

***AMERICAN AND CROOKED RIVER PROJECT  
DRAFT ENVIRONMENTAL IMPACT STATEMENT  
NEZ PERCE NATIONAL FOREST***

**MAY 2004**

**DRAFT**

## **ORGANIZATION OF THIS DOCUMENT**

THIS DOCUMENT IS ORGANIZED INTO FOUR CHAPTERS AND SUPPORTING INFORMATION AS FOLLOWS:

**CHAPTER 1** – DESCRIBES THE PURPOSE AND NEED FOR ACTION, THE PROPOSED ACTION, AND THE SCOPE OF THE ENVIRONMENTAL ANALYSIS.

**CHAPTER 2** – DESCRIBES THE ISSUES ASSOCIATED WITH THE PROPOSED ACTIONS AND PRESENTS AND COMPARES ALTERNATIVES TO THE PROPOSED ACTION.

**CHAPTER 3** – DESCRIBES THE PHYSICAL, BIOLOGICAL, AND SOCIAL SETTING OF THE ANALYSIS AREA AS THEY EXIST TODAY AND ARE TRENDING TOWARDS INTO THE FUTURE BASED ON IMPLEMENTATION OF ANY OF THE ALTERNATIVES DESCRIBED IN CHAPTER 2, INCLUDING THE NO ACTION.

**CHAPTER 4** - LISTS THE INDIVIDUALS INVOLVED IN THE PREPARATION OF THIS DOCUMENT.

**APPENDICES** – PROVIDE ADDITIONAL INFORMATION FOR THE READER AND INCLUDES A MAP LIST, GLOSSARY, REFERENCES, AND ADDITIONAL SUPPORTING INFORMATION.

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**AMERICAN AND CROOKED RIVERS PROJECT**  
**DRAFT ENVIRONMENTAL IMPACT STATEMENT**  
**MAY 2004**

NEZ PERCE NATIONAL FOREST  
RED RIVER RANGER DISTRICT  
IDAHO COUNTY, IDAHO

**LEAD AGENCY:**

USDA FOREST SERVICE

**RESPONSIBLE OFFICIAL:**

BRUCE BERNHARDT  
FOREST SUPERVISOR  
ROUTE 2 BOX 475  
GRANGEVILLE, ID 83530  
208-983-1950

**FOR FURTHER  
INFORMATION:**

PHIL JAHN  
PROJECT MANAGER  
NEZ PERCE NATIONAL  
FOREST  
ROUTE 2 BOX 475  
GRANGEVILLE, ID  
83530  
208-983-1950

OR

TERRY NEVIUS  
DISTRICT RANGER  
RED RIVER RANGER DISTRICT  
NEZ PERCE NATIONAL FOREST  
P.O. BOX 416  
ELK CITY, ID 83525  
208-842-2245

**COMMENTING ON THE DRAFT:**

Reviewers should provide the Forest Service with their comments during the review period of the draft environmental impact statement. This will enable the Forest Service to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decision making process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to reviewers' position and contentions. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

**SEND COMMENTS TO:**

MONICA MCGEE, ADMINISTRATIVE ASSISTANT  
NEZ PERCE NATIONAL FOREST  
ROUTE 2, BOX 475  
GRANGEVILLE, ID 83530

**Date comments must be received: July 23, 2004**

## **SUMMARY**

The Forest Service has prepared this draft environmental impact statement to disclose potential effects of the proposed action and the alternatives to the proposed action within and surrounding the American and Crooked River project area in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. The project area is located within the Red River Ranger District on the Nez Perce National Forest in Idaho. This Draft Environmental Impact statement discloses direct, indirect, and cumulative environmental impacts and irreversible or irretrievable commitments of resources that would result from implementation of the proposed action and alternatives.

The project area is located in two separate areas within the Nez Perce National Forest in Idaho County. Portions of the American and Crooked River watersheds are contained in the project area boundary and are located in the Clearwater Mountains of the Rocky Mountain physiographic province. The American River watershed is located north and northeast of Elk City, while the Crooked River watershed is located west and southwest of Elk City. The project area, which encompasses approximately 39,000 acres, lies north and east of the town of Orogrande and includes National Forest System lands around the Elk City Township.

### **PURPOSE AND OBJECTIVES**

The purpose of the project is to reduce existing and potential forest fuels, create conditions that will contribute to sustaining long-lived fire tolerant tree species (ponderosa pine, western larch) and contribute to the economic and social well-being of people who use and reside within the surrounding area.

The Forest Plan provides direction for the management of the American and Crooked River project area and the desired future condition. The purpose and need for this project was determined after comparing the desired future condition and the existing condition of the American and Crooked River project area. The area's existing condition was determined using field data and the findings and recommendations from the South Fork Clearwater River Landscape Assessment (SFLA). This analysis addresses only a few of the overall package of actions that were recommended in these documents.

#### **THE OBJECTIVES OF THIS PROJECT ARE TO:**

Promote the health and vigor of timber stands and improve the environment for long-lived, fire resistant species by reducing densities of lodgepole pine or other small diameter trees that provide fuel ladders for development of crown fires,

Increase relative proportions of long-lived, fire resistant tree species by restoring or regenerating to western larch, ponderosa pine, and by protecting large diameter ponderosa pine, Douglas fir, and western larch,

Reduce the risk of large-scale crown fire spread by creating vegetative patterns, including fuel breaks and safety areas, through harvest or silvicultural treatments, that would increase fire suppression and management effectiveness, and

Reduce the likelihood of severe local fire effects by removing dead, dying, and downed trees that would otherwise result in high fuel loading.

### **THE PROPOSED ACTION**

The Red River Ranger District proposes to implement fuel reduction activities and a range of watershed improvement activities, likely to begin in the fall of 2004. This project is proposing to harvest or otherwise treat timber stands of dead, dying, or downed trees and trees at risk of

mountain pine beetle attack (primarily lodgepole pine). Proposed harvesting and associated treatments, including road treatments, would be conducted in portions of the American and Crooked River watersheds within the American and Crooked Rivers project area on the Red River Ranger District of the Nez Perce National Forest, Idaho County, Idaho. Completion of these activities would move the project area towards a Desired Future Condition as defined in the Nez Perce National Forest Land and Resource Management Plan (Forest Plan).

## **THE ISSUES**

The Forest Service worked closely with the public to identify issues and concerns. A comment period last fall produced 20 letters from the public, and state and federal agencies. These responses were condensed into two substantive issue areas. These are effects to water quality and fish habitat and the fuel reduction effectiveness. There are no impacts to terrestrial threatened and endangered species, and heritage resources, but a summary of impacts are listed below in the general projects impacts of interest, because some commenters had an interest in these areas.

## **THE ALTERNATIVES**

**TABLE 0.1: – COMBINED ALTERNATIVE OVERVIEW FOR AMERICAN/CROOKED RIVER WATERSHEDS**  
**Table 2.4: Alternatives in the American and Crooked River Project.**

<b>Proposed Activity – Total Project</b>		<b>Alt B</b>	<b>Alt C</b>	<b>Alt D</b>	<b>Alt E</b>
Acres Treatment of	Tractor Yard/Machine Pile	1,138	1,172	1,732	901
	Cable Yard/Broadcast Burn	945	1,095	1,207	780
	Roadside Salvage	467	477	466	475
	<b>Total Acres Treated</b>	<b>2,550</b>	<b>2,744</b>	<b>3,405</b>	<b>2,156</b>
	Percent Clearcut	42%	42%	34%	28%
	Percent Partial Cut/Thin	58%	58%	66%	72%
Miles temporary road construction <sup>1</sup>		8.0	14.3	14.3	5.4
Miles road improvement <sup>2</sup>		89.6	77.8	95.0	94.5
<b>Watershed Restoration Package Improvements</b>					
Miles of decommissioned roads <sup>3</sup>		14.9	17.9	19.0	37.5
Miles of Watershed Road Improvement		15.2	15.8	15.8	23.8
Number of sites of Watershed Road Improvement		1	3	3	3
Stream crossing improvements <sup>4</sup>		10	10	12	34
Miles of instream improvements		15.2	15.8	15.8	23.8
Miles of Recreation and Trail improvements		2.9	2.9	2.9	4.8
Acres of Recreation and Trail improvements		0	4	4	4
Acres of Mine Site Reclamation		7	7	7	9
Acres of Soil Restoration		18	26	32	58
Access change for vehicle use - motorized trail use (ATV) to restricted use (miles) <sup>5</sup>		1.0	1.0	1.0	1.0
Access change for vehicle use – road to trail <sup>6</sup>		1.5	1.5	1.5	1.5

<sup>1</sup> Temporary roads would be decommissioned within one to three years of construction.

<sup>2</sup> Road improvement covers a range of activities, such as surface blading, drainage repair, and roadway brushing with occasional culvert installations, slump repairs, and stabilization work. Road improvements stated in this table are not to be considered or confused with routine road maintenance that may include but not limited to road prism brushing, clearing, or hazard reduction activities.

<sup>3</sup> Road decommissioning for this project covers a range of activities, from recontouring to abandonment due to grown in conditions. See Appendix F

<sup>4</sup> Stream crossing improvements include upgrading or improving culverts and bridges to improve fish passage and peak water flows and are listed as the number of sites.

<sup>5</sup> This is an access change, which restricts use to two wheeled vehicles or snowmobiles over snow, from previous all terrain vehicle use (ATV).

<sup>6</sup> This is an access change of miles of roads to trails use.

The alternatives in this document were analyzed by their effect to the substantive issue areas. Indicators were developed to compare the effects. A summary of the effects can be found in the following section. The summary table above describes the treatments. It shows the total acres to be treated by alternative developed.

## **THE EFFECTS**

The effects provides an overall summary of the existing conditions and effects analysis relative to water quality and fish habitat, soil productivity, and fuel reduction effectiveness in the American/Crooked Project. Mitigation measures would reduce effects for all harvest alternatives to meet Forest Plan standards for detrimental disturbance upon completion of activities.

### **EFFECTS TO WATER QUALITY AND FISH HABITAT**

#### **WATER QUALITY**

##### **SUMMARY OF EXISTING CONDITIONS**

In American River, subwatersheds within the project area mostly contain low to moderate gradient streams. The watersheds have a range of disturbance conditions, as indexed by existing road densities (miles of road per square mile of area (mi/mi<sup>2</sup>). American River road densities range from 0.6 to 4.3 mi/mi<sup>2</sup>. Stream channels have been mostly affected by sediment deposition and road encroachment.

In Crooked River, subwatersheds within the project area have generally steeper stream gradients than American River. Watershed disturbances are more evenly distributed within the project subwatersheds, as indexed by existing road densities ranging from 1.8 to 3.3 mi/mi<sup>2</sup>. Stream channels have been affected by sediment deposition and road encroachment. In addition, historic dredge mining was conducted in the mainstem of Crooked River and in lower Relief Creek. This completely altered the channel morphology, floodplain function, and riparian vegetation.

The mainstem of the South Fork Clearwater River has been impacted by sediment deposition, road encroachment, dredge mining, and removal of riparian vegetation. Certain impacts, such as the encroachment of State Highway 14 on the river, are essentially permanent in nature.

##### **PROJECT EFFECTS**

In American River, the project is expected to have some short-term impacts, especially in terms of sediment yield, followed by long-term improvements. The short-term impacts are mostly in terms of sediment yield resulting from temporary road construction, road decommissioning, culvert removals, and soil restoration.

In American River, all of the short-term impacts fall within prescribed Nez Perce Forest Plan sediment yield and entry frequency guidelines. Long-term trends of aquatic resources are discussed in Section 3.3 (fisheries). Alternative E has generally the widest spread between short-term impacts and long-term improvements. Alternative B, C, and D scale roughly in that order in terms of the size of the short-term impacts, relative to long-term improvements in watershed condition.

In Crooked River, the project is also expected to have some short-term impacts, especially in terms of sediment yield, followed by long-term improvements. The short-term impacts are mostly in terms of sediment yield resulting from temporary road construction, road decommissioning, culvert removals, soil restoration, and instream improvements.

In Crooked River, all of the short-term impacts fall within prescribed Nez Perce Forest Plan sediment yield and entry frequency guidelines. Long-term trends of aquatic resources are discussed in Section 3.3 (fisheries). Alternative E has generally the widest spread between short-term impacts and long-term improvements. Alternative B, C, and D scale roughly in that order in terms of the size of the short-term impacts, relative to long-term improvements in watershed condition.

Effects to the mainstem South Fork Clearwater River are expected to be relatively minor. The project is expected to produce a minor amount of short-term additional sediment yield, followed by reductions of over time. No increases in water temperature are expected and a very slight reduction may occur over time as the effects of riparian planting on increasing shade begin to occur. The project is expected to comply with implementation guidelines under the South Fork Clearwater River total maximum daily load (TMDL)s for sediment and water temperature, as defined by the Clean Water Act.

## **FISH HABITAT**

### **SUMMARY OF EXISTING CONDITION**

Fish habitat in the analysis area is in poor condition. Past mining operations such as, bucket line dredging of the mainstem American River, Box Sing Creek, Whitaker Creek, Queen Creek and Crooked River, Relief Creek, Silver Creek, and Quartz Creek, have left these systems with a very reduced carrying capacity for fish. Water temperatures are elevated due to the vegetative canopy that was removed by roads and dredging. Surveyed streams in the analysis area are below their Forest Plan objectives (existing and proposed) included in Appendix A. Habitat elements of most concern include high levels of deposited sediment, low number of high quality pools, high stream temperatures, and an overall simplification of habitat leading to reduced carrying capacity.

Road/stream crossings in the project area have culverts that block or impede upstream fish migration.

Westslope cutthroat trout, steelhead and bull trout are located in the project area streams but have very low densities. These streams are classified as priority watersheds (South Fork Clearwater River Landscape Analysis, 1998). Current habitat conditions may be limiting growth, reproduction, and survival of these species in the tributaries as well as in the mainstem rivers.

Spring Chinook salmon are found in the mainstem and tributaries of American and Crooked Rivers as well as in the South Fork Clearwater River.

Non-native brook trout exist in many streams in the analysis area especially in American River.

### **PROJECT EFFECTS**

Under the action alternatives, a short-term increase in sediment production is expected from vegetation treatments, road construction/reconstruction, road decommissioning and in channel improvements.

This short-term increase in sediment yield is not at a threshold where changes in stream substrate (cobble embeddedness) are expected to occur.

If Alternative A (no action) were implemented, watersheds and streams would remain in a poor condition and recover slowly over time.

Under the action alternatives, vegetation treatments, including timber harvest, may result in lower risk of large, stand-replacing fires. Such fires could adversely affect watershed condition. Short-term increases in sediment yield under the action alternatives are partly due

to watershed improvement activities, which are expected to result in long-term improvement in habitat condition.

Equivalent Clearcut Area (ECA), a predictor of changes in water yield, would increase slightly under all action alternatives. This increase is not likely to result in adverse changes in fish habitat.

Of the action alternatives, Alternative E offers the most rapid improvement in watershed condition, with the least short-term risks, while Alternatives B, C, and D offer a slower rate of improvement with higher short-term risks. Alternative B offers less short-term risk but also less long-term improvement than Alternatives C and D.

Fish in the project area, including steelhead trout, bull trout, Chinook salmon and westslope cutthroat trout, may be adversely affected by potential short-term changes in habitat condition. These species are also expected to benefit from long-term improvement in habitat condition. There is no anticipated risk to fish population viability as a result of this project.

## **EFFECTS FROM FUEL TREATMENTS**

### **SUMMARY OF EXISTING CONDITION**

#### **FIRE REGIME**

Fire incidence has dropped substantially since the 1930's, due to the effectiveness of fire suppression.

Areas with frequent to very frequent fire regimes are missing between 1 to 15 fire occurrences.

Areas with infrequent and very infrequent fire regimes are little departed from their pre-settlement fire occurrences at the stand scale, but some departure may exist at the broader landscape scale where little disturbance has occurred in the last 50 to 80 years.

In the areas of infrequent and very infrequent fire regimes, the fire mosaic of mixed and lethal fires that might follow as a result of increasing fuel loads caused by the mountain pine beetle infestation would be normal for these fire regimes, but could pose risk to structures and investments.

#### **HAZARDOUS FUEL/FIRE RISK**

The fire ignition occurrence (risk) within the project area is high. Fire risk is the probability of a fire ignition occurring.

Due to increases in fuel loading resulting from the mountain pine beetle infestation, fuel models are transitioning to models that would result with a higher fire hazard rating.

### **PROJECT EFFECTS - FIRE REGIME, FUELS, AND RISK/HAZARD**

The cumulative effects of the Alternatives considers past, present and reasonably foreseeable actions. These actions are described earlier in this Chapter. The effects of the past actions are included in the existing condition by indicator. The environmental effects for each indicator discussed in Chapter 2 and Scope of the Analysis earlier in this section, when combined, show the cumulative effects of the Alternatives.

#### **ALTERNATIVE A (NO ACTION ALTERNATIVE)**

This Alternative would have no immediate effect on fuel conditions in the project area. However, in the short to long-term, fuel loadings, both live and dead, would continue to increase with the result that more of the project area would move toward a higher fire hazard

rating. Over time, the fuels and associated hazard would continue to accumulate until fire suppression is no longer successful in keeping fires small.

The only active fuels management projects within the project area are the Crooked River Demonstration and proposed Orogrande defensible space projects. The purpose of these treatments is to reduce available vegetation/fuels within 300-500 feet of private and public structures and reduce the threat of losing these structures to wildfire. The size and scope of these treatments are small, designed to protect only the structures themselves, so the treatments would have little effect on the project area.

The BLM is planning to implement two fuels reduction projects (Whiskey South and Eastside Township) within the Elk City Township adjacent to the American and Crooked River project area. The purpose of these projects is to reduce the risk of high intensity wildland fire to life, property, and natural resources in the Elk City area. Alternative A provides no temporary road access to the BLM's proposed treatment areas along the eastern and northern boundary of the Elk City Township.

### **ALTERNATIVES B, C, D, AND E**

These Alternatives all provide mechanical and prescribed fire fuel reduction treatments, differing in the amount and location of those treatments and the associated reduction in high fire hazard. The interspersed treatment areas along with fuel reduction in past harvest and burned areas can reduce the intensity and severity of a fire burning through those areas. Observations of wildland fire growth and behavior among age-mosaics of fuel patterns in the forests of the Sierra Nevada (van Wagtendonk 1995, Parsons and van Wagtendonk 1996) and on fires in the forests of the Northern Rockies (Button, personal observations) support the idea that spatial fragmentation of fuels can cumulatively change fire sizes and behavior. Past harvest and burned areas along with proposed treatments under Alternatives B, C, D, and E would provide anchor points (relatively safe, defensible locations) that facilitate fire suppression activities. Since it is not known exactly where or when a fire may start, having a dispersed pattern of fuel reduction treatment can provide more options for fire suppression by connecting these treatment areas depending on where the fire is, how fast it is spreading, and the amount, type and location of suppression forces (Agee, et al 2000, Finney, et al 1997).

Dispersed treatments rely on the topology of the treatment units as parts of a pattern to reduce spread rates and intensities (Martin et al. 1989, Gill and Bradstock 1998, Finney 2001). Dispersed treatments facilitate all suppression tactics (direct, indirect, and parallel attacks) by slowing overall fire growth and allowing units to be connected by firelines at the time, the fires occur. Extensive coverage by a dispersed treatment pattern offers the optimal strategy for multiple fire spread directions and can change fire behavior irrespective of suppression actions.

The weather conditions most amenable to changes in fire behavior from fuel treatments will be those that historically have produced large and severe fires, but are not considered to be worst-case. Fire behavior under the worst conditions is rarely responsive to either treatment or suppression effects.

The BLM is planning to implement two fuels reduction projects (Whiskey South and Eastside Township) within the Elk City Township adjacent to the American and Crooked River project area. The purpose of these projects is to reduce the risk of high intensity wildland fire to life, property, and natural resources in the Elk City area. Alternatives C and D provide the most temporary road access to the BLM's proposed treatment areas along the eastern and northern boundary of the Elk City Township. Alternative B provides less temporary road access than Alternatives C and D, and Alternative E provides no temporary road access to the BLM projects.

## **GENERAL PROJECT IMPACTS OF INTEREST**

### **HERITAGE IMPACTS**

To date, seven cultural properties eligible for the National Register of Historic Places have been identified within, or immediately adjacent to, the American and Crooked River project, and will be protected from disturbance resulting from project activity (see Table 3.83). All seven of these properties are related to the historical theme of mining settlement and technology.

### **SOIL PRODUCTIVITY**

Activities that cause compaction, displacement, or exposure to erosion may have cumulative effects on below ground physical and biological processes, hydrologic function, and long-term productivity. All alternatives may meet Forest Plan soil quality standards on harvest units, if mitigation and design measures are rigorously implemented, so that cumulative effects are the same for all alternatives on a site basis. The likelihood of exceeding the standards increases with increasing number of activity areas proposed for ground based logging or temporary road construction. Temporary roads are not considered part of the permanent transportation system, but are difficult to restore to former productivity. Cumulative effects occur with repeated entries or additive entries in a watershed. From this perspective, the relative ranking of alternatives for both watersheds is (best to worst): A, E, B, C, and D. The no-action Alternative A results in the greatest likelihood of compliance in each watershed. Alternative E results in the greatest likelihood of compliance of the action alternatives in each watershed.

### **WILDERNESS, INVENTORIED ROADLESS, AND AREAS WITH POSSIBLE UNROADED CHARACTERISTICS**

Any of the alternatives together with reasonably foreseeable and ongoing activities would reduce Solitude within the areas with possible unroaded characteristics during the actual activities. Natural Integrity and Apparent Naturalness will also be reduced regardless of the alternative selected due to other reasonably foreseeable actions.

Alternatives B, C and D would also increase the areas with possible unroaded characteristics but to a lesser extent than alternative E because of fewer miles of road obliteration. Eventually, these roadbeds would disappear or would be hidden with vegetation and motorized use would decrease. Natural Integrity, Apparent Naturalness, Solitude, Remoteness, and Manageability and Boundaries would be increased in the long-term, most likely to the extent that a balance is reached with the effects of the other ongoing activities within the areas. Cumulatively, the effect would be an increase in the value of the roadless characteristics and an increase in areas with possible unroaded characteristics, as revegetation occurs over the next 30 years.

Alternative A and E would not result in any irreversible and irretrievable commitment of resources within any of the Areas with Possible Unroaded Characteristics.

Harvest activities at various levels and intensities are proposed in Alternatives B, C, and D within each of the unroaded areas, with the intent to improve vegetative conditions.

While some stumps will persist on the landscape, the natural stand structure and function will be retained or enhanced and over time, the stumps will deteriorate resulting in no permanent irreversible effects on unroaded resource values.

Alternatives B, C and D would result in an irretrievable commitment within the Areas with Possible Unroaded Characteristics because of the use of natural resources through harvesting.

## TRAIL SYSTEM IMPACTS

Under the action alternatives, the harvest activity will change the character of trails where they occur within harvest units as the tree canopy is removed. The harvest activity will also open vistas from the trails where units are across or adjacent to the trails. By adhering to the mitigation measures for trails, the impacts to the trail character will be minimized.

## WILDLIFE

Impacts from no action to federally threatened species (wolf, lynx, bald eagle) are minor or nil for these species. No adverse impacts would occur to any federally listed terrestrial wildlife species. All action alternatives would yield minor, but non-adverse impacts to these species or their habitats.

Effects of the alternatives on Forest Service sensitive species would vary. No impacts would occur to Coeur d' Alene salamanders, Townsend's big-eared bat, flammulated owl, or white-headed woodpeckers in any alternatives. Alternative A (No Action) would have no effects on most other sensitive species except those that are closely associated with late-seral or old growth timber or standing dead trees (goshawk, fisher, black-backed woodpecker). Effects to other sensitive species from all action alternatives may impact individuals or habitats but would not likely result in trends toward federal listing or reduced populations viability for any of these.

Effects to Forest Plan Management Indicator Species (MIS) would be mixed. Effects of all action alternatives on elk, moose and their habitats would be positive or very minor. The effects of the action alternatives to pileated woodpeckers, American marten, and key neotropical migrant birds would be relatively modest. Highest impacts to habitats of this group of late-seral associated species would be from Alternative D. Despite the varying harvest and treatment levels, reduction in old growth loss risks from future wildfires would remain.

## AIR QUALITY

Prescribed burning under the action alternatives would comply with the requirements of the Clean Air Act. Both PM 10 and PM 2.5 emissions are quantified and modeled for their effects on adjacent and downwind airsheds, particularly non-attainment and Class I areas.

The action alternatives are consistent with Forest Plan standards and guides in that implementation would be in cooperation with Idaho Department of Health and Welfare by complying with the procedures outlined in the North Idaho Smoke Management Memorandum of Agreement.

## NOXIOUS WEEDS

Past and present disturbances associated with vegetation treatments added to reasonably foreseeable actions would create a cumulative effect on weed expansion by the combination of distribution of weed seed, ground disturbance and creation of spread pathways. The degree of the cumulative effect would vary depending upon the number of entrances over time, distribution of disturbance across the analysis area and acres disturbed. The impacts of cumulative effects incurred by action alternatives to risk of weed expansion would be eased with the implementation of preventive and weed management actions.

## SOCIO/ECONOMICS

Current levels of recreation-based economic activity (hunting, fishing, backpacking, etc) would not be appreciably affected by any of the action alternatives, except hunting and fishing which could have positive effects from improvements to elk, salmon and steelhead habitat. There

would be an overall decrease in the risk of large-scale fire to those who live and use the area. Additionally, the project could result in an increase in direct employment of 152-237 local jobs.

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