Jim Creek 2023 Forest Management Project

Environmental Assessment

The Bureau of Indian Affairs and the Colville Confederated Tribes of the Colville Indian Reservation

Proposed Action: The Bureau of Indian Affairs and the Confederated Tribes of the Colville Indian Reservation proposes the Jim Creek Forest Management Project. The objective of this project would be to harvest approximately 39.4 million board feet of timber on approximately 7,877 acres of tribal trust lands within the Omak/Nespelem District.

Official Decision Maker: Randal Friedlander, Superintendent, Colville Agency, BIA

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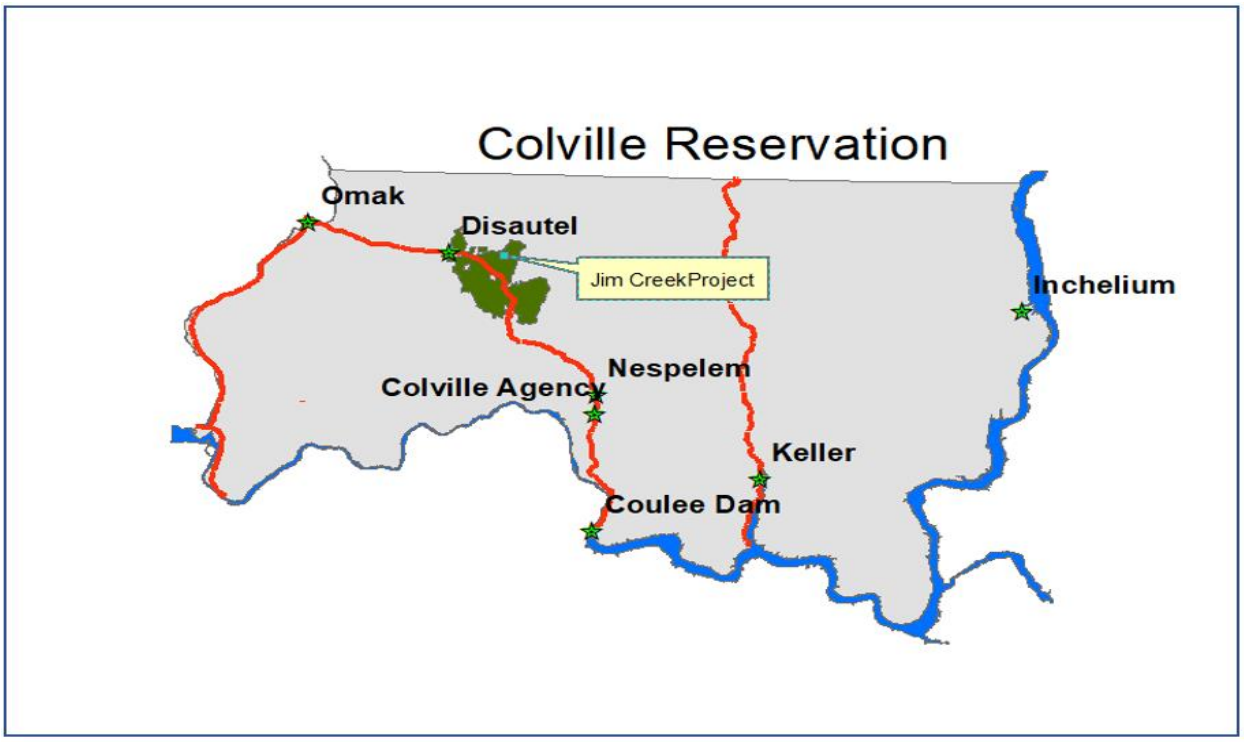

Table of Contents

1.0 Purpose and Need

1.1 Introduction

The Bureau of Indian Affairs (BIA) and the Confederated Tribes of the Colville Indian Reservation (CTCR) propose the harvest of approximately 39.4 MMBF of timber from approximately 7,877 acres of Tribal land in the Omak/Nespelem District. This harvest would require about 7.2 miles of road construction and about 115.7 miles of road reconstruction. Non timber harvest activities included in this Proposal are: 1,362 acres of Pre-Commercial Thin (PCT). There is an estimated 1,594 acres of mechanical site preparation associated to harvest unit prescriptions at this time.

1.2 Purpose and Need for Action

The federal action (40 CFR 1508.18) is the BIA approval of the Jim Creek 2023 Forest Management Project, which triggers BIA compliance with the National Environmental Policy Act (NEPA; 42 USC § 4321-4375) and associated regulations (40 CFR 1500-1508, 43 CFR 46). This Environmental Assessment is prepared to meet the BIA's NEPA responsibilities. The purpose of the action is to be able to implement the activities under the federal action to meet the primary need of revenue for CTCR.

The CTCR is in the business of growing timber for profit. Timber growing, harvesting, and processing are major sources of income for the Colville Tribe, the tribal membership and other groups in the local population.

The Colville Reservation's Plan for Integrated Resource Management (PIRM) (Klock 2001) calls for an annual harvest of 77.1 MMBF of timber. Some years may be slightly higher and some years lower. The 2023 timber sale projects total 80.8 MMBF, although not all proposed acres would end up being harvested. The PIRM also stresses the need for a healthy forest ecosystem with habitat that would contribute toward and support populations of native species, particularly those associated with cultural use.

The Jim Creek Project Area contains stands of timber that present a high risk of sustaining losses to several forest insect and disease agents.

1.3 Issues, Concerns and Objectives

Forestry

Forest Health and Timber Regulation

Most forested ecosystems in the ponderosa pine, Douglas-fir, and grand fir zones on the Colville Reservation exhibit stocking levels and species compositions that have never before existed. The result is an unstable condition of the fuel and vegetation that threatens the ability of the ecosystems to provide the resources desired by the CTCR on a long term basis. This is also true of the Jim Creek Project Area.

In order to restore ecosystems to a sustainable, balanced, healthy condition; management activities should produce a pattern of vegetation on the landscape that closely resembles that produced by historic disturbance agents (i.e., fire). We can define stable ecosystems in terms of the occurrence of different seral stages, stand structures, and stand size classes across the landscape.

To assure a continued supply of timber from Reservation lands it is necessary to regulate the amount of timber removed in any one period. "Regulation" means that timber is removed in approximately equal portions each year, and, over the long run, no more timber should be removed than is grown (volume removed = volume grown). The concept of timber regulation requires that all land in the timber base produce (grow) timber at an acceptable level. Since managed timberlands are more productive than unmanaged lands, the more timberland brought under management, the closer we are to meaningful regulation of the timber harvest and therefore to a sustained yield condition.

1. To reduce the risk of loss of timber to insects, disease and fire.
2. To improve general forest health.
3. To expand forest regulation.

Indicator:

A. Acres treated by each alternative.

Income for the CTCR, Support of Tribal Businesses and Employment for the Tribal Membership

The income from the sale of timber accrues directly to the Tribal Government and, through that governing body, to the Tribal membership. It is therefore in the best interest of the Tribes to realize income from the sale of Reservation timber.

The Colville Tribal Sorting Yard (owned by the Colville Tribal Federal Corporation) and businesses owned by Tribal members in the region rely on the sale of timber from Tribal Lands. These and other wood-based businesses also employ Tribal members. These firms are engaged in logging, transporting, milling, marketing, and processing of timber into dimension lumber and other products. The PIRM (Klock 2001) indicates that 77.1 MMBF should be harvested in each calendar year in order to supply the timber needs of these businesses. This is in accordance with the regulations contained in 25 CFR 163.6.

The intent of managing Tribal timber is, in part, to provide meaningful, productive employment for Tribal Members and to provide profit opportunities for tribally owned businesses.

1. To provide income for the Colville Tribes.

Indicator:

A. Estimated stumpage produced by each alternative.

1. To provide employment for the tribal membership.
2. To provide profit for tribally owned businesses.

Indicator:

A. Estimated volume of timber harvested per alternative.

Soil Resource Objectives

1. To avoid causing detrimental soils conditions on more than 25% of the treatment (logged) area.

Indicators:

A. Displacement: movement or removal of topsoil.
B. Compaction: topsoil is noticeably compressed or flattened, decreasing several inches in depth in contrast to nearby undisturbed soils of similar character.
C. Fire damage: most of the topsoil is consumed and the top layer of mineral soil has changed color.
D. Rutting of soil in the bottom of swales and draws.

Hydrology Objectives

1. To minimize erosion and sediment delivery to surface waters and prevent streambank/wetland disturbance.

   Indicators:

A. Road construction and use.
B. Road density by watershed.
C. Road construction/use within 200ft of surface water.
D. Harvest within 200ft of surface water.
E. Harvest on vulnerable soils.

Fish and Wildlife Objectives

1. To maintain and restore critical forest structure; old growth forests, deciduous stands, wetlands, large woody debris, etc. (Klock 2001).

   Indicator:

A. Wetland and stream adjacency acres.

2. To reduce alterations to fish and wildlife habitat in order to sustain viable populations and communities through maintained thermal, forage and travel cover and reduction of habitat fragmentation (Klock 2001).

   Indicators:

A. Block size and adjacency, acres.
B. Road density, mi/mi^2.
C. Miles of new road construction.

3. To maintain or increase the quantity and quality of habitat necessary to sustain and restore fish populations through high quality habitat and water (Klock 2001).

   Indicators:

A. Miles of new road construction.
B. Density of stream crossings (new, existing, removed).
C. Miles of stream adjacency.

1.4 Compliance with Other Codes and Regulations

This project is designed to be compliant with CTCR Forest Practices Code 4-7, CTCR 4-9: Hydraulic Project Permitting, 4-10: Water Resources Use and Permitting, the Endangered Species Act, Clean Water Act, National Environmental Policy Act, Tribal Forest Protection Act, National Indian Forest Resources and Management Act, National Historic Preservation Act, Clean Air Act and other applicable Tribal and Federal Regulations.

1.5 Determination

The Colville Agency BIA Superintendent with the concurrence of the Colville Business Council (CBC) would determine which alternative is selected for implementation.

a) To take no action (Alternative A).

b) To approve the proposed action (Alternative B).

c) To direct an additional alternative be created.

The BIA Superintendent would also determine whether the environmental consequences are significant and prepare either a Finding of No Significant Impact (FONSI) or determine that Environmental Impact Statement (EIS) would be required.

1.6 Public Involvement

During the development of the CTCR PIRM numerous "visioning sessions" with the Tribal membership occurred and detailed input by Tribal staff and management utilized to develop goals for management of natural resources. In July of 2001 the ROD and PIRM were approved by the CBC. The ROD outlines a 15 year implementation plan in which the cumulative effects were analyzed in Alternative 7 of the Final Environmental Impact Statement (FEIS)(Klock 2000). The Jim Creek Forest Management Project was presented to the 3P Team in March of 2022. The 3P Team and public also had a field tour of the project area in June of 2022.

2.0 Alternatives Considered

2.1 General Discussion: Alternative Design

The National Environmental Policy Act (NEPA) and the Council on Environmental Quality (CEQ), the Department of the Interior (DOI) and the BIA have developed regulations that require that a reasonable range of alternatives be considered in NEPA documentation, including the "Proposed Action" and "No Action" alternatives.

For this project, Alternative A (No Action) is included to fulfill the requirements of NEPA and to provide baseline values by which to measure the effects of other alternatives. For the purposes of this document, "no action" means that no harvest or other resource manipulation would occur if this alternative were adopted.

Alternative B (the Proposed Action) was constructed to fulfill the purpose and need. That is, Alternative B was designed to:

- Reduce risk of loss of timber to insects, disease and fire,
- Provide stumpage income for the Tribal Government of the Colville Tribes,
- Provide employment for tribal members,
- Provide opportunity for profit for tribally owned businesses,
- Improve general forest health,
- Expand forest regulation.

All alternatives are designed to meet all legal and procedural requirements to which the CTCR and the BIA must adhere.

2.2 Alternative A: No Action

The "No Action Alternative" includes the BIA not approving the Jim Creek Forest Management Project at this time and/or the BIA and CTCR not implementing activities under the project. Under this alternative no timber harvest, road reconstruction, or other manipulation of resources would take place.

2.3 Alternative B: Proposed Action

The Proposed Action Alternative includes the BIA approving the Jim Creek Forest Management Project and the BIA and CTCR implementing the activities under the proposal. This Alternative does meet the Purpose and Need of the project. This alternative was proposed by Omak/Nespelem District (OND) to meet forest health needs, and provide 39.4 MMBF of the 80.8 MMBF of timber proposed for 2023.

The proposal includes removing 39.4 MMBF of timber from about 7,877 acres. Non timber harvest activities included in this Proposal are: 1,362 acres of Pre-Commercial Thin (PCT).

- Let it be noted that individual block prescriptions given in this document are given in good faith and are appropriate for data collected and field review notes up to this point. However, prescriptions may be adjusted when entire block is evaluated through the timber cruise and marked for harvest.
- Pre-Commercial Thinning would be completed with traditional chainsaw thinning or a Masticating head placed on a piece of heavy equipment such as an excavator; used to achieve the desired spacing of residual stand.

Table 1. Prescription Summary for Alternative B.

Prescription- Non-Commercial Harvest	**Acres**
Pre-commercial Thin (PCT)	1,362
Tree Planting- Artificial Regeneration	470
Prescription- Commercial Harvest	**Acres**
Regeneration with Reserves (RRT)	470
Seed Tree / Overstory Removal (ST/OR)	2,978
Seed Tree (ST)	1,874
Shelterwood (SW)	144
Sanitation (SANI)	629
Improvement Cut (IC)	1,311
Overstory Removal (OR)	275
Select Cut (SC)	186
Wildland Urban Interphase (WUI)	10
Total Commercial Harvest	**7,877**

The harvest system acres are shown in Table 2. The acres are estimated. Operational decisions would be made on the ground to determine how each acre would be harvested. Generally, areas

over 35% slope would be cable logged, but there are small, steep inclusions that may be harvested using a ground-based system such as tractor or forwarder. Tether/cable assisted logging method can be used to aide ground based machines to harvest and skid on steeper inclines of 40% to 70% slopes that would be normally considered unsafe for equipment or damaging to soils. Non-commercial thinning units are not included in these estimates because no logging equipment would be used for those treatments.

Table 2. Alternative B harvest systems.

Logging Method	Acres
Ground Based	6,830
Tether-Assisted or Cable	1,040
Total	**7,877**

Table 3. Alternative B road construction and reconstruction.

Roads	Miles
New Construction	7.2
Reconstruction	115.7

Road Closure Plan

All newly constructed roads would be closed following past-harvest activities. There are also additional road closures proposed to bring the project area closer to road density goals of the IRMP (Appendix F).

Project Mitigation

There are many other project design features that are included in this alternative. These are included to help protect other resources such as fish and wildlife, and riparian areas. Some of these design features are outlined below. These design features would help mitigate most of the issues and concerns raised by Fish and Wildlife, Soils and Hydrology. These design features would make the project meet the standards of the PIRM and Forest Practices Code and help to mitigate some of the potential negative impacts of the project.

- Habitat patches would be left in the large units to break up the "continuity" on the landscape and provide refuge for wildlife.
- Scattered over-story trees would be left on all units to provide a future source of snags and down woody debris.
- Riparian Management Zones (RMZ) would be identified in the planning process using stream classification maps and determined by Presales Department personnel during block boundary layout. Streams and wetlands would be buffered as required by the current CTCR Forest Practice guidelines:

Water Type	Minimum RMZ Width
1	150'
2	125'
3	100'
4	50'

- A combination of cable logging and ground-based systems would be used, depending on steepness of the units and road placement.
- Summer and winter seasonal restrictions would be placed on units to protect the sensitive ash cap soils from erosion. Summer would be dry soil conditions; winter restrictions would require frozen ground and/or 2 feet of snow.
- Archeological sites would be buffered and protected from logging damage.
- Corridors would be in place on the landscape to allow wildlife to travel across the project area while being secure.
- Continued monitoring for specific wildlife species would occur and operational adjustments can be made if needed.
- Skid trails would be spaced at least 100 feet to reduce soil compaction and displacement.

When timber harvest takes place, Best Management Practices (BMP's) outlined in the Colville Confederated Tribes Forest Practices Handbook, would be employed. Timber contract compliance by the Timber Sale Officer (TSO) would be the foremost method ensuring that the BMP's are followed and implemented. Proper maintenance of roads and skid trails after logging operations would be implemented to reduce erosion. Designated skid trails and cable logging would help reduce impacts to the soil resources. Slash treatments, on the ground and at the landings, would be either lop & scattered, slash, excavator piled & burned, prescribed burned or left on site. The continual management of the stands including monitoring from initial stand development to the maturity of the stand would be completed by various forestry staff such as Silviculturists, Timber Sale Officers, and forest development staff. The monitoring would ensure the individual stands are going down the anticipated pathway to the desired future conditions.

Culverts would be replaced at certain locations depending on the necessity which would be determined by the TSO's, District Officer, the road engineer, or Environmental Trust Department Non-Point Source Management Coordinator. Also, new culverts would be installed to allow the continual flow of water to remain in the same established channel and accommodate the estimated discharge of a 100-year flood event. Water sources would be identified on the CTCR Forest Practices/Hydraulic Practice Applications as potential sites to obtain water for road watering, dependent on approval from the CTCR Water Administrator. Calcium chloride may be used on sections of road as an alternative to road watering.

3.0 Affected Environment

3.1 Forestry

Affected Environment

General Discussion

The project area is located between Nespelem, WA and Omak, WA. The project area lies on both sides of State Highway 155. The headwaters and upper reaches of Omak Creek lie within the east half of the project area. Summit Lake is within the southern part of the project area. Camp Progress Road runs south of the highway, into the middle of the project area. Jim Creek lies within the west half of the project area. The community of Disautel lies within the project.

Forest Health

From the early 1920's to the late 1960's single tree selection or a selective harvest was the most common logging practices. The objective was to remove the larger more desirable tree species, Ponderosa pine, and Western larch. There is evidence of this throughout the entire Omak/Nespelem District, but more recent improved, scientific-based forest management practices are apparent as well. Favorable topography and access have facilitated extensive past logging activity.

Around the same time, land managers also began to aggressively put out wildfires. Historically, the forest types in this project area would have been open and "park-like" with frequent fires removing many of the understory trees and creating an open condition that would have favored shade intolerant species such as Ponderosa pine and Western larch. These openings have been encroached with conifers and shrubs over the last 80-year period.

Years after Selective Harvest and Fire Suppression

Selective harvest not only removed a much desirable species composition, but it also removed much of the fire tolerant tree species and size classes.

The species composition has shifted so heavily to Douglas-fir, Subalpine and Grand Fir and Lodgepole Pine that intensive management such as site preparation and/or planting would be needed to shift the area back to a Ponderosa pine/Western larch dominated forest. Douglas-fir, Subalpine/Grand Fir and Lodgepole Pine are much more prone to insects and diseases, and far less tolerance to fire and drought. Because of the dense level of Douglas-fir, Subalpine/Grand Fir and Lodgepole Pine in the understory, the proposed treatment units are at very high risk for catastrophic fire and insect outbreaks.

Past Treatments

Management implemented changes in the early 1980's and 1990's from uneven-aged to even aged practices like commercial thinning, clear-cuts, seedtree, regeneration with reserve trees, and shelterwoods. The Jim Creek 2023 Forestry Project Area had last been managed around 2008. Previous harvest history shows a unique even mix of intermediate cuts such as commercial thins and regeneration cuts such as Seedtree/Overstory removals. Maintenance treatments are planned in many of these same blocks this entry. This was to revert the species composition back to Western larch/Ponderosa pine and release these species established by previous entries. A concerted effort to treat fuels around individual's homes would be made this entry. A large fuel break estimated to be five miles in length is planned along the main BIA KarTar Creek Road. The fuel break begins at HW 155 and runs west to the 2021 Whitmore Fire scar.

Insects & Diseases

There are several insects and diseases issues causing forest health issues within the project area. Many of these have been exacerbated by past selective harvest practices and fire suppression, as discussed earlier in this section.

Dwarf Mistletoe

Dwarf mistletoe is the most common disease affecting forest health in the project area. Dwarf mistletoe is endemic to the reservation but is more abundant than historic levels due to past management practices.

Effects of Dwarf Mistletoe

- Robs the tree of nutrients and water
- Severe growth loss and decreased survival
- Small trees are unlikely to ever grow into large tree dominated forests
- Causes bunched growths of branches called witch's broom
- Causes large branches and knots which decreases the wood quality

Armillaria Root Rot

Armillaria root rot pockets of various sizes and infection rates were found scattered throughout the project area. Root rot is a fungus that kills host cambium, decays root wood, and plugs water conducting tissue. The effects of root rot are:

- Creates openings in the forest by killing trees
- Kills infected trees or weakens them so beetles can kill them
- Reduces diameter growth
- Can cause butt rot, which reduces the value of individual trees

A few of the proposed units within the project area have root rot infections. Consultation with the USFS Forest Health Department in Wenatchee, WA has been made and their treatment recommendations would be implemented in these units.

Insects

Signs of several insects throughout the project area are evident in declining tree growth and form coupled with increased and accelerating mortality. The primary insect concerns are:

- Overstocked ponderosa pine at risk of epidemic for IPS Pine beetle.
- Overstocked Douglas-fir, at risk of epidemic levels of Western Spruce Budworm and Tussock Moths further stressing trees through defoliation or even leaving to mortality.
- Western pine beetle, Douglas fir beetle, fir engraver and other wood borers. These are usually found in conjunction with overstocked stands or root rot pockets

Post-harvest slash and site preparation treatments are planned and needed for conifer regeneration establishment and fuel hazard reduction. A concerted effort would be made to: monitor for beetle activity, burn slash concentrations as soon as possible and cut and buck loose slash to contact specs so that it dries out quickly.

Road Conditions:

- Washed out culverts
- Poor water drainage off roads

Culverts within project area have been evaluated. Upsizing, replacement and clean out has been documented and presented on Ex. B Map. Coordination with transportation planner and Environmental Trust has taken place to identify and plan roads that have been poorly placed in the past or have drainage issues.

3.2 Soils

The landscape throughout the project area is dominated by mountain slopes. Soils are formed predominantly from residuum and colluvium, glacial till, volcanic ash, and loess. Soil parent

materials largely derived from glacial till with a mantle of volcanic ash or glacial lake sediment and glaciofluvial deposits mixed with loess and volcanic ash. Table 4 shows the general soil types and their landscape characteristics. Soils data for the Colville Indian Reservation comes from the detailed soil survey of the Colville Indian Reservation (NRCS 2002).

Table 4. General soil types and their landscape characteristics of the project area.

General Soil Types	Map Unit Names	Landform
Silt Loam/Silt Loams Association	Nevine, Neuske, Louploup, Swimpkin	Mountain Slopes, Lake Terraces
Loam/Loams Association	Apex, Bernhill, Stepstone, Scrabblers	Mountain Slopes, Till Plains
Sandy Loam	Stapaloop, Merkel, Torboy, Donavan	Outwash Terraces, Mountain Slopes, Hillslopes

3.3 Hydrology

This project area contains the Upper Omak Creek Watershed Management Unit (WMU). Omak Creek is a major tributary to the Okanogan River. The Jim Creek Project Area extends southward to the drainage divide of the Omak Creek Watershed. Omak Creek is fed by Trail, Clark, and Swimptkin Creeks to the east, and Coyote Creek 01, and Camp 7 Creek to the west. The Kartar and Nason Creek drainages bound the project area to the west, but flow towards Omak Lake. The Lower Omak Creek WMU is fed by the Upper Omak Creek Watershed, which ultimately flows into the Okanogan River.

Table 5. Hydrologic features within project area footprint.

Hydrologic Feature	Potentially Affected Size
Mapped Streams	84.96 mi
Mapped Wetlands	269.46 ac

3.4 Fish and Wildlife

Wildlife

The Jim Creek Project Area supports habitat for a variety of birds including Northern goshawks, great gray owls, other raptors, pileated woodpeckers and other cavity nesters, gold and bald eagles, owls, and a wide range of songbirds. Habitat components that provide requirements for the highest concentration of birds are found in and around riparian areas and areas with deciduous vegetation. Other critical habitat components include large diameter trees, snags and an abundance of large woody debris.

Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), of 1940, as amended, and Migratory Bird Treaty Act (16 U.S.C. 703-712), of 1918, as amended, prohibits anyone, without a permit, from “Taking” eagles or any bird, including their parts, nests, or eggs. Within this Act, eagles/nests/eggs/young are not to be “Disturbed” including agitated or bothered. Aerial surveys have been conducted in the past by the Colville Tribe to identify eagle and raptor nests. All known nests are buffered and have seasonal restrictions.

Other Species

The Northern goshawk (*Accipiter gentilis)* is a large forest raptor, strongly associated with mature forests where there is dense and closed canopy cover, open understory for flyways, and multiple canopy layers for protection. These attributes are critical for nesting and foraging Northern goshawks. Great gray owls (*Strix nebulosi)* share similar habitat requirements as the Northern goshawk with the additional requirement of open meadows for hunting. Pileated woodpeckers (*Hylatomus pileatus*) and white-headed woodpeckers (*Picoides albolarvatus*) are residents of the project area. Woodpeckers seek habitat that contains large diameter trees and mature stands of timber with an abundance of woody debris.

The Jim Creek Project Area contains habitat that meets the life requirements of a variety of mammal species including snowshoe hares (*Lepus americanus*), mice (*Cricetidae spp.*), voles (*Cricetidae spp.*), beaver (*Castor canadensis*), several species of bat (*Chiroptera spp.*), coyotes (*Canus latrans*), black bears (*Ursus americanus*), bobcats (*Lynx rufus*) and cougars (*Puma concolor*). Reptiles and amphibians are also residents of the project area and are sensitive to habitat changes. Areas used for reproduction are among the most important areas to protect for these species. Each of these species would react differently to the impacts of logging operations but maintaining species diversity and structural complexity would ensure the continuance of the greatest suite of species.

Mule deer (*Odocoileus hemionus*), White-tailed deer (*Odocoileus virginianus*), Rocky mountain elk *(Cervus elaphus nelsoni),* and Moose (*Alces alces)* are culturally significant species to tribal members for both subsistence and ceremonial uses and are found within and adjacent to the project area throughout the year. Additionally, aerial big game surveys have documented winter range for elk, white-tailed deer, mule deer, and moose within the perimeter of the project area. Mule deer can be found throughout the area from steep forested ridges to lowland shrub-steppe habitat at all elevations. White-tailed deer are primarily found using riparian associated habitat adjacent to streams, rivers, meadows or agriculture at elevations below 3,500 feet. Elk are known to use portions of the area throughout the year, including calving grounds and winter range.

The Colville Reservation is currently home to eight known wolf packs. Gray wolves (*Canis lupus*) as an apex predator play an important role in ecosystem function, preying primarily on ungulates such as deer, elk and moose. Currently, there is a wolf pack utilizing the Jim Creek area, with habitat and prey existing to support wolves. This area provides travel habitat and movement for resident and migrant wolves. Wolves in Eastern Washington are state threatened species, but not a federal listed species.

Canadian lynx (*Lynx canadensis*) may also be present in the project area, but this occurrence is unlikely. This area is located south of the Omak Mountain Lynx Management Zone (LMZ) and lynx life requirements should be maintained. The project area serves as an important wildlife corridor. Additionally pine marten (*Martes martes*), wolverine (*Gulo gulo luscus)*, and fishers *(Pekania pennanti)* historically have been documented on the Colville Reservation. These rare forest carnivores are extremely susceptible to logging and harvesting of old growth forests. Snags are used for denning sites and the bigger snags should be left when possible.

Fish

The Jim Creek Forest Management Project is located within the Upper Columbia River Basin in the northwest corner of the reservation primarily within the Omak Creek Watershed. Omak

Creek is an Okanogan River tributary and the Okanogan River is the uppermost tributary of the Columbia River which supports anadromous salmonids. Anadromous salmonids that inhabit cold water tributaries such as Omak Creek have suffered from several actions and consequently, stream-type Chinook salmon are considered extirpated and summer steelhead are classified as "threatened." In addition to these two species recognized at a depressed level by the federal regulatory agencies, other species of Tribal interest in vicinity of the project site are Chinook *Oncorhynchus tshawytscha*, sockeye *O. nerka*, resident rainbow trout *O. mykiss*, and bull trout *Salvelinus confluentus*. Summer Steelhead in the area are listed as threatened in the Upper Columbia Evolutionary Significant Unit under the Endangered Species Act (ESA) and Bull Trout in the area are also listed as threatened within the Upper Columbia Recovery Unit (NMFS 2009; USFWS 2002). Omak Creek tributaries Camp Seven, Stapaloop, Swimpkin, Clark, Jim and Trail creeks and a number of their unnamed tributaries are also home to resident fish species including rainbow trout, brook trout *S. fontinalis*, and Dace species (Rhinichthys spp.), native minnows (Cyprinidae), and Sculpins (Cottidae).

Within the project area acute impacts to Bull Trout and Summer Steelhead are likely to be minimal and not of concern, however cumulative impacts of logging and associated road construction, road maintenance, and harvest related vehicle traffic have the potential to negatively degrade downstream habitat and as such the roads identified for closure (Appendix F) by CTCR Anadromous Biologist Chris Fisher and BIA Transportation Planner Megan Crim should be closed and decommissioned post-harvest. The road segments of concern are depicted in red on the map included as Appendix F and were originally prescribed for removal. The OND Forestry would like to use them for the sale and have agreed to close them afterwards by either: 1) recontouring the road prism to the adjacent slope; or 2) rip the roadbed (using a minimum of a two-prong subsoiler) to a depth of 18", after which the road bed would be seeded with a native seed mix, at a density of at least 10 seeds per sq. foot (Chris Fisher, personal communication, 19 December 2022). The actions described would render the roads "hydrologically inert" and mitigate the impacts of forest management by removing poorly located road segments and serve to work towards open road density targets identified in the IRMP (Klock 2001).

Federally Threatened or Endangered Species

Federally Threatened or Endangered Species: Section 7 of the Endangered Species Act (ESA; 16 U.S.C. 1531 et seq.) of 1973 as amended, and its implementing regulations found at 50 CFR 402, require federal agencies to insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat. The project would not directly or indirectly impact on any living resources.

Information for Planning and Conservation was acquired from the United States Department of Interior Fish and Wildlife Service (USDOI-FWS) for Endangered Species Act Species List. An Official Species List from the United States Department of Interior Fish and Wildlife Service (USDOI-FWS), is included as Appendix B. The following species, listed in Table 6, have no critical habitat and no potential to occur within or adjacent to the project site based on the appropriate USGS 7.5- minute quadrangle map.

Species	**Scientific Name**	**Status**

Canada Lynx	*Lynx canadensis*	Threatened
Yellow-billed Cuckoo	*Coccyzus americanus*	Threatened
Bull Trout	*Salvelinus confluentus*	Threatened
Monarch Butterfly	*Danaus Plexippus*	Candidate
North American Wolverine	*Gulo gulo luscus*	Proposed Threatened

Table 6. US-DOI-Fish and Wildlife Service: Official Species List.

Migratory Birds: Certain birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The birds listed below in Table 7, are birds of particular concern either because they occur on the USDOI-FWS Birds of Conservation Concern (BCC) list or warrant special attention in the project location.

Species	Scientific Name	Status
Cassin's Finch	*Carpodacus cassinii*	BCC Rangewide (CON)
Rufous Hummingbird	*Selasphorus rufus*	BCC Rangewide (CON)
Evening Grosbeak	*Coccothraustes verpertinus*	BCC Rangewide (CON)
Bald Eagle	*Haliaeetus leucocephalus*	Non-BCC Vulnerable
Golden Eagle	*Aquila chrysaetos*	Non-BCC Vulnerable
Lewis's Woodpecker	*Melanerpes lewis*	BCC Rangewide (CON)
Long-Eared Owl	*Asio otus*	BCC Rangewide (CON)
Olive-Sided Flycatcher	*Contopus cooperi*	BCC Rangewide (CON)

Table 7. US-DOI-Fish and Wildlife Service: Migratory Birds List. USFWS Birds of Conservation Concern (BCC); Continental USA and Alaska (CON).

Habitat

The Jim Creek Project Area is comprised of terraced, granitic/volcanic mountains and hilly terrain. Due to its western locale on the Colville Reservation, there is a strong influence of the rain shadow effect cast by the Cascade mountain range; as a result, it is a warmer and drier environment compared to the eastern sector of the Colville Reservation. The flora of the Jim Creek Project is distinguished by the near or complete absence of grand fir (*Abies grandis*), western red cedar (*Thuja plicata*), and the pacific yew (*Taxus brevifolia*) plant communities. Ponderosa pine (*Pinus ponderosa*) dominates the dry, warm sites of the reservation. In the Jim creek project, ponderosa pine is found mainly in southern aspects with skeletal soils, particularly the south-facing aspect of the terraces along highway 155. Douglas fir (*Pseudotsuga menziesii*) is the most dominant forest zone on the Colville Reservation. Douglas fir zones are found in hillier and mountainous terrain at higher elevations in the project area.

The project area supports a variety of cottonwood and aspen (*Populus spp.*) stands possessing multiple stand characteristics. Riparian areas within the project area are associated with seeps and springs, intermittent and perennial streams, and wetlands. There are many seeps and springs in this area that may not be visible until the ground is disturbed; this, along with soil type and slope, could result in washouts and landslides.

Within the project, some areas contain sufficient woody debris both in the uplands and riparian habitats.

3.5 Cultural Resources

National Historic Preservation Act (NHPA)

Section 106 of the National Historic Preservation Act (NHPA) as amended, and its implementing regulations found at 36 CFR Part 800, require federal agencies to identify cultural resources for federal action. The significance of the resource must be evaluated using established criteria outlined at 36 CFR 60.4. If a resource is determined to be a historic property, Section 106 of the NHPA requires that effects of the undertaking on the resource be determined. A historic property is "…any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and material remains related to such a property…" (NHPA, 16 USC 470w, Sec. 301[5]).

The Jim Creek Forestry Project is within the ancestral lands of the Okanogan and Nespelem Tribes, who can identify their ancestry back over a thousand years in this area. The languages of the twelve tribes comprising the Confederated Tribes of the Colville Reservation have been grouped into general Salishan and Sahaptian language families. The majority spoke the Interior Salish languages of nxaʔamcín and nsləxcín, though the Sahaptian languages of the Nez Perce (nímípuʔ) and Palus (palús) were also spoken. The language of the Okanogan and Nespelem is nsləxcín.

For the purposes of consultation with the Tribal Historic Preservation Officer (THPO) under Section 106 of the National Historic Preservation Act, the 7,877 acre timber treatment areas and attendant landings, any road construction and reconstruction as well as all existing roads utilized for logging operations would be considered the Area of Potential Effect (APE).

Approximately 881 acres were previously surveyed within and immediately adjacent to the Jim Creek Forestry Project Area (Gough 1990; Meyer 2005; Hess 2007; Pouley & Meyer 2009). These inquiries have resulted in documentation thirteen archaeological sites within or immediately adjacent to the Jim Creek Project Area and a review of the Colville Confederated Tribe History/Archaeology Program documented five Traditional Cultural Properties (TCPs) and one historic Indian cemetery within the project area (Table 8) for a total of nineteen cultural resources.

A search of Bureau of Land Management/General Land Office (BLM/GLO) records indicates that there are twenty-two historic Indian allotments documented here.

For the current project, a predictive model was used to select areas within the Jim Creek Project Area for a cultural resource survey.

Table 8. Cultural Resources Recorded within and adjacent to the Jim Creek Project Area*.

Site ID Number	Site Name	Site Description
45OK396	Disautel Pictographs	Pre-contact/Historic Rock Image
45OK956	Camp Six	Historic Logging Property
45OK990	Disautel Town Site	Historic Logging Property
45OK991	Omak Creek CCC-ID Camp	Historic Depression Era Property
45OK1522	Brooks Corral	Historic Road
062005-1	N/A	Pre-Contact Rock Shelter
042805-1	N/A	Historic Scatter
042805-2	N/A	Historic Scatter
052011-1-AM	Wippel Allotment Graves	Historic Gravesite
052011-2-AM	Wipple Allotment Can Dump	Historic Scatter
050905-2	N/A	Historic Scatter
042705-1	Gemini Mine	Historic Mining Property
042505-2	N/A	Historic Rock Cairn
CEM-WA-OK-38	Alice B. (Zarcherle) Irey	Historic Cemetery
CCT-WA-OK-994	Omak Creek Fishing Area	TCP – Fishing Location
CCT-WA-OK-1059	Disautel Pictographs	TCP – Community Knowledge
CCT-WA-OK-1022	Indian Carrots	TCP – Gathering Area
CCT-WA-OK-1021	Summit Lake	TCP – Gathering Area
CCT-WA-OK-954	N/A	TCP- Place Name/Camp Site

*Archaeological and sacred site locations are not provided in this document because disclosure of site locations may put these resources at risk to vandalism and looting (see the National Historic Preservation Act of 1966, Section 304a; and the Archaeological Resources Protection

Act of 1979, Section 9a) or jeopardize their access, integrity and ceremonial use (see Executive Order No. 13007).

Fourteen of the nineteen cultural resources identified within/adjacent to the entire project area are located within the APE for the current project. These sites have been recorded as CCT-WA-OK-994, CCT-WA-OK-1059, CCT-WA-OK-1022, CCT-WA-OK-1021, CCT –WA-OK-954 which are Traditional Cultural Properties (TCPs), 45OK956, 45OK991, 042805-1, 042805-2, 05211-1-AM, 052011-2-AM, 042705-1, 042505-2, and CEM-WA-OK-38. These sites may be considered eligible for the National Register of Historic Places, as described in 36 CFR Part 60.4.

All TCPs and archaeological sites must meet at least one of the following criteria to be considered eligible for evaluation to the National Register: A) they must be associated with events that have made a significant contribution to the broad patterns of history, B) they must be associated with the lives of persons significant to our past, C) they must embody the distinctive characteristics of a type, period, or method of construction or they represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components make individual distinction, or D) they must have yielded, or be likely to yield, information important in prehistory or history. Additionally, to be a "property" a TCP must have tangible boundaries (36 CFR 60.4; Parker & King 1998).

Shannon and Moura (2007) have aptly observed that due to the unique nature of TCPs, the standards identified above must also be evaluated with perception of Native American history. When reviewing TCPs for continued use of at least 50 years, for instance, it must be recalled that federal and state policies common in the 1800s restricted, regulated and denied access to property to Tribal people which had previously been in their exclusive territory. Oftentimes, Indian people may shift their area of use to adjacent or nearby locations if a previously utilized property suddenly (and beyond Tribal control) became unavailable. Therefore, a location may still retain value and continue to be a TCP when access is restored (Shannon & Moura 2007).

In pre-contact and historic times, the knowledge of these TCPs and their locations and use provided people with a means for subsistence and important cultural items for personal use or trade, cultural practices which continue to this day. Additionally, the nature of these sites and their close proximity to other documented cultural resources, including pre-contact, historic and additional TCP sites increases their potential to yield information important to the CCT.

Oral history accounts of the region identify the general areas of Omak Creek, Summit Lake, Swimptkin Creek and Stapaloop Creek as possessing traditional value in addition to those locations observed during the archaeological survey. It is the position of the CCT that "A place is significant due to its location and the meaning assigned to it, not the language of the name by which it is known. While recording place names in the original languages is of immeasurable value, the places would continue to have meaning and significance regardless of the language used to describe them (George 2011).

It is likely that cairns, rock alignments, and other rock features may be found throughout the area due to the prominent landscape of the mountains in the area. Small pre-contact camps may be present on the upland areas adjacent to springs or creeks, or in sheltered canyons, where people would have camped while taking advantage of upland resources. Evidence of early historic-period occupation, logging and mining features and\or graves may be present within the project

area. It is also likely that eagle feather collection areas are utilized by current Tribal members, given the proximity to the Columbia River.

The project area is located within the Omak Watershed, which contains twelve springs and all or portions of Tunk Creek, Stapaloop Creek, Swimptkin Creek, Clark Creek, Camp Seven Creek, Trail Creek and Summit Lake. Land-based cultural activities occur in the summer and fall within this watershed, with the most prevalent use during the summer. Traditional use of sweathouses perpetuates within the Nespelem River Watershed, as do harvest of culturally significant plant species across the landscape. Six locations within the watershed have been documented as important areas for water-related resources and legendary landscapes. Some of these areas include Omak Creek, No Name Creek and Trail Creek. The project area falls within a portion of the watershed which is documented as a principle gathering location for at least twenty-three native plant species for consumption, construction, weaving, and religious purposes (Table 9).

Table 9. Traditional Cultural Plants gathered within the project area (Marker et al. 2011).

Arrow-leaf balsamroot, *Balsamorhiza sagittata*	**Ponderosa Pine,** *Pinus ponderosa*	**Lichen,** *Lewisia rediviva*
Bitterrot, *Lewisia rediviva*	**Lichen,** *Bryoria femontii*	**Chokecherries,** *Prunus spp*
Hawthorn (Red or Black), *Crataegus spp*	**Elderberry (Blue or Red),** *Sambucus spp*	**Huckleberry,** *Vaccinium spp*
Xusxus (Canby's Lovage), *Ligusticum canbyi*	**Foamberry,** *Shepherdia canadensis*	**Wild Rose,** *Rosa spp*
Sages, *Artemisia spp*	**Indian potato,** *Claytonia lanceolata*	**Sumac,** *Rhus glabra*
Red Willow (Dogwood), *Conrus stolonifera*	**Fir,** *Multiple Species*	**Tule,** *Schoenoplectus actus*
Green Willow,	**Buchgrass,**	**Cedar,** *Thuja plicata*
Lodgepole Pine, *Pinus contorta*	**Western Larch,** *Larix occidentalis*	

3.6 Range Management

The Jim Creek Project blocks intersect with four active range units. The Range Program infrastructure GIS layer shows an extensive interface between range infrastructure and the proposed activity areas. The CTCR Range Program asks that when encountered infrastructure such as cattle guards, watering facilities, and fences be avoided if possible. If range infrastructure

is damaged during project activity the project proponent would be responsible for notifying the range program and seeing that damage is repaired in a timely manner. Fences are of particular concern in that if they are along a roadway and are damaged, they need to be repaired immediately during the time livestock are expected to be present. Highway 155 is the main corridor through the project area. The season of use for Range Units 5, 6, 10, and 16 is May 1 to November 30 and livestock should be expected to be present during that period. The Range Program requires notification of when harvest activities would commence in an area so we can notify permittees. It would be necessary to keep gates closed during the grazing season.

4.0 Environmental Consequences

Summary Table of Issues Indicators

Table 10. Summary table of issue indicators for PIRM goals and objectives.

Resource	Issue	Issue Indicator	Alt. A	Alt. B
Vegetation/Timber	**Forest Health**	**Acres Treated**	0	7,877 ac
	Support of Tribal Wood Processing	**Timber Volume for Processing**	0	39.4 MMBF
	Tribal Income	**Projected Stumpage**	$0	$9,850,000
Hydrology **Fish & Wildlife**	**Sediment Delivery/Erosion** **Habitat**	**Road Construction**	0 miles	7.2 miles new construction 115.7 miles reconstruction
Hydrology	**Sediment Delivery to Surface Water**	**Road construction/reconstruction/use within 200 ft. of Surface Water**	NA	23.8 mi
Hydrology	**Sediment Delivery to Surface Water**	**Harvest within 200 ft of Surface Water**	na	738 acres
Fish and Wildlife **Road Density**		Upper Omak Cr	6.8 (mi/mi^2)	7.0 (mi/mi^2)
		Camp 7 Cr	9.6 (mi/mi^2)	9.5 (mi/mi^2)
		Lower Omak Cr	4.8 (mi/mi^2)	4.8 (mi/mi^2)
		Stapaloop Cr	8.8 (mi/mi^2)	8.8 (mi/mi^2)
		Swimptkin Cr	13.1 (mi/mi^2)	13.0 (mi/mi^2)

	Trail Cr	10.8 (mi/mi^2)	11.0 (mi/mi^2)

4.1 Forestry

Impacts to Forestry Resources Alternative A: No Action

- No profits for Colville Tribe and the volume toward AAC of 77.1 MMBF would be lost.
- Forest management would not receive the 10% funds.
- No timber industry employment would be generated.
- Forest health would decline, increased risk to disease, insects, drought and wildfire would occur.
- Improvements in forest roads in this project area would not occur.
- Area would move farther away from the Desired Future Condition's in the Integrated Resource Management Plan.
- No new acres would be added to the regulated forest.
- Reforestation would not occur or be diminished.
- Wildfire prevention/mitigation would not occur, would not meet the goals of the National Fire Plan.

If Alternative A is chosen, the Colville Tribe would receive no profit from their timber. This means that forest management would not receive the 10% funds needed to plant trees, thin trees, and collect pinecones. Moreover, this means less work for tribal members and higher unemployment. Finally, all the forest health problems outlined in the Affected Environment section of this document would continue and to worsen. Tree mortality would increase, and forest health would decline. Douglas-fir encroachment would continue, and there would be an increased likelihood of catastrophic fire and a severe insect outbreak.

Impacts to Forestry Resources Alternative B: Proposed Action

- $ 9.85 million dollars of profit for the Colville Tribe with a harvest of 39.4 MMBF.
- Species composition on 7,877 acres would be shifted to managed Ponderosa pine and Western larch.
- Forest health would improve, diseased trees would be lessened, and disease-resistant species would be regenerated naturally and with planting.
- Understory Douglas-fir, Subalpine/Grand Fir, Lodgepole Pine encroachment would be piled and/or burned, reducing the likelihood of catastrophic fire and prepare site for regeneration of desirable species.
- Density would be reduced in overstocked stands, creating a healthier forest.
- Desired Future Condition's outlined in the IRMP would be met over time.
- 115 miles of existing road would be improved.

Some of the potential negative impacts that a timber sale may create, include the following: Visual landscape changes or disturbances would occur. Man-made "signs" (ribbon, tags, paint) are introduced into the area to guide the forest management. Noise and dust are created from logging operations. Existing vegetation is temporarily disturbed, but their resiliency to

disturbances would allow them to come back. Skid trails and landings are created. Woody slash material is created.

4.2 Soils

Impacts to Soil Resources Alternative A: No Action

The "no action" alternative would have no impact on the soil resource within the project area.

Impacts to Soil Resources Alternative B: Proposed Action

Soil would be impacted by ground-based logging, cable or cable assisted logging, tethered logging, excavator piling and broadcast burning. Approximately 6,830 acres would undergo ground-based logging. Blocks that are cable logged and/or tethered logged, comprising approximately 1,040 acres, typically have fewer significant soil impacts. If tethered logging is used instead of cable, soil impacts would vary depending upon localized conditions, but tend to improve overall safety. For site preparation, 0 acres would undergo broadcast burning, 1,594 acres would be excavator piled, and 6,023 acres would undergo lop and scatter. Approximately 6,001 acres of potential prime farmland exist within the commercial harvest blocks. Prime farmland within the project area is located within forested land that is part of the CTCR designated commercial timber base. It is unlikely that timber harvesting would have any detrimental effect on the functional integrity of the land classification and CTCR does not have future plans to develop the prime farmland within this project area.

Generally, areas with slopes exceeding 35% are less well suited to use of ground-based machinery and soil impacts would be greater. According to data obtained from the Colville Tribes RIA/GIS program, 4.0 percent of the total 6,830 ground-based logging acres of the proposed blocks in this project have slopes exceeding 35%, meaning the total ground-based treatment area with slopes exceeding 35% would be 276 acres. Anticipated soil impacts include displacement of topsoil, rutting, compaction, and erosion or soil loss. Ratings of potential for soil degradation are provided by the Natural Resources Conservation Service. Table 11 shows the number of acres of ground-based harvest classified by soil displacement, rutting, compaction, and erosion hazard ratings:

Table 11. Ground-based harvest acres with soil degradation ratings.

Soil Degradation Type	High Potential Acres	Moderate Potential Acres	Low Potential Acres
Displacement	1,317.0	5,333.1	171.9
Rutting	5,106.1	1,612.4	103.5
Compaction	5,064.1	1,630.9	127.0
Erosion	Null/Not Rated in NRCS Web Soil Survey With steep slopes, erosion could become an issue with severe precipitation events.		

The Natural Resources Conservation Service rates most soils with slopes exceeding 20% as poorly suited or unsuited for surface mechanical site preparation. Approximately 43.5 percent of the total harvest acres blocks in this project have slopes exceeding 20%. The primary factor limiting suitability is hill slope. Anticipated soil impacts include displacement of topsoil and erosion.

Skid trails and pile burning generally cause severe impact to the upper soil layer (Cooley 2004). Skid trail impacts include compaction, rutting, and erosion or soil loss. Pile burning consumes most soil organic matter, nutrients, while changing the texture of soil surface layers.

Any new road construction likely involves clearing and grubbing, excavation, and compaction of multiple acres of soil depending on the mileage of new road. According to the project shapefile, approximately 7.2 miles of new road construction and 115.7 miles of road reconstruction would occur.

Standard Operating Procedures and Mitigation Measures

All applicable Best Management Practices (BMP) specified in Tribal Code CTC 4-7 Forest Practices are required to limit soil damage (CTCR 2015). Some notable provisions follow:

Overall, activities should be performed when soil conditions are not likely to result in excessive erosion or soil movement, considering soil types, slopes, and climatic conditions.

Avoid developing prime farmland to preserve those portions of the reservation which contain prime agricultural soils for agricultural purposes.

4.3 Hydrology

Impacts to Hydrology Resources Alternative A: No Action

The no action alternative would allow for the natural ecological process to continue. Stream channel hydraulics and associated riparian vegetation would not be impacted by harvest related activities. Effective ground cover and hydraulic roughness would remain, continuing to provide overland flow attenuation and prevent nonpoint source pollutant delivery to downslope watercourses. Retention of mature vegetation would continue to provide canopy interception and reduced rain splash erosion. Infiltration would remain high, and rill and scour erosion would remain minimal. Additionally, soil structure would be maintained in the current state. All methods of timber harvest, ground- or cable-based, result in some amount of soil disturbance. Soil compaction generally occurs in locations where machinery tracks have traveled (particularly in wet conditions), while destruction of soil structure and subsequent sediment mobilization generally occurs as a result of ground-based operation on steep slopes and a lack of traction. Transport of trees by logging equipment also results in soil disturbance and transportation. These effects would be avoided through Alternative A, maintaining soil structure, density, and productivity.

Road density would be maintained at the current level in Alternative A. Existing road density in the Upper Omak Creek WMU is higher than the desired condition outlined in the IRMP, but lower than the density that would be achieved as a result of Alternative B. Alternative A would also not involve reconstruction of any existing roads, allowing existing vegetative cover and stability to be maintained. Maintaining the lowest road density (i.e. the existing condition) would provide the closest approximation of natural hydrologic conditions, between the two scenarios. High road densities are detrimental to watershed hydrology primarily due to the interception and diversion of water from natural flow paths. When water flowing down a hillslope is intercepted by a road prism, ditch, blocked or undersized culvert, or other infrastructure, that water is generally diverted or lost to evaporation, rather than continuing as overland, shallow subsurface, or groundwater flow. As climate change advances, it becomes increasingly important to retain water on the landscape. High road density contributes to the loss of water on the landscape

through decreased infiltration and increased evaporation, and each additional road increases these effects.

Existing roads in the Upper Omak Creek Project Area are maintained to various levels of stability. 155 existing segments, with a total length of 36.59 miles, were identified for review within the project area; segments were selected for review if they were within or adjacent to swales, draws, wetlands, streams, or other aquatic resources. Under Alternative A, none of these segments would be reconstructed, and use would not increase. However, segments that have not been maintained would continue to be at risk of failure, and crossings obstructing flow and fish passage would continue to do so.

Impacts to Hydrology Resources Alternative B: Proposed Action

- 7.2 miles of new road construction and 115.7 miles of road reconstruction
- 4.46 miles of new construction and 19.35 miles of reconstruction within 200ft of surface water
- Harvest activities within 200ft of surface water – 738 ac

All road construction and use associated with proposed timber harvest activities would lead to soil disturbance and loss as well as alteration of watershed hydrology (Hunner 2014). Specifically, road miles within 200ft of surface water are statistically likely to deliver sediment/erosion to surface water (Dubé et al 2004). Road reconstruction and new construction effects on water quality, hydrologic processes, and aquatic habitat would be the longest-on-going, longest-lasting, and highest-degree negative impacts resulting from the proposed action. The use of heavy machinery to create and redo roads would result in immediate sediment delivery to adjacent waterbodies. Additionally, reconstruction results in soil compaction and disturbance, both of which are significant causes of decreased soil health, eventual runoff channelization and continued erosive losses. Repeated improper reconstruction procedures that fail to reincorporate disturbed material into the road prism create linear features that channel water away from natural water features. When these features are created adjacent to streams, heavy flow events can cause the relocation of the active channel into the road prism, creating a safety hazard, and drastically altering the natural hydrology of the area. Proposed reconstruction and new construction in the Jim Creek project area would occur on 126.02 miles of road, with as many as 22.6 additional miles of potential road use on BIA, county, and “existing” forest roads. High road densities detrimentally affect water retention on the landscape, creating interception points that redirect flow from reaching creeks, streams, and wetlands. Abandonment and revegetation of roads can mitigate some of the effects of high road density, improving infiltration and decreasing overland flow, but retention of road prisms, nonnative road bed material, and artificial crossing structures such as culverts would continue to alter hillslope hydrology regardless of vegetation establishment.

The proposed project plan also includes 738 acres of planned harvest activities within 200ft of surface water. Harvest operations, including the use of heavy machinery to fell and skid timber, cause soil compaction and erosion; additionally, as a result of decreased vegetation, interception, infiltration and water use are decreased, and a greater volume of water occurs as overland flow. This can result in great sediment transportation to downslope streams and wetlands, resulting in decreased water quality. Additionally, harvest operations create linear features such as skid trails. If oriented parallel to the slope, or located in swales and topographic low points, these linear

features channelize water, and lead to rill and gully erosion, sediment transportation, and road failure. These effects can be minimized by locating skid trails perpendicular to slope direction, and through the use of cable logging rather than ground based harvest systems, particularly on steeper slopes. Tethered logging, a harvest system new to the Reservation, which involves the use of a winch for assistance in machinery operation of slopes, is proposed for 1,040 acres of blocks. Existing Tribal Code does not allow for operation of ground based harvest systems on slopes over 35% due to potential soil impacts; however, tethered logging is in the process of being adopted for use on steeper slopes to increase efficiency and decrease costs of harvest. Where any ground based harvest system is used on vulnerable soils, the potential for compaction and erosion is increased. When these factors are combined with steep slopes and proximity to aquatic resources, the potential for sediment delivery and resource damage is significant.

Mitigation and Monitoring Requirements

Operators must ensure that all Best Management Practices (BMP) and standards for timber harvest identified in Colville Tribal Code (CTC) Chapter 4-7: Forest Practices are followed in order to minimize hydrologic disturbance resulting from actions taken under this alternative. During road construction and reconstruction Planners and Operators must ensure that new/re-constructed roads meet the BMPs and standards for roads identified in Chapter 4-7: Forest Practices, and CTC Chapter 4-9 Hydraulic Projects if doing any culvert/bridge work. By meeting these BMPs Planners and Operators would minimize the water quality, hydrologic process, and aquatic habitat degradation associated with roads as a result of the actions taken under this alternative. The transportation plan developed by the OND Forest Roads Engineer incorporated input from the Environmental Trust Department regarding stream adjacent roads, new road locations, and culvert sizing and placement. The Forest Roads Engineer should continue to work with the Watershed Restoration Program to remove any unnecessary road construction, and determine where roads can be closed or decommissioned to reduce road density.

A shapefile entitled 062122_SiteVisitShp was provided on 6/30/22. It contains information regarding culverts that were field assessed and determined through interdisicplinary coordination to require improvements to be in compliance with Tribal code, and Best Management Practices.

OBJECTID C1 is a 24” CMP, while it should be a 36” CMP. OBJECTID C2 is a 24” plastic pipe, and should be a 36” CMP based on the width of the stream. OBJECTID C3 is an 18” CMP which should be replaced with a 24” CMP. OBJECTID C4 is a severely undersized 24” CMP, which should be replaced with a 48” CMP. Location C5 was identified as needing a drivable dip, to move water from the adjacent seep off the road. Segment F1 is a ford that we determined would solve the issue of water seeping into and compromising the road.

The segment of road passing through a wetland, identified as R1, was determined to be unnecessary to access blocks, and would be tank trapped (T1) to prevent continued degradation of the wetland.

An additional shapefile, entitled 092022_SiteVisitLines, was provided on 9/22/22. This shapefile identifies segments of road that were originally identified as needing review, and were subsequently field assessed for potential to detrimentally affect aquatic resources.

Road segments OBJECTID 1529, 4366, and 4503 run parallel to a currently used road, and are redundant, in addition to being located in a draw. These road segments are unnecessary and should not be used.

Road segment OBJECTID 10623 is stream adjacent, and should not be used. Road segment OBJECTID 4085 is only accessible by segment 10623, and therefore should also not be used.

Within the "JimCreek_Roads" (10/22/22) shapefile, the following issues were identified. Restored roads were provided to Forestry staff on 3/16/22, with a memo stating that these roads were not available for reconstruction. Additionally, all road closures were reviewed and approved by the 3P Team at the time of restoration project. The below roads may no longer remain in the most up to date transportation plan, but comments apply to all restored segments. The entity responsible for originally restoring the road should be consulted prior to use of any segment purposefully removed from the transportation network, in order to prevent further and repeated natural resource damage.

Proposed road segment FID 1421 is located entirely within a wetland. This is a violation of Tribal Code, and should not be carried out, as was outlined in the 3/16/22 Preliminary Transportation Memo. Additionally, road segment FID 1329 extends beyond a previously decommissioned road segment, and terminates on the southern end within a mapped wetland. Road construction should not occur within any wetland, stream, floodplain, or buffer area.

Table 12. The Forest Roads Engineer provided the following crossing data. ETD has provided input on sizing and installation.

FID	Existing	Forestry Proposed Size	ETD Proposed Size	ETD Comments
2	18"	24"	48"	Complete stream profile in spring 2023 and size based on results.
5	36"	48"	-	May need field review
9	None	24" or log crossing	-	Log crossing must be removed immediately after use.
14	24"	24"		Do not install. Road segment 1421 is located within a wetland, and should not be constructed, in accordance with Tribal Code.
29	None	24"	-	Do not install unless road segment is relocated out of aquatic resource areas. Road segment 1329 only available for use if located entirely outside of stream, wetland, and buffer.

Table 13. Potential blocks that would require seasonal restriction if tethered harvest system is used.

Comp	Block	Proposed Harvest System	ETD Mitigations
432	103	C/CA	Cable harvest only
432	102	C/CA	Seasonal restrictions if tethered
432	302	C/CA	Cable harvest only
431	236	C/CA	Cable harvest preferred

423	37	CA	Cable harvest preferred
423	28	CA	Cable harvest preferred
423	29	CA	Cable harvest preferred
440	256	CA	Seasonal restrictions
423	8	CA	Seasonal restrictions

Planners and Operators should develop practices that would effectively mitigate for the increased road surface erosion. Such practices should include a plan for permanent road decommissioning to meet the IRMP objectives and comply with CTCR Forest Practices Code.

Upon completion of harvest or haul operations the following maintenance & monitoring actions be performed:

- Clear all drainage improvements of obstructions
- Stabilize or remove unstable material and forest debris with potential to block drainage improvements
- Repair or replace all damaged drainage improvements to fully restore their function
- Leave road surface in a condition that would prevent subsequent erosion, and keep runoff within natural drainages, by outsloping, removing berms from the outside of roads, providing drain dips, waterbars, rolling grade or other methods

4.4 Fish and Wildlife

Impacts to Fish and Wildlife Resources Alternative A: No Action

The "no action' alternative would not have adverse effects on fish and wildlife habitat in the project area. Leaving the timber intact would allow the area to follow natural succession patterns and would benefit wildlife species both terrestrial and aquatic. Fires and/or insect/disease die offs could affect the project area but the timing and severity of these disturbances is not known. Natural disturbances may even benefit fish and wildlife species by increasing habitat values. Overstocked and diseased stands may show a decline in value for some species of wildlife.

Impacts to Fish and Wildlife Resources Alternative B: Proposed Action

Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act

Per code 4-7-68 a minimum of two reserve trees per acre, well distributed, shall be left standing (CCT 2006). Due to this being suitable habitat for eagle species it is requested that these reserve trees consist of the largest diameter and tallest living trees. If during harvest activities a bald or golden eagle nest is thought to have been found please contact the 3P wildlife biologist immediately.

Within the project area there are no known active great gray owl or Northern goshawk territories. If a great gray or goshawk nest is located, a no harvest activity buffer of 750 feet would be put into place, with a 0.5 mile seasonal (March 1- August 31) buffer to protect fledging activates. With the timbered habitat bordering open habitat there is the available structure to support both great gray owls and goshawks. If at any time during harvest activities of goshawk or great gray owls are observed the 3P biologist should be contacted.

Other Fish and Wildlife Species

The Proposed Action would have impacts on fish and wildlife species and habitat within the project area. Removal of timber from 7,877 acres could have negative impacts on wildlife populations that use the habitat in the project area to meet their life requirements. Impacts to the habitat within the project area would include but are not limited to: an increase in soil compaction and ground disturbance, a growth, and introduction of noxious weeds, the creation of large openings, a decrease in water quality, degradation of instream and riparian habitats, a reduction and loss of large diameter snags, future snags and large diameter downed wood, a deterioration or loss of mature and old growth coniferous forest, a loss of large diameter trees, a decline or loss of wildlife travel corridors, a decrease in hiding, escape and thermal cover, and a reduction in canopy cover.

These changes to the habitat structures and functions within the project area would have effects on a variety of wildlife species. The implementation of this project would decrease effective wintering, calving and summer/fall range for resident and migrant big game species, reduce the amount of suitable habitat for pileated and white headed woodpeckers, reduce the quality and quantity of instream and riparian habitat and impact the ecological function of aspen stands wetlands, seeps, and springs.

Being that Jim Creek Forest Management Project Area may support lynx travel habitat additional caution and protection should take place when working in these blocks for potential denning sites of animals. Additionally, any fisher or pine marten sightings or denning sites should be forwarded to the tribe's 3P wildlife biologist.

In the Project Area there are approximately 5,932 acres of blocks that are adjacent to streams. These bodies of water include Camp seven creek, Upper and Lower Omak Creek, Swimptkin Creek, and Stapaloop Creek. The water bodies eventually flow into Omak Lake or the Columbia River, both of which provide several ecosystem services for the Colville Reservation. Harvesting close to or near bodies of water would allow for increased sedimentation, temperature, decreased supply of woody debris for invertebrates, an increase in turbidity, all of which would lead to a reduction in fish habitat as well as water quality. These streams and their associated riparian habitat have some of the highest fish and wildlife richness and diversity and are very susceptible to environmental change.

Infrastructure (culverts) should allow for the passage of fish, flow, sediment, and debris. Undersized culverts may lead to channel avulsion, head cutting, or failure of the structure completely. Constricting flow through undersized culverts may contribute to velocity barriers limiting instream movement of resident fish at early or all life stages. The failure of inadequately sized structures typically occurs long after work has been completed.

The proposed action falls within five of the Reservation WMUs which are the following: Upper Omak Creek WMU, Camp Creek WMU, Lower Omak Creek WMU, Stapaloop Creek WMU, and the Swimptkin Creek WMU. Road densities on the reservation are calculated using the WMU boundaries; Table 14 depicts the road density for the affected WMUs.

Table 14. Road Density by WMU.

WMU	Roads (mi)	WMU (mi^2)	Proposed New Rd (mi)	Proposed RD Decommision (mi)	Post Sale Roads	Pre-Sale Road	Post-Sale Road Density

					(mi)	Density (mi/mi^2)	(mi/mi^2)
Upper Omak Creek	275.9	40.3	**6.5**	1.3	281.1	6.8	**7.0**
Camp Seven Creek	52.6	5.5	**0**	.34	52.3	9.6	**9.5**
Lower Omak Creek	130.6	27.3	**0**	0	130.6	4.8	**4.8**
Stapaloop Creek	143.3	16.2	**0**	1.3	142	8.8	**8.8**
Swimptkin Creek	120.7	9.2	**0**	.34	120.3	13.1	**13.0**
Trail Creek	116.6	10.7	**0.7**	0	118.1	10.8	**11.0**

Currently all of the WMUs in this project exceeds the IRMP objective of 4.0 mi/mi^2 total road density. Alternative B proposes roughly 7.2 miles of new construction and 115.7 miles of reconstruction which would increase both open road and total road densities further exceeding the Tribes goal of 1.5 mi/mi^2 of open roads.

It is the suggestion of the Fish and Wildlife Department that unnecessary segments and select reconstructed roads should be closed to adhere to the IRMP goal of 4.0 mi/mi^2 total road for Upper Jim Creek WMU along with 1.5 mi/mi^2 of open road densities.

The department is proposing 13 road closures by double tank trapping to eliminate vehicle use (Appendix F). Forest road systems fragment wildlife habitat, reduce available habitat and create barriers for population movement. New construction and reconstruction of roads also have the potential to affect the surrounding fish habitat and water quality/quantity.

Federally Threatened and Endangered Species

The BIA and CTCR Wildlife Biologist determined that the proposed actions and associated activities would have 'No Effect' to threatened or endangered species, or candidate or proposed species, or suitable or critical habitat within the action area. Documentation is found in Appendix B.

Mitigation for Fish and Wildlife, Alternative B: "Proposed Action"

Mitigating for the loss and reduction of habitat structures and functions discussed above would minimize the negative impacts to wildlife habitats and species in the Jim Creek Project Area. The

following mitigation efforts are requested by the Fish and Wildlife department for any alternative that is chosen and implemented:

- Fawning/calving habitat: all areas of deciduous trees within wet areas and draws should be protected from disturbances.
- All native fruit bearing shrub and tree species should be protected and retained.
- Multilayered cover should be left along all access roads that have high vehicular use.
- Minimize the amount of use on stream adjacent roads and prioritize them for permanent or seasonal closure.
- Leaving more than the required 2 snags per acre would help mitigate some of the losses of large woody debris and recruitment trees.
- Wildlife corridors should be setup to allow for natural movement between seasonal and daily habitats.
- Snags in harvest units would be retained in clumps with their associated understory vegetation intact to insure their retention after site preparation.
- Green leave trees would be identified and retained as future snags in all areas. The majority of large diameter trees should be left standing. Blocks that would be treated under the RRT prescription should have more than 2 trees per acre after the harvest.
- All large diameter woody debris should be left on the ground to insure habitat for a wide range of species.
- All wetlands should be protected with maximum RMZ lengths and should all be protected from equipment entry.
- Implementation of bank stabilization, sediment traps and road surface improvements to decrease risk of sediment delivery and runoff into surrounding watersheds.
- Areas where there is considerable soil disturbance should be planted to reduce encroachment and establishment of noxious weeds.
- If at any time during harvest a bald or golden eagle nest is found, cease work within .25 miles of nest and contact the 3P Wildlife Biologist; all timber harvest is prohibited within 660 feet of active bald eagle nests (Klock 2001).
- If at any time during harvest a Northern Goshawk or Great Gray nest and/or territory are thought to have been found, cease work within 750 feet and please contact the 3P Wildlife Biologist.
- Infrastructure (culverts/bridges) should allow for passage of all life stages of fish, and for water, sediment, and wood/debris during Q_{100} flow events.

4.5 Cultural Resources

Impacts to Cultural Resources Alternative A: No Action

Although there may be a number of direct and indirect effects to the Reservation's resources from the implementation of Alternative A, it is important to recognize that cultural resources are, for the most part, non-renewable resources. The 'No Action' alternative would have a number of various effects to the known cultural resources identified within the project area.

The historic exclusion of fire on the Reservation has resulted with an overabundance of vegetation. Although Alternative A would leave the timber intact and allow for natural succession patterns; overstocked and diseased stands have increased ladder fuels which must be addressed by current management practices.

Potential impacts of Alternative A include vegetation encroachment to sites which exhibit surface features. This encroachment may reduce visibility of the site, potentially affecting its integrity and increasing the likelihood of adverse effects to it from wildland or prescribed fire. Invasive non-native plant species within this area would likely perpetuate and increase, competing with native plant species of traditional and cultural significance. The 'No Action' alternative may also cause physical damage to sites from snags or trees falling upon them, dismantling, destroying or otherwise impacting surface features. Fallen trees may also expose buried subsurface cultural materials, which otherwise would have remained intact.

Impacts to Cultural Resources Alternative B: Proposed Action

There are currently eighteen known cultural resource sites recorded in the Jim Creek Project Area. An official determination of National or Colville Register eligibility for these sites has not been made, but most of these sites appear to be eligible. Nine sites are located within the APE of Alternative B; they have been documented as 45OK956, 45OK991, 042805-2, 042805-1, 052011-1-AM, 052011-2-AM, 042705-1, 042505-2, CEM-WA-OK-38. The 'Proposed Action' would result in no adverse effects to these sites as long as appropriate buffers are adhered to for 052011-1-AM and CEM-WA-OK-38. These sites may be considered eligible for the National Register of Historic Places, as described in 36 CFR Part 60.4.

Mitigation for Cultural Resources

Nine cultural resource sites have been documented within the project area. These sites have been documented as 45OK956, 45OK991, 042805-2, 042805-1, 052011-1-AM, 052011-2-AM, 042705-1, 042505-2, CEM-WA-OK-38, which are within the APE of the Jim Creek Project. 052011-1-AM, a historic grave site in treatment block 117-0637 and CEM-WA-OK-38, a cemetery in treatment block 114-0654. The Colville Confederated Tribes History/Archaeology Program recommends a 200 foot buffer be in place to protect 052011-1-AM and CEM-WA-OK-38.

The Resource Archaeologist would brief the TSO and others working in the Jim Creek Forest Management Project Area regarding the steps to be taken to identify and report cultural resources. If resources are found, the TSO shall insure that all work stops in the vicinity of the find, that steps are taken to protect the find, and that the Resource Archaeologist is called immediately. No work shall resume until the Tribal Historic Preservation Officer (THPO) has approved a management plan.

4.6 Range Management

Impacts to Range Resources Alternative A: No Action

This alternative would have no impact on the current ecological condition as no mechanical disturbance activity would happen. Although, no action would also not correct the identified forest health issues the project would address.

Impacts to Range Resources for Alternative B: Proposed Action

Forest understory recovery after logging activities is a resource concern. The area where the project blocks are located range from 14 to 20 inches of precipitation annually with differences most likely due to elevation. This range of average annual precipitation would likely cause natural understory recovery to be variable. There are fourteen forest ecosites represented in the blocks of this sale Douglas fir/common snowberry and Douglas fir/pinegrass occur over 50% with other Douglas fir variations, mallow ninebark and kinnikinnick phase being next most common. Ponderosa pine ecosites are found throughout the project area but occur most often in the northwest project area blocks in the 14-inch precipitation zone. Throughout the project area pinegrass appears to be the most represented grass species and being very resilient would likely not need help recovering except in the most highly disturbed sites. Idaho fescue and Columbia brome occur quite often as well and depending on circumstances these species may need assistance becoming more competitive against invasive weed species. These differences in plant communities and their ecology would need to be considered if seeding for highly disturbed sites is desired. Landings, skid trails, roads, and pile burns can result in a high degree of soil disturbance which can create a competitive advantage for invasive plants over more desirable plants. The drier lower elevation sites would be of concern as reduced moisture can increase recovery time of desirable species, allowing more time for invasive weed species to take hold. If monitoring determines a need, inputs in the form of herbicide treatment and native plant seeding should be considered to assist understory recovery. Intermediate wheatgrass and Siberian wheatgrass should not be used as they are non-native and highly competitive. If something is needed to quickly provide ground cover, there are alternatives to consider. If the project manager determines a need for seeding or spraying activities the Land Operations department can offer suggestions for herbicide treatment and seed type if assistance is needed.

Invasive Plants

Logging and related activities can introduce new invasive species to a site via uncleaned equipment and soil disturbing activities or cause currently present invasive species to spread more rapidly. The surrounding project area contains the following weed species: diffuse and spotted knapweed, scotch thistle, dalmatian toadflax, yellow toadflax, sulfur cinquefoil, common St. Johnswort, hoary alyssum, rush skeletonweed, and likely others that haven't been recorded. Land Operations recommends the following: cleaning equipment prior to using on site, washing equipment in a centralized area, re-seeding heavily disturbed sites such as skid trails and stacking sites, the use of biological controls on large weed infestations and herbicides as needed primarily along roadsides. If borrow pits or fill material are used from offsite, it is recommended that these materials be weed free to reduce the spread of invasive species. The Land Operations Program recommends that loggers, Forestry and Land Operations/Range staff work together to reduce the amount of weed infestations and treat disturbed areas post harvests. Seeding is recommended in highly disturbed areas to reduce the amount of invasive species regrowth following road closures. Recommend use of an approved seed mix that would be highly competitive with currently present invasive species.

4.7 Cumulative Impacts

Cumulative impacts are addressed in the FEIS for the CTCR PIRM (Klock 2000). Activities in this area that can result in cumulative impacts include domestic cattle grazing, fire management activities, wild fire, road construction and forest management activities. These activities combined could result in soil disturbance often associated with soil degradation and increased sediment delivery to surface waters. The vegetation removal can also decrease soil stability and

lead to increased water temperatures. All of these impacts can impact resident fish and aquatic life. These activities could also result in establishment of noxious weeds in the area, which can push out native species and decrease wildlife habitat quality.

5.0 List of Preparers

Name	Contributions
Shay Logue	Forestry
Tyrone Rock	Soils
Marcus McClung	Fish and Wildlife
Dennis Moore	Fish and Wildlife
Kerry Wilson	Range/Noxious Weeds
Charlotte Axthelm	Hydrology
Stacy King	Hydrology
Guy Moura	History/Archaeology
Amanda Hoke	History/Archaeology
Chasity Swan	Editor

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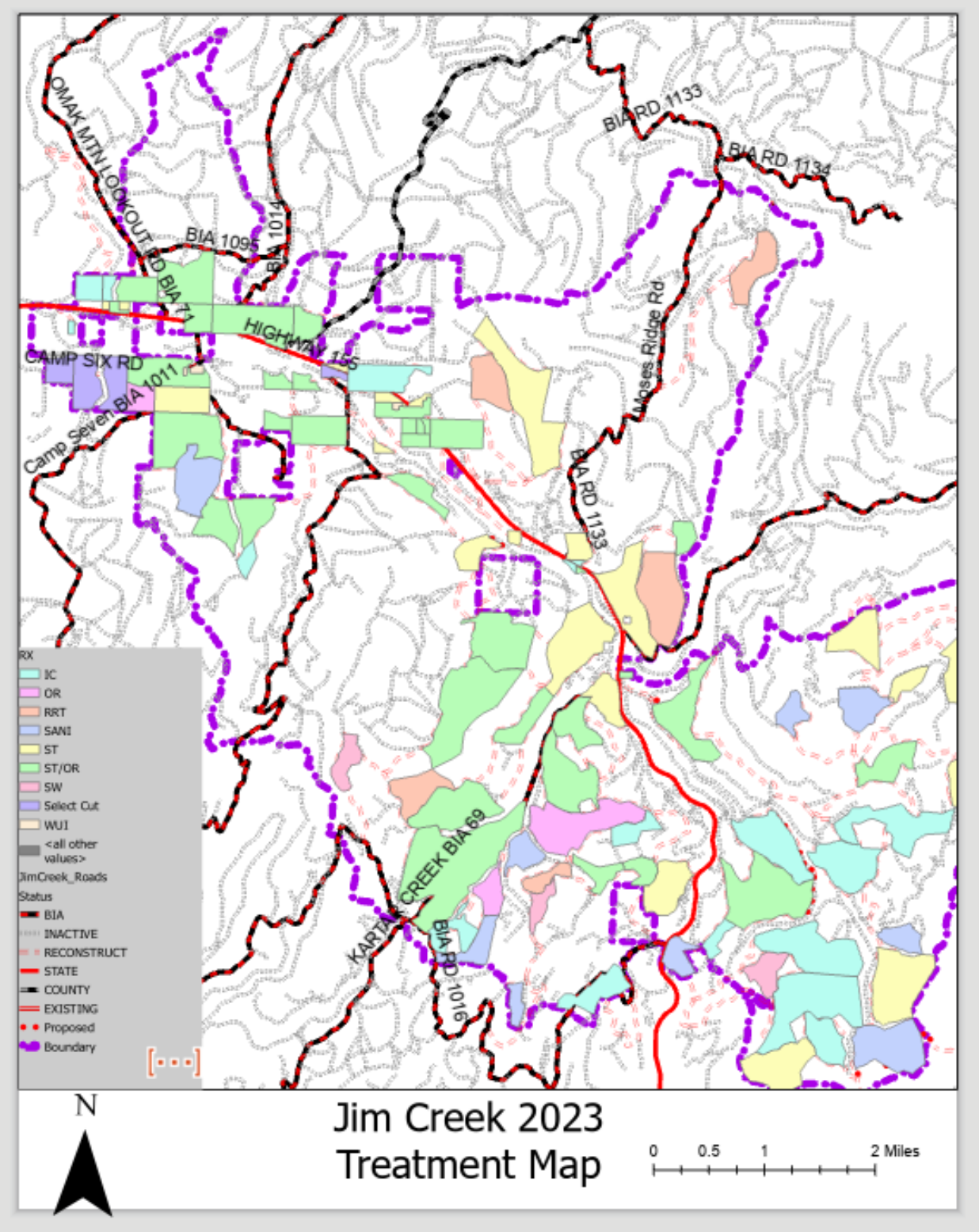
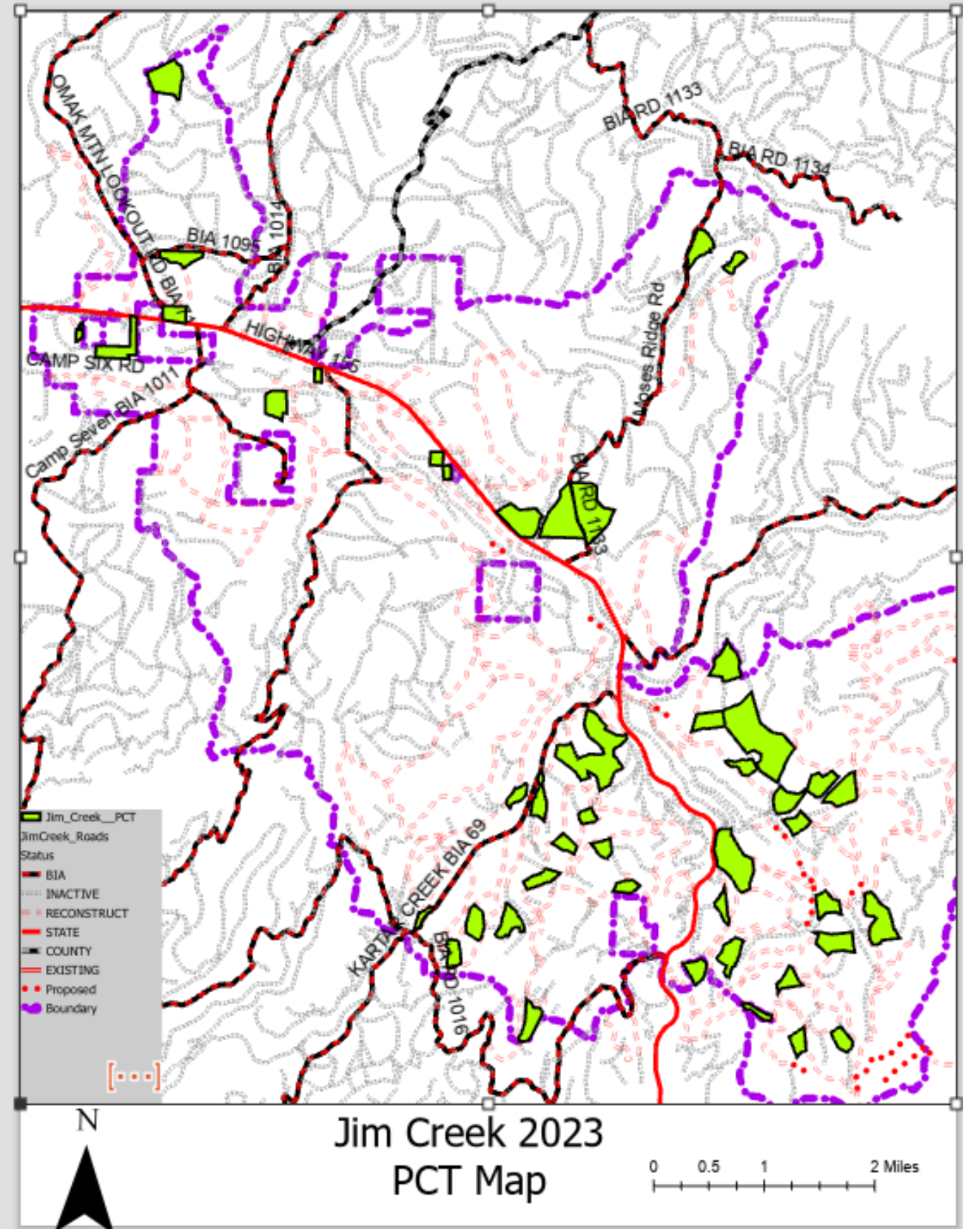
7.0 Appendices

7.1 Appendix A: Project Map, Activity Table and Harvest Schedule

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BIA 1095
BIA 1014
HIGHWAY 155
CAMP SIX RD
Camp Seven BIA 1011
BIA RD 1133
BIA RD 1134
Moses Ridge Rd
BIA RD 1133
KARTAK CREEK BIA 69
BIA RD 1016
Jim_Creek__PCT
JimCreek_Roads
Status
BIA
INACTIVE
RECONSTRUCT
STATE
COUNTY
EXISTING
Proposed
Boundary
N
Jim Creek 2023
PCT Map
0
0.5
1
2 Miles

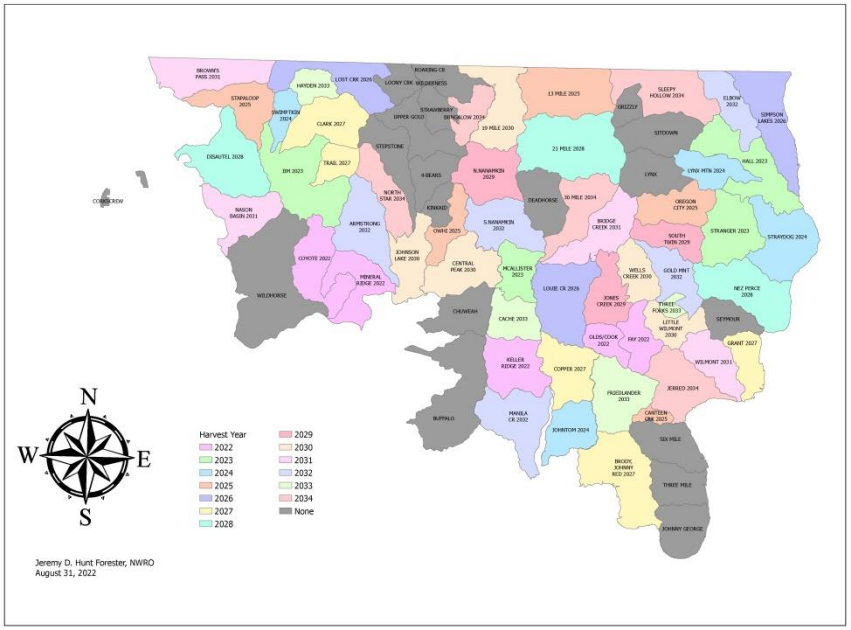
Unit Activity Table Jim Creek – Harvest Blocks								
Block	**Acres**	**Treatment**	**System**	**Slash Disposal**	**Site Prep**	**Whole Tree**	**PCT**	**PLANT**
149-001	55.7	ST/OR	T		LOP/SCAT	YES	EVALUATE	
140-002	27.8	SANI	T		LOP/SCAT	YES	EVALUATE	
145-003	51.8	SW	T	BURN	EX/P	YES		
151-004	32.5	ST/OR	T		LOP/SCAT	YES	EVALUATE	
150-007	86.8	RRT	T	BURN	EX/P	YES		YES
150-009	33.2	ST	T	BURN	EX/P	YES		
140-010	33.9	SW	T	BURN	EX/P	YES		
143-011	167.0	ST/OR	T		LOP/SCAT	YES	YES	
140-012	57.5	IC	T		LOP/SCAT	YES	YES	
143-013	21.0	ST/OR	T		LOP/SCAT	YES	YES	
146-015	136.2	ST/OR	T		LOP/SCAT	YES	YES	
143-016	22.6	IC	T		LOP/SCAT	YES		
140-019	388.7	ST/OR	T		LOP/SCAT	YES	YES	
140-022	45.5	IC	T		LOP/SCAT	YES		
140-023	51.8	SANI	T		LOP/SCAT	YES		
140-026	152.4	ST/OR	T		LOP/SCAT	YES	YES	
140-030	83.9	RRT	T	BURN	EX/P	YES		YES
140-033	145.3	ST/OR	T		LOP/SCAT	YES	YES	
140-038	61.9	ST/OR	T		LOP/SCAT	YES	YES	
140-039	64.9	ST	T	BURN	EX/P	YES		
140-042	**172.4**	ST	T	BURN	EX/P	YES		
143-0635	**65.0**	SELECT CUT	T			YES		
117-0637	**70.1**	SELECT CUT	T			YES		
117-0637-A	**37.8**	SELECT CUT	T			YES		
147-0639	**53.1**	ST/OR	T		LOP/SCAT	YES		
147-0639	**14.5**	IC	T		LOP/SCAT	YES	YES	
147-0639-B	**7.9**	ST/OR	T		LOP/SCAT	YES	EVALUATE	
147-0639-C	**4.6**	ST	T	BURN	EX/P	YES		
115-0639-G	**3.3**	ST	T	BURN	EX/P	YES		
150-0650	**95.1**	IC	T		LOP/SCAT	YES		
144-0652-B	**39.6**	ST/OR	T		LOP/SCAT	YES	YES	
144-0652-B	**18.1**	ST/OR	T		LOP/SCAT	YES	YES	
150-0652-C	**8.0**	ST	T	BURN	EX/P	YES		
144-0652-D	**11.8**	ST	T	BURN	EX/P	YES		
144-0652-F	**5.7**	ST/OR	T		LOP/SCAT	YES	EVALUATE	

144-0652-G	**3.1**	WUI	T			YES	EVALUATE	
144-0654-B	**8.5**	ST	T	BURN	EX/P	YES		
117-0663-A	**4.8**	IC	T		LOP/SCAT	YES		
143-066-B	**5.5**	WUI	T			YES	EVALUATE	
134-066-E	**1.8**	WUI	T			YES	EVALUATE	
144-0688	**20.7**	ST/OR	T		LOP/SCAT	YES	YES	
150-0688	**81.3**	ST/OR	T		LOP/SCAT	YES	YES	
146-069	**82.2**	SANI	T		LOP/SCAT	YES	EVALUATE	
147-0694	**128.2**	ST/OR	T		LOP/SCAT	YES	YES	
144-0709-A	**85.4**	ST/OR	T		LOP/SCAT	YES	YES	
143-0714	**76.2**	ST	T	BURN	EX/P	YES		
151-072	**170.9**	RRT	T	BURN	EX/P	YES		YES
131-073	**76.8**	IC	T		LOP/SCAT	YES		
147-0742-G	**6.8**	ST	T	BURN	EX/P	YES		
151-076	**155.3**	ST	T	BURN	EX/P	YES		
144-0792-A	**12.9**	SELECT CUT	T		LOP/SCAT	YES		
143-0792-D	**18.7**	ST/OR	T		LOP/SCAT	YES		
131-080	**34.7**	ST/OR	T		LOP/SCAT	YES	YES	
145-094	**250.0**	ST/OR	T		LOP/SCAT	YES	YES	
145-101	**155.6**	ST/OR	T		LOP/SCAT	YES	YES	
144-116	**48.8**	ST	T	BURN	EX/P	YES		
144-122	**9.4**	ST	T	BURN	EX/P	YES		
150-124	**243.4**	ST	T	BURN	EX/P	YES		
144-128	**49.1**	ST/OR	T		LOP/SCAT	YES		
150-139	**92.9**	RRT	C/TE		LOP/SCAT	YES		YES
140-140	**49.7**	OR	T		LOP/SCAT	YES	YES	
140-148	**60.3**	SANI	T		LOP/SCAT	YES		
140-174	**187.3**	OR	T		LOP/SCAT	YES	EVALUATE	
140-180	**35.2**	RRT	T	BURN	EX/P	YES		YES
140-187	**40.9**	ST/OR	T		LOP/SCAT	YES		
143-201	**107.5**	ST/OR	T		LOP/SCAT	YES	YES	
141-202	**131.8**	ST	C/TE		LOP/SCAT	YES		
143-203	**38.1**	OR	T		LOP/SCAT	YES	YES	
146-204	**154.4**	IC	T		LOP/SCAT	YES		
141-205	**153.0**	SANI	C/TE		LOP/SCAT	YES		
141-207	**73.9**	IC	T		LOP/SCAT	YES		
146-209	**223.7**	ST	C/TE		LOP/SCAT	YES		
141-211	**180.3**	ST	C/TE		LOP/SCAT	YES		

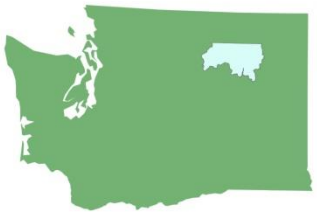
143-212	**120.9**	SANI	T		LOP/SCAT	YES	YES	
141-213	**239.2**	IC	T		LOP/SCAT	YES	EVALUATE	
141-215	**58.0**	SW	T	BURN	EX/P	YES		
146-216	**80.8**	ST/OR	T		LOP/SCAT	YES		
143-217	**68.7**	ST/OR	T		LOP/SCAT	YES	EVALUATE	
141-218	**184.3**	IC	T		LOP/SCAT	YES		
141-219	**45.5**	SANI	T		LOP/SCAT	YES		
141-220	**46.1**	SANI	T		LOP/SCAT	YES		
141-223	**26.8**	IC	T		LOP/SCAT	YES		
146-224	**41.7**	SANI	T		LOP/SCAT	YES		
141-227	**225.9**	ST/OR	T		LOP/SCAT	YES	EVALUATE	
131-228	**96.6**	ST	T	BURN	EX/P	YES		
146-229	**129.7**	IC	T		LOP/SCAT	YES	EVALUATE	
141-233	**141.8**	IC	T		LOP/SCAT	YES	YES	
143-236	**75.5**	ST/OR	T		LOP/SCAT	YES	YES	
115-2372	**36.3**	IC	T		LOP/SCAT	YES		
146-241	**95.2**	ST	T	BURN	EX/P	YES		
147-2428	**42.9**	ST/OR	T		LOP/SCAT	YES	YES	
147-2428	**124.2**	ST/OR	T		LOP/SCAT	YES	YES	
146-253	**34.8**	ST	T	BURN	EX/P	YES		
146-255	**265.3**	ST	C/TE		LOP/SCAT	YES		
140-307	**72.9**	ST/OR	T		LOP/SCAT	YES	YES	
150-3182	**3.1**	IC	T		LOP/SCAT	YES		
145-3182-B	**2.7**	ST/OR	T		LOP/SCAT	YES	YES	
145-3182-C	**4.1**	IC	T		LOP/SCAT	YES	YES	
143-361	**22.8**	ST/OR	T		LOP/SCAT	YES	YES	
140-4641-A	**4.9**	ST/OR	T		LOP/SCAT	YES	EVALUATE	

Jim Creek Pre-Commercial Thinning Blocks -PCT			
COMP	**BLOCK**	**ACRES**	**RX**
141	168	15.7	PCT
141	179	16.9	PCT
141	183	16.1	PCT
141	153	9.0	PCT
141	193	34.1	PCT
141	149	18.8	PCT
141	195	22.5	PCT
140	158	25.6	PCT

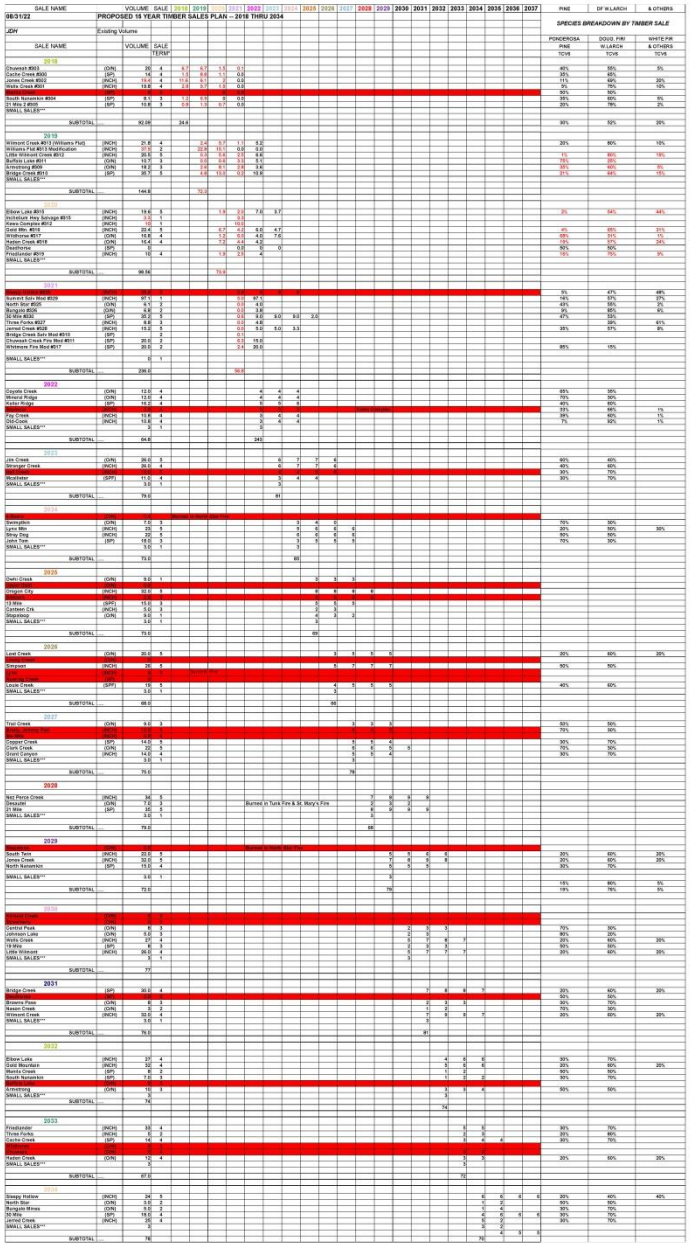
131	227	12.6	PCT
140	145	17.7	PCT
140	142	24.6	PCT
146	46	17.2	PCT
146	11	15.3	PCT
146	221	141.8	PCT
146	1	33.6	PCT
146	41	25.0	PCT
146	45	27.6	PCT
140	190	14.0	PCT
140	196	10.6	PCT
150	405	48.5	PCT
141	137	12.8	PCT
147	694	24.0	PCT
146	232	38.0	PCT
146	201	24.8	PCT
140	211	118.8	PCT
150	402	70.7	PCT
150	401	76.8	PCT
143	424	34.5	PCT
147	4	48.0	PCT
144	133	5.2	PCT
390	5	5.5	PCT
390	3	9.1	PCT
140	170	18.7	PCT
150	52	12.1	PCT
140	151	26.0	PCT
140	114	12.7	PCT
147	427	18.6	PCT
141	2	27.6	PCT
140	106	7.4	PCT
141	134	75.7	PCT
140	175	21.6	PCT
150	42	28.3	PCT
140	6	13.7	PCT
144	363	27.4	PCT
141	199	52.1	PCT
117	5410	4.7	PCT
	Total	**1,362.0**	



CONFEDERATED TRIBES
OF THE COLVILLE RESERVATION



HARVEST SCHEDULE (2018-2034)



7.2 Appendix B: Consultation

REQUEST FOR COMMENTS FROM THE
CONFEDERATED TRIBES OF THE COLVILLE RESERVATION
TRIBAL HISTORIC PRESERVATION OFFICER (THPO)
ON
DETERMINATION OF EFFECT

Project Name: 22pp39 Jim Creek Forest Management Project.

Proponent(s): Omak/Nespelem Forestry District, Colville Confederated Tribes

Legal Description: T 34N, R 28E: Sec 36; T 32N, R 28E: Sec(s) 1, 11-14, 24 & 25;
T 33N, R 29E: Sec(s) 2, 6-12, 14-23 & 26-36;
T 33N, R 29E: Sec(s) 1-6 & 8-14; T 32N, R 30E: Sec(s) 5-7 & 18;

The sections of 36 CFR 800 that address effects to historic properties have been applied to the proposed undertaking. This has been done in order to determine if any effects might occur to properties eligible for, or listed on, the National Register of Historic Places or the Colville Register of Historic Places. I have determined that the proposed undertaking will have:

____	**No effect**, the undertaking will not effect historic properties
XX	**No adverse effect**, the undertaking will affect one or more historic properties, but the effect will not be harmful
____	**Adverse effect**, the undertaking will harm one or more historic properties

Signed: Chasity Swan (responsible agency official) Title: IRMP Coordinator Date: 11/29/2022

Provide documentation to support the Determination of Effect for Tribal Historic Preservation Officer review and comment.

FOR TRIBAL HISTORIC PRESERVATION OFFICER USE ONLY

I concur with the determination of the Responsible Agency Official. 22pp39 Jim Creek Forest Management Project

Comments/Conditions of Approval:

Implementation of the project is not expected to result in any effects to cultural resources as long as mitigation surrounding the cemetery is adhered to.

Signed: _____ Date: 11-29-22
(Tribal Historic Preservation Officer)

The Confederated Tribes of the Colville Reservation
P.O. Box 150, Nespelem, WA 99155
(509) 634-2200
FAX: (509) 634-4116

Wednesday, January 18, 2023

The Jim Creek Forest Management Project 22pp39 is expected to have No Effect on Federally Threatened or Endangered species, candidate or proposed species, or suitable or critical habitat within the action area. Past surveys, environmental review processes via USFWS and other work efforts have shown no evidence that would bring forth concerns to the Colville Tribes Fish and Wildlife Department in regard to Federal T&E Species.

Marcus McClung
CTCR Fish and Wildlife Department
Omak/Nespelem Assistant District Biologist
509-634-2133 (Office)
509-634-0093 (cell)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
Phone: (360) 753-9440 Fax: (360) 753-9405

In Reply Refer To:
Project Code: 2023-0025135
Project Name: Jim Creek Forest Management Project 22pp39

December 14, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Washington Fish And Wildlife Office
510 Desmond Drive Se, Suite 102
Lacey, WA 98503-1263
(360) 753-9440

Project Summary

Project Code: 2023-0025135
Project Name: Jim Creek Forest Management Project 22pp39
Project Type: Timber Harvest
Project Description: Jim Creek Forest Management Project 22pp39

The Jim Creek Project is located approximately 15 miles northwest of Nespelem, WA and is approximately 25,923 acres in size. For all intensive purposes, the entire project area is covered by one watershed WMU 13-15 Upper Omak Creek. This watershed composes 25,770 acres of the total 25,923 acres. The remaining 153 acres appears to be composed of WMU 13-12 Camp Seven Creek and WMU 13-08 Clark Creek.

The Jim Creek Project encompasses approximately 25,923 acres; of which 25,098 acres is the total amount in Tribal Trust land status. The Tribal Trust land status acreage was calculated by summing up the total acreage for the Tribal Trust land, Tribal Allotment land, and Tribal Purchase (i.e. Norwood Properties) land. The amount of acreage in FEE land status is 825 acres. The following is the Tribal Trust land broken down into the Tribal Trust land categories: 1,768 acres is Tribal Trust Allotment land; 23,330 acres is Tribal Trust land.

At the pre-synthesis phase of the IRMP process, Omak/Nespelem District Forestry proposes to treat 136 Commercial blocks, totaling 8,476 acres and 41 Pre-Commercial Thinning (PCT), totaling 1,233 acres on commercial and non-merchantable forest land; to improve the overall Forest Health of forest stands within the project area. OND Forestry proposes to commercially harvest timber on 6,000 to 9,000 acres; to reach the OND Forestry goal of achieving 25-40 MMBF of timber harvest. Further field evaluation is needed to narrow the gap in this wide range of proposed treatment block acres. The acreage amount will include both Tribal Trust lands, Tribal Trust Allotment lands, and Tribal Purchased Land.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@48.3341735,-119.21133713780834,14z

Counties: Okanogan County, Washington

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Canada Lynx *Lynx canadensis* Population: Wherever Found in Contiguous U.S. There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3652	Threatened
North American Wolverine *Gulo gulo luscus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Birds

NAME	STATUS
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Fishes

NAME	STATUS
Bull Trout *Salvelinus confluentus* Population: U.S.A., conterminous, lower 48 states There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8212	Threatened

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Conifers and Cycads

NAME	STATUS
Whitebark Pine *Pinus albicaulis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1748	Proposed Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

IPaC User Contact Information

Agency: Confederated Tribes of the Colville Reservation
Name: Samuel Rushing
Address: 21 Colville Street
City: Nespelem
State: WA
Zip: 99155
Email sam.rushing@colvilletribes.com
Phone: 5096342133

7.3 Appendix C: Preliminary Transportation Analysis

The Confederated Tribes of the Colville Reservation
Office of Environmental Trust
Watershed Restoration Program
P.O. Box 150, Nespelem, WA 99155 (509) 634-2414

Wednesday, March 16, 2022

To: **Tony Stanger, OND Forestry District Officer**
Shay Logue, OND Forestry Forester
Megan Crim, OND Forestry Transportation Planner

cc: **Phil Wapato, Assistant Forest Manager**
Darnell Sam, NPS Management Coordinator
Joseph Ezell, Restoration Program Manager
Stacy King, Wetland Specialist
Chris Fisher, Fisheries Biologist
Sam Rushing, Wildlife Biologist
Chasity Swan, IRMP Coordinator

From: **Charlotte Axthelm, Watershed Analyst**

Subject: **Jim Creek Timber Sale 2023, Preliminary Road Issue Identification**

Shay, Megan and Tony,
I have attached a map showing roads and crossings in the Jim Creek Timber Sale boundary that have the potential to impact water quality, stream habitat and riparian management zones. This identification should be considered **preliminary** and used to guide the transportation plan included in the Jim Creek PPF.

Important features to note in regards to the Jim Creek transportation plan include the following:

- Any current or proposed stream crossings will need to be reviewed by CCT Fish & Wildlife and CCT Environmental Trust to ensure they are appropriately sized and installed for fish/aquatic organism passage and site specific hydrologic flows.
- There are road segments that need to be field assessed for watershed impact.

Other notes regarding timber sale transportation plans:

- The Forest Practices Code and Hydraulic Practices Code—along with specific site conditions—will determine final usage of road segments and stream crossings or treatments necessary to mitigate impacts to Tribal resources.
- The preliminary identification in this memo and map packet includes the entire sale area and does not account for specific blocks that may be used as part of the sale.
- Determine which crossings and road segments overlap with the sale and identify what steps will be taken to address potential impacts to Tribal resources from those crossings and segments.
- Roads and crossings outside of the timber sale project area that may be used for timber hauling or other sale related activities should be assessed for stream adjacency and crossing sizing as well. Haul routes and road use outside of the project area should be identified as early as possible to allow for assessment by other resource managers.
- As the planning process continues, it is possible that blocks and/or treatments will change and these road segments and stream crossings will need to be re-reviewed to ensure resource protection.

The Watershed Restoration Program supports timber management and a road network that allows access for forest practices, wildfire fighting, ranching and membership hunting, fishing, gathering, firewood cutting, etc. Each timber sale allows us the opportunity to improve and maintain roads that are needed for management and membership while addressing those that are impacting Tribal waters and other resources. Let me know if you have any questions regarding this preliminary identification. We can meet onsite at any locations that need further review or clarification.

Thanks,
Charlotte

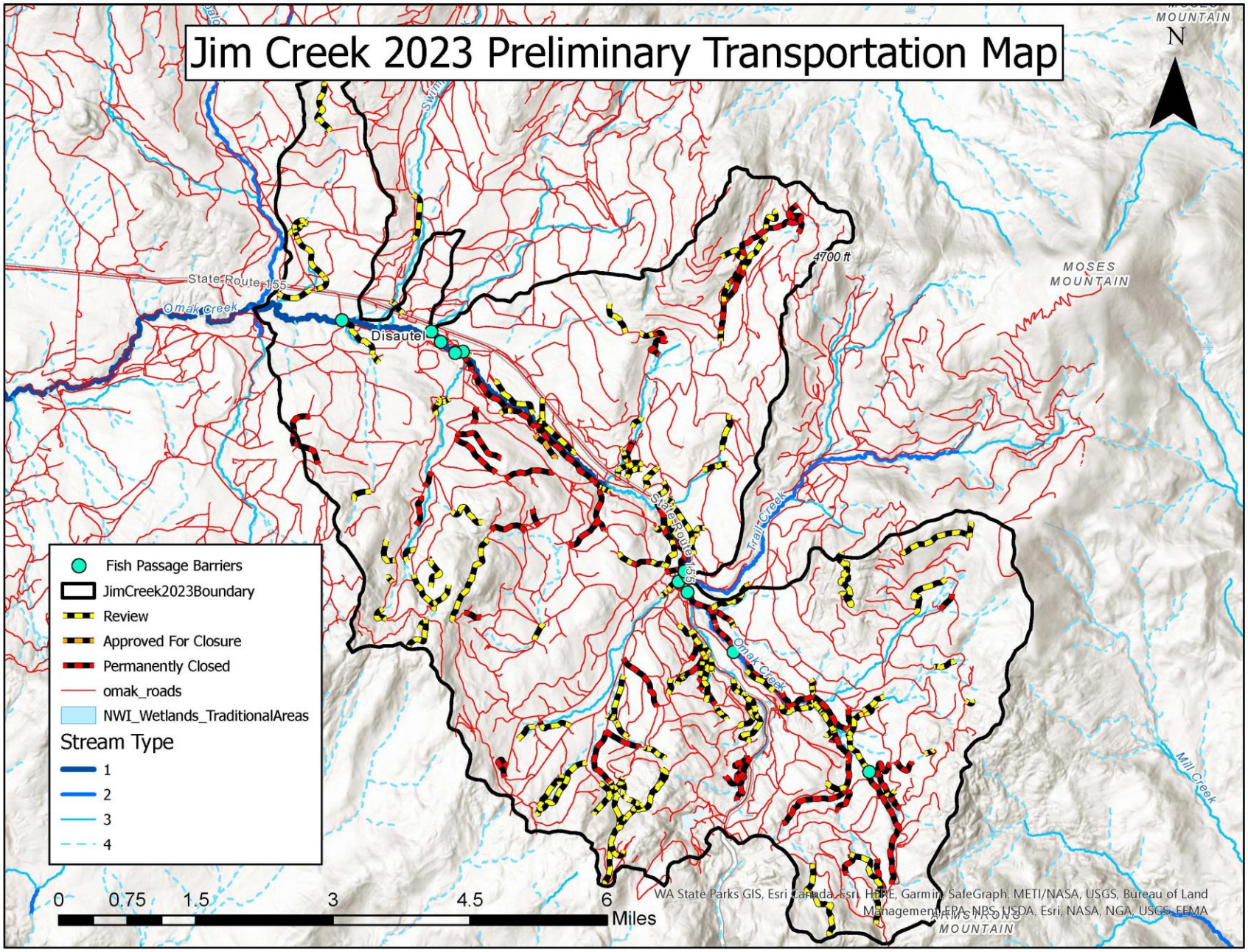
Shapefiles are for entire timber sale area and potential haul routes. Please refer to the WRKNG_ID in the attribute table for each road segment.

ROADS: 3 shapefiles

- This is a combination of the Duck Creek data and Forestry's LiDAR roads data. It has been updated with any info from ETD's projects and/or inventories.
- Identify which road segments in attached shapefiles overlap with Forestry's planned transportation network.

1) **JimCreek2023Approved Closure**
    a. These segments were identified by the Restoration Program for closure, and have been reviewed and approved for closure by the 3P team under PPF 21pp73. They are not available for use as part of this timber sale, and will be closed this year.
2) **JimCreek2023PermClosed**
    a. These roads have been closed by the Restoration Program, Watershed Management Program, or Fish and Wildlife, using funding from sources including NRCS, BPA, and EPA. These roads were closed to improve wildlife and fish habitat, protect water quality, and reduce road density, and are not available to be reopened as part of the sale, in accordance with funding agreements from grantor agencies, NEPA, and the tribal permitting process.
3) **JimCreek2023Review**
    These roads **have the potential** to impact water quality and quantity. Forestry will need to ensure they meet standards for continued use or reconstruction, and field verify to ensure that Forest Practice Codes are met.
    a. Possible mitigation treatments:
        i. Abandon road (use existing alternate route)
        ii. Realign road
        iii. Erosion control
            1. Drivable dips, water bars, out-sloping, berm removal, ditching, cross drains, rock-armoring, gravel surfacing, magnesium chloride, realignment, post-sale closure, etc.

The culverts identified on the attached map were determined to be fish passage barriers during the Okanogan Barrier Assessment by Cascade Fisheries. These culverts will be reviewed by the Environmental Trust Department and Fish and Wildlife, and may need replacement prior to use by Forestry. This is not necessarily a comprehensive representation of all project area culverts that will require ETD and Fish and Wildlife review prior to approval or installation.


Jim Creek 2023 Preliminary Transportation Map
N
MOSES MOUNTAIN
4700 ft
State Route 155
Omak Creek
Disautel
Trail Creek
Mill Creek
ARMS MOUNTAIN
Fish Passage Barriers
JimCreek2023Boundary
Review
Approved For Closure
Permanently Closed
omak_roads
NWI_Wetlands_TraditionalAreas
Stream Type
1
2
3
4
0 0.75 1.5 3 4.5 6
Miles
WA State Parks GIS, Esri Canada, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, Esri, NASA, NGA, USGS, FEMA

7.4 Appendix D: Army Corp of Engineers BMPs

Road Exemption Summary

FARM, FOREST, OR TEMPORARY MINING ROADS

Pursuant to Section 404 of the Clean Water Act (33 USC 1344) and Federal Regulations (33 CFR 323.4), certain discharges have been exempted from requiring a Section 404 permit. Included in this exemption is construction or maintenance of farm roads, forest roads, or temporary roads for moving mining equipment. To meet this exemption, such roads must be constructed and maintained in accordance with the best management practices (BMPs) to assure that flow and circulation patterns and chemical and biological characteristics of waters of the United States are not impaired, that the reach of the waters of the United States is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized.

The following best management practices must be followed in order for the activity to be exempted from requiring a permit:

(1) Permanent roads (for farming or forestry activities), temporary access roads (for mining, forestry, or farm purposes) and skid trails (for logging) in waters of the U.S. shall be held to the minimum feasible number, width, and total length consistent with the purpose of specific farming, silvicultural or mining operations, and local topographic and climatic conditions.

(2) All roads, temporary or permanent, shall be located sufficiently far from streams or other water bodies (except for portions of such roads which must cross water bodies) to minimize discharges of dredged or fill material into waters of the U.S.

(3) The fill shall be bridged, culverted, or otherwise designed to prevent the restriction of expected flood flows.

(4) The road fill shall be properly stabilized and maintained during and following construction to prevent erosion.

(5) Discharges of dredged or fill material into waters of the United States to construct a road fill shall be made in a manner that minimizes the encroachment of trucks, tractors, bulldozers, or other heavy equipment within waters of the U.S. (including adjacent wetlands) that lie outside the lateral boundaries of the fill itself.

(6) In designing, constructing, and maintaining roads, vegetative disturbance in the waters of the U.S. shall be kept to a minimum.

(7) The design, construction, and maintenance of the road crossing shall not disrupt the migration or other movement of those species of aquatic life inhabiting the water body.

(8) Borrow material shall be taken from upland sources whenever feasible.

(9) The discharge shall not take, or jeopardize the continued existence of, a threatened or endangered species as defined under the Endangered Species Act, or adversely modify or destroy the critical habitat of such species.

(10) Discharges into breeding and nesting areas for migratory waterfowl, spawning areas, and wetlands shall be avoided if practical alternatives exist.

(11) The discharge shall not be located in the proximity of a public water supply intake.

(12) The discharge shall not occur in areas of concentrated shellfish production.

(13) The discharge shall not occur in a component of the National Wild and Scenic River System.

(14) The discharge of material shall consist of suitable material free from toxic pollutants in toxic amounts.

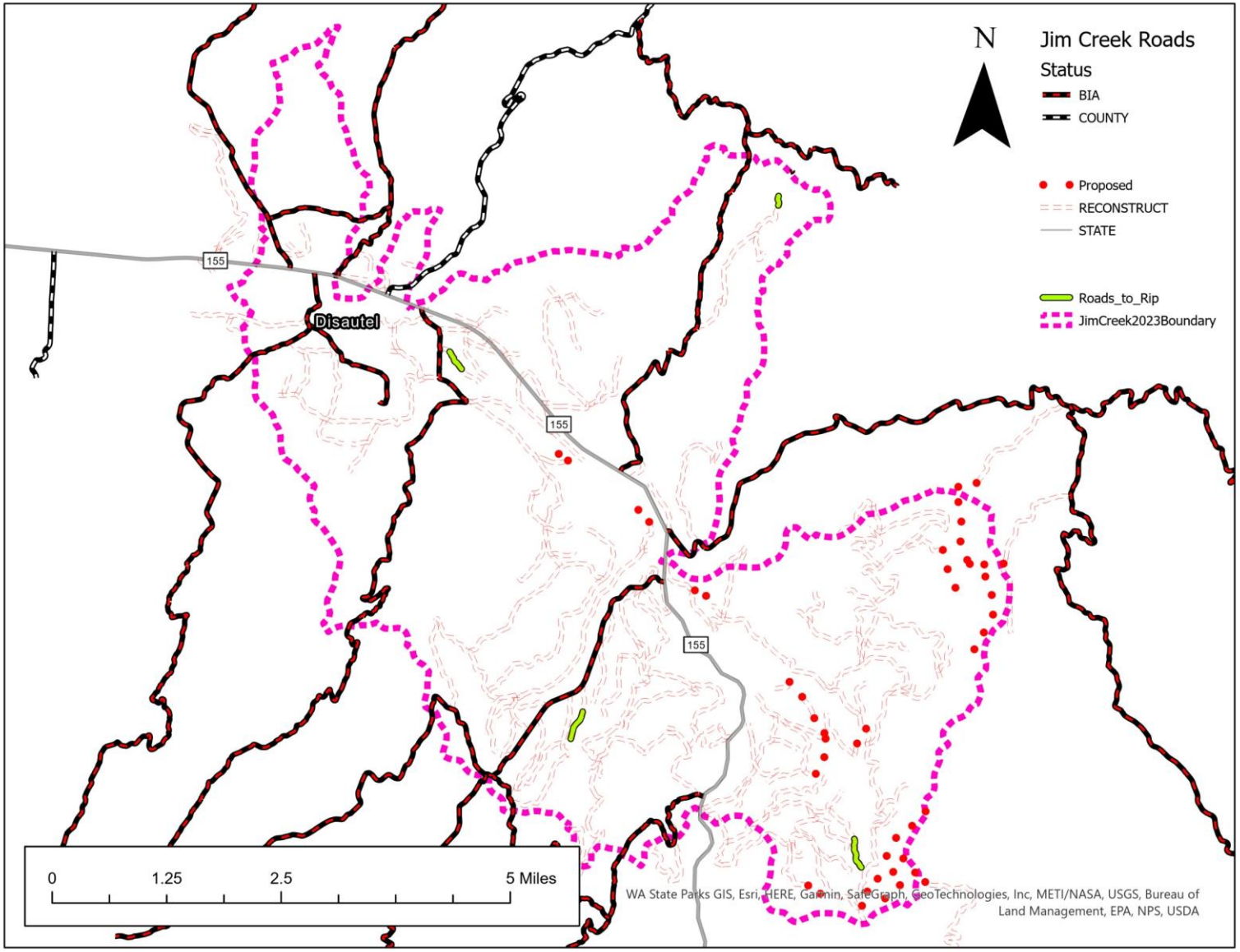
(15) All temporary fills shall be removed in their entirety and the area restored to its original elevation.

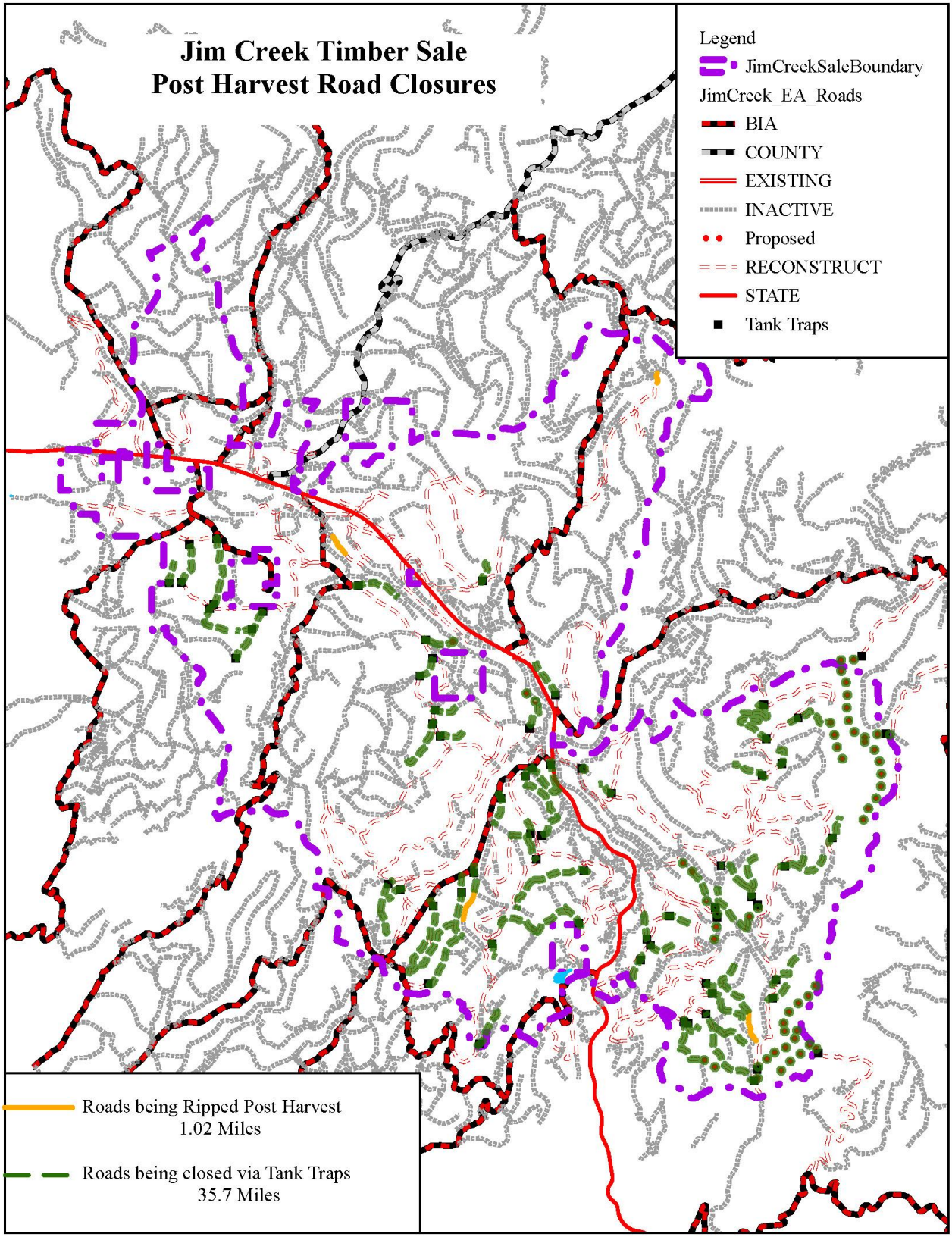
A Section 404 permit is required if either of the following occurs:
(1) Any discharge of dredged or fill material resulting from the above activities which contains any toxic pollutant listed under Section 307 of the Clean Water Act shall be subject to any applicable toxic effluent standard or prohibition, and shall require a permit.

(2) Any discharge of dredged or fill material into waters of the United States incidental to the above activities must have a permit if it is part of an activity whose purpose is to convert an area of the waters of the United States into a use to which it was not previously subject, where the flow or circulation of waters of the United States may be impaired or the reach of such waters reduced. Where the proposed discharge will result in significant discernible alterations to flow or circulation, the presumption is that flow or circulation may be impaired by such alteration. For example, a permit will be required for the conversion of a wetland from silvicultural to agricultural use when there is a discharge of dredged or fill material into waters of the United States in conjunction with construction of dikes, drainage ditches, or other works or structures used to effect such conversion. A discharge which elevates the bottom of waters of the United States without converting it to dry land does not thereby reduce the reach of, but may alter the flow or circulation of, waters of the United States.

If the proposed discharge satisfies all of the above restrictions and the best management practices, it is automatically exempted and no further permit action from the Corps of Engineers is required. If any of the restrictions of this exemption will not be complied with, a permit is required and should be requested using ENG Form 4345 (Application for a Department of the Army permit). A nationwide permit authorized by the Clean Water Act may be available for the proposed work. State or local approval of the work may also be required.

7.5 Appendix F: Fish and Wildlife Roads to Decommission




Jim Creek Timber Sale
Post Harvest Road Closures
Legend
JimCreekSaleBoundary
JimCreek_EA_Roads
BIA
COUNTY
EXISTING
INACTIVE
Proposed
RECONSTRUCT
STATE
Tank Traps
Roads being Ripped Post Harvest
1.02 Miles
Roads being closed via Tank Traps
35.7 Miles

Finding of No Significant Impact

Jim Creek 2023 Forest Management Project
Colville Reservation, Okanogan County, Washington

Based on the attached final Environmental Assessment's (EA) for the Jim Creek 2023 Forest Management Project for a proposal to harvest 39.4 million board feet of timber on approximately 7,877 acres of tribally owned and tribally allotted lands in the Omak/Nespelem District of the Colville Reservation in Okanogan County, Washington, I have determined that by implementation of the agency proposed action and environmental mitigation measures as specified in the EA, the proposed Jim Creek 2023 Forest Management Project, will have no significant impact on the quality of the human environment. In accordance with Section 102 (2) (c) of the National Environmental Policy Act of 1969, as amended, an Environmental Impact Statement will not be required.

This determination is supported by the following:

1. Agency and Tribal Interdisciplinary Team involvement was conducted and environmental issues related to development of the Jim Creek 2023 Forest Management Project were identified. Alternative courses of action and mitigation measures were developed in response to environmental concerns and issues. Tribal community outreach was conducted (Colville Tribes Plan for Integrated Resource Management (PIRM) (2001) and associated Final Environmental Impact Statement (FEIS)(2000). A public field tour was given of the project area in June of 2022 (EA section 1.6).

2. The EA discloses the environmental consequences of the "proposed action" and "no action" alternatives.

3. Protective measures will be levied to protect air (Clean Air Act as amended 42 USC 7401 et seq.), noise, and water quality (Clean Water Act of 1977, 33 U.S.C. 1251 et seq.), as outlined in the Mitigation Measures (Section 4 of EA), CCT Forest Practices Handbook (Colville Tribal Law and Order Code Title 4-7), CCT PIRM (Klock 2000) and associated FEIS (Klock 2001).

4. The proposed action will not jeopardize threatened and endangered species (Threatened and Endangered Species Act of 1983, as amended, 16 U.S.C. 1531 et seq.) (Colville PIRM (2001) and associated FEIS (2000); EA Section 4.4, and Appendix B).

5. There are no adverse effects on historic properties (National Historic Preservation Act, as amended 16 U.S.C. 470) for the purpose of 36 CFR 800.9 (b) by preserving archeological value through conduct of appropriate research in accordance with applicable standards and guidelines. Should undiscovered archeological remains be encountered during project ground-disturbing activities, work will stop in the area of discovery and the stipulations 36 CFR 800.11 be followed. The BIA Regional Archaeologist and Tribal Historic Preservation Officer (THPO) were consulted for this project (Colville PIRM and associated FEIS; EA Appendix B).

6. The proposed action will not affect public health or safety.

7. The proposed action will not cause a significant effect to energy resources (Energy Policy Act of

2005), water resources, wetlands (E.O. 11990), or flood plains (E.O. 11988). The Jim Creek 2023 Forest Management Project will not result in discharge of pollutants into waters of the U.S. or in surface water quality issues (Clean Water Act, as amended, 33 U.S.C. 1251 et seq.) (Colville Tribes (PIRM) (2001) and associated FEIS (2000); EA section 4.3).

8. The cumulative effects to the environment are mitigated to avoid or minimize effects of implementation of the proposed project (Colville Tribes PIRM (2001) and associated FEIS (2000); EA Section 4).

9. The proposed action will improve the economic and social conditions of the effected Indian community.

10. The proposed action will not affect unique characteristics of the geographic area such as the proximity to park lands, wild and scenic rivers, or ecologically critical areas.

There are approximately 6,001 acres of prime farmland within the commercial harvest blocks of this project. It is unlikely that timber harvesting would have any detrimental effect on the functional integrity of the land classification and the CTCR does not have future plans to develop the prime farmland within this project area (Section 4.2 of EA).

There are approximately 269.46 acres of mapped wetlands within the project area footprint. All wetlands and surface water are buffered to minimize impacts of the project to these water systems (CTC Chapter 4-7 Forest Practices, Section 4.3 of EA).

The Jim Creek 2023 Forest Management Project will not have significant impacts on natural and unique geographic features such as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild and scenic rivers; national natural landmarks; sole or prime drinking water aquifers; national monuments; eagles and migratory birds, and other ecologically significant areas.

11. The proposed action will not produce highly controversial effects on the quality of the human environment and will not have unresolved conflicts concerning alternate uses of available resources.

12. The proposed action will not have highly uncertain effects on the human environment or involve unique or unknown risks.

13. The proposed action will not establish a precedent for future actions with significant effects or represent a decision in principle about a consideration.

14. The Jim Creek 2023 Forest Management Project is not related to other actions with individual insignificant but cumulatively significant environmental effects.

15. There will be no disproportionately high and adverse human health or environmental effects on minority or low-income communities (Environmental Justice E.O. 12898; Title VI of the Civil Rights Act of 1964).

16. The proposed action will not affect American Indian Religious Freedom (42 U.S.C. 1996). The action will not limit access to, and ceremonial use of, Indian sacred sites on federal lands, by Indian

religious practitioners, and/or adversely affect the physical integrity of such sites (Native American Graves Protection and Repatriation Act, 25 U.S.C. 32).

17. Logging and related activities can introduce new invasive species to a site via uncleaned equipment and soil disturbing activities or cause currently present invasive species to spread more rapidly. In order to insure the action will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area, or promote the introduction, growth, or expansion of the range of such species, cleaning equipment prior to using on site, washing equipment in a centralized area, re-seeding heavily disturbed sites such as skid trails and landings is required. The use of biological controls on large weed infestations and herbicides is recommended as needed primarily along roadsides. If borrow pits or fill material are used from offsite, it is recommended that these materials be weed free to reduce the spread of invasive species. (EA Section 4.6)

18. The proposed action will not contribute to the disposal of solid or hazardous waste (Resource Conservation and Recovery Act of 1976; 43 U.S.C. 6901, et seq.).

19. The proposed action will not be a violation of federal, state, local, or tribal law or requirements imposed for the protection of the environment.

_____ 2/22/23

Date

Randall Friedlander, Superintendent
Colville Agency
Bureau of Indian Affairs
U.S. Department of the Interior

DEPARTMENT OF THE INTERIOR

Bureau of Indian Affairs

Final Environmental Assessment for the proposed Jim Creek 2023 Forest Management Project on the Colville Reservation, Okanogan County, Washington

AGENCY: Bureau of Indian Affairs

ACTION: Notice of Availability

SUMMARY: This notice is to advise interested parties that the Bureau of Indian Affairs (BIA) as lead federal agency, with the Confederated Tribes of the Colville Reservation, has prepared a final Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Jim Creek 2023 Forest Management Project on the Colville Reservation, Okanogan County, Washington. This notice also announces the EA is now available in hard copy at the addresses below.

ADDRESSES: You may request a hard copy of the EA and FONSI by writing the BIA Colville Agency, PO BOX 150, Nespelem, Washington, 99155, and the Colville Tribe, PO BOX 111, Nespelem, Washington, 99155.

FOR FURTHER INFORMATION CONTACT: Randall Friedlander, BIA Colville Agency Superintendent, at (509) 634-2316 and Chasity Swan, Colville Tribe Integrated Resource Management (IRMP) Coordinator, at (509) 675-8361.

SUPPLEMENTAL INFORMATION: The Colville Tribe, through contractual obligations to the BIA, has proposed the Jim Creek 2023 Forest Management Project. The activities under the agency proposed action to harvest approximately 39.4 million board feet of timber on approximately 8,877 acres of tribally owned and tribal allotted lands within the Omak/Nespelem District of the Colville Reservation in Okanogan County, Washington. The activities will occur under guidelines in the Plan for Integrated Resource Management (PIRM)(Klock 2001) and associated Final Environmental Impact Statement (FEIS)(Klock 2000).

Authority: This notice is published pursuant to 43 CFR 46.305 of the Department of Interior Regulations (43 CFR Part 46), the procedural requirements of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4371 et seq.), and is in accordance with the exercise of authority delegated to the Assistant Secretary – Indian Affairs by 209 DM 8.

2/22/23

Randall Friedlander
Colville Agency Superintendent
Bureau of Indian Affairs
U.S. Department of the Interior

Date