

*STATE FOREST LAND*  
**SEPA ENVIRONMENTAL CHECKLIST**

***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants:***

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

*Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov/sepa>. These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

***Instructions for Lead Agencies:***

Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

***Use of checklist for nonproject proposals:***

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or

site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

**A. BACKGROUND**

1. Name of proposed project, if applicable:

*Timber Sale Name:* **JACKSON**  
*Agreement #* **30-098225**

2. Name of applicant: **Washington Department of Natural Resources**

3. Address and phone number of applicant and contact person:

Robert Hechinger  
Washington Department of Natural Resources  
225 S. Silke Road  
Colville, WA 99114  
(509) 684-7474

4. Date checklist prepared: **12/31/2018**

5. Agency requesting checklist: **Washington Department of Natural Resources**

6. Proposed timing or schedule (including phasing, if applicable):

a. *Auction Date:*  
**09/24/2019**

b. *Planned contract end date (but may be extended):*  
**10/01/2021**

c. *Phasing:*  
**None**

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

*No, go to question 8.*

*Yes, identify any plans under A-7-a through A-7-d:*

a. *Site Preparation:*

TSU NO: 1 GROUND HERB	08/01/2022	103 acres
TSU NO: 1 PILE & BURN	11/01/2021	3 acres
TSU NO: 2 GROUND HERB	08/01/2022	106 acres
TSU NO: 2 PILE & BURN	11/01/2021	3 acres

b. *Regeneration Method:*

TSU NO: 1 HAND PLANT	04/15/2023	103 acres
TSU NO: 2 HAND PLANT	04/15/2023	106 acres

c. *Vegetation Management:*

TSU NO: 1 SEED GRASS	10/15/2021	3 acres
TSU NO: 2 SEED GRASS	10/15/2021	3 acres

d. *Other:*

Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and grading as necessary.

Pre-commercial thinning needs will be assessed at approximately 7 to 10 years of age.

Commercial thinning potential will be assessed at approximately 25 to 35 years of age.

Thinning may be done as needed to meet desired density, stocking, species diversity, and growth.

Landing slash may be piled and burned, or if economically feasible chipped for biomass.

Firewood cutting may take place after harvest activities have concluded

Application of herbicides may occur to assist with site preparation and to control roadside weeds.

Prescribed fire may be utilized to achieve future silvicultural, forest health, fuel reduction, or fire hazard abatement objectives.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. *Note: All documents are available upon request at the DNR Region Office.*

303 (d) – listed water body in WAU: See 3.a.1.a

temp

sediment

completed TMDL (total maximum daily load)

Landscape plan:

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: Draft WADNR Road Plan dated 9/12/2018

Wildlife report:

Geotechnical report:

Slope Stability additional information form:

Other specialist report(s):

Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):

Rock pit plan:

Other: GIS generated WAU maps reporting: soil types, mass wasting potential, erosion potential, soil stability, and habitat typing; DNR TRAX; DNR Smoke Management Plan; State Soil Survey; Policy for Sustainable Forests, "Identifying Old Trees and Forests in Eastern Washington" by Robert Van Pelt, September 2008. Referenced documents may be obtained at the region office responsible for this proposal.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

b. Describe the stand of timber pre-harvest (include major timber species and origin date), type of harvest and overall unit objectives.

***Pre-harvest Stand Description:***

<b>Unit</b>	<b>Origin Date</b>	<b>Major Timber Species</b>	<b>Type of Harvest</b>
1	1937, 1943	Douglas-fir, ponderosa pine, grand fir, western redcedar, lodgepole pine, western larch, western hemlock	Final Rotational Harvest
2	1919, 1944, 1957	Douglas-fir, ponderosa pine, grand fir, western redcedar, lodgepole pine, western larch, western hemlock	Final Rotational Harvest
ROW 3	1957	Western redcedar, grand fir, Douglas-fir, western hemlock, western larch, ponderosa pine, lodgepole pine	ROW
ROW 4	1943	Western redcedar, grand fir, Douglas-fir, western hemlock, western larch, ponderosa pine, lodgepole pine	ROW
ROW 5	1943	Western redcedar, grand fir, Douglas-fir, western hemlock, western larch, ponderosa pine, lodgepole pine	ROW
ROW 6	1943	Western redcedar, grand fir, Douglas-fir, western hemlock, western larch, ponderosa pine, lodgepole pine	ROW

***Overall Unit Objectives:***

The objectives of this proposal are:

- 1) Produce revenue for the Common School Trust (03) through the production of saw logs and pulp material.
- 2) Provide for wildlife and riparian habitat by developing vertical stand structure and age class distribution in the future stands.
- 3) Improve stand health by adding early seral species resistant to root rot and remove as much mistletoe infected western larch and ponderosa pine in the proposal area as possible.
- 4) Improve stand health by removing over-mature and falling-out lodgepole pine where necessary in the proposal area.

10. List any government approvals or permits that will be needed for your proposal, if known.

- FPA/FPHP # 3023371 
  FPHP # \_\_\_\_\_ 
  Board of Natural Resources Approval  
 Burning permit 
  Shoreline permit 
  Existing HPA  
 Other: \_\_\_\_\_

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

*a. Complete proposal description:*

There are two proposed final rotational harvest units and four right-of-way harvest units associated with the Jackson Timber Sale. Approximately 5,000 thousand board feet (MBF) of mature conifer timber is proposed for harvest. Approximately 12,843 feet of road construction is associated with this proposal.

Unit	Proposal Acres (gross)	RMZ/WMZ Acres	Potentially Unstable Slope Acres	Existing Road Acres (within unit)	Sale Acres	Leave Tree Clump Acres	Net Harvest Acres
1	120	17	0	0	103	0	103
2	139	33	0	0	106	0	106
ROW 3	0.2	0	0	0	0.2	0	0.2
ROW 4	0.2	0	0	0	0.2	0	0.2
ROW 5	0.1	0	0	0	0.1	0	0.1
ROW 6	0.2	0	0	0	0.2	0	0.1
<b>Totals</b>	<b>259.7</b>	<b>50</b>	<b>0</b>	<b>0</b>	<b>210</b>	<b>0</b>	<b>210</b>

c. Describe planned road activity. Include information on any rock pits that will be used in this proposal. See associated forest practice application (FPA) for maps and more details.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		12,843	5	0
Reconstruction		0		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Stream Culvert Install/Replace (fish)	0			0
Stream Culvert Install/Replace (no fish)	4			
Cross-Drain Install/Replace	13			

Additionally, there is approximately 10,936 feet of pre-haul maintenance planned for this proposal. There may be up to 599 feet of additional new road construction within the sale area, in the form of short spurs to facilitate access to landings, protect public resources, maintain ingress and egress, or provide for safety.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist (See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" as referenced on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)

- a. Legal description: T29-0N R45-0E S31  
T29-0N R45-0E S32  
T28-0N R45-0E S06

- b. Distance and direction from nearest town (see the driving map listed on the DNR website for further information):

The proposal is located approximately eight road miles southeast of Elk, Washington. The route from Elk is via Elk-Chattaroy Road, to East Blanchard Road, to Conklin Road, to Laurel Road, to East Jackson Road to the E284506F Road.

13. Cumulative Effects

- a. Briefly describe any known environmental concerns that exist regarding elements of the environment in the associated WAU(s). (See WAC 197-11-444 for what is considered an element of the environment).

There are no known major environmental concerns associated with this proposal that exist regarding elements of the environment in the Little Spokane/Deer Creek WAU.

Within the Little Spokane/Deer Creek WAU, Deer Creek is listed on the state 303(d) list for temperature at the confluence with the Little Spokane River, located approximately seven miles downstream from the proposal area.

Within the Little Spokane/Deer Creek WAU, gray wolves have been observed. No gray wolves were observed or den site identified near the sale area during the timber sale layout. In Washington State gray wolves are listed as a state endangered species. They were delisted by the federal government in 2011 in the eastern 1/3 of WA. No forest management restrictions are anticipated for wolves, as they are tolerant of disturbance.

There are approximately 4.1 road miles per square mile within the Little Spokane/Deer Creek WAU.

See A.13.e for harvest activity summary.

*b. Briefly describe existing plans and programs (i.e. the HCP, DNR landscape plans, retention tree plans) and current forest practice rules that provide/require mitigation to protect against potential impacts to environmental concerns listed in question A-13-a.*

- Forest Practice Rules established Riparian Management Zones (RMZ) along streams to maintain riparian functions.
- Forest Practice Board Manual “Guidelines for Forest Roads” Best Management Practices (BMP) guides road construction and maintenance techniques.
- The DNR Policy for Sustainable Forests (2006) guided the development and layout of the proposal.
- The DNR Retention and Perpetuation of Biological Legacies and Green Trees Procedure (PR14-006-091) aided in the selection of retention trees.
- Identifying Old Trees and Forests in Eastern Washington, by Robert Van Pelt, September 2008, was utilized in the identification and protection of old growth trees. Sale layout follows the Washington State Department of Natural Resources Policy number PO14-009 regarding wildlife habitat pertaining to federally or state listed species.
- The Smoke Management Plan (SMP) regulates activities associated with pile burning or prescribed fire.

*c. Briefly describe any specific mitigation measures proposed, in addition to the mitigation provided by plans and programs listed under question A-13-b.*

- No harvest or road construction within the RMZ of Deer Creek to ensure riparian functions are maintained.
- No harvest within the core and inner zone of Type F, and Type Np riparian management zones except to the extent necessary for road construction.
- No harvest within average width wetland management zones except to the extent necessary for road construction.
- Retaining at least six leave trees from the largest available diameter classes per acre dispersed and aggregated throughout the harvest units.
- Planting of tree seedlings on harvest units to supplement natural regeneration and ensure adequate reforestation occurs.

- Coordinated skidding patterns and landing locations, effective contract administration, and normal road maintenance will minimize erosion potential.
- No felling, skidding, or other hauling activities will occur during spring break-up unless approved by the contract administrator (CA).
- Harvest and haul activities will be monitored and activities will be restricted where needed to prevent sediment delivery to streams.
- Roads have been designed to minimize erosion potential and conduct water onto naturally vegetated forest floors utilizing drivable dips, in or out-sloping of road surfaces, crowning, ditching, and installation of cross drains.
- Energy dissipating structures will be placed at the outfall of cross drains where necessary to prevent erosion. Culvert headwalls will be armored where necessary.
- Skid trails will be grass seeded, water barred, or have slash placed where necessary to prevent erosion. Grass seeding will also occur on cut and fill slopes where necessary.
- Road Plan has been designed by a forest engineer and reviewed and approved by a licensed engineer.
- Proposal review by DNR wildlife biologist.
- A DNR State Lands geologist remotely reviewed all units of the sale utilizing historic aerial photographs, and GIS data from the DNR corporate database.
- Timing restrictions will be placed on sale for timber harvesting, timber hauling, road construction, and site preparation within one mile of an occupied wolf den from March 15<sup>th</sup> to July 30<sup>th</sup> or ¼ mile of a confirmed wolf den site at other times of the year.

d. *Based on the answers in questions A-13-a through A-13-c, is it likely potential impacts from this proposal could contribute to any environmental concerns listed in question A-13-a?*

It is not likely potential impacts from this proposal will contribute to the environmental concerns listed in question A.13.a. This proposal will be conducted in accordance to the Policy for Sustainable Forests (2006) and Washington State Forest Practice Rules.. Additionally, planned reforestation activities post-harvest will further mitigate any possible effects made to the environmental concerns listed above.

e. *Complete the table below with the reasonably foreseeable future activities within the associated WAU(s) (add more lines as needed). Future is defined as occurring within the next 7 years.*

WAU Name	Total WAU Acres	DNR-managed WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven-aged harvest in the future	Acres of proposed harvest on non-DNR-managed lands currently under active FP permits
LITTLE SPOKANE/DEER CREEK	46,039	4,329	1,057	422	2,563

Other management activities, such as stand and road maintenance, will likely occur within the WAU.

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

a. General description of the site (check one):

Flat,  Rolling,  Hilly,  Steep Slopes,  Mountainous,  Other:

1. *General description of the associated WAU(s) or sub-basin(s) within the proposal (landforms, climate, elevations, and forest vegetation zone).*

<b>WAU:</b>	LITTLE SPOKANE/DEER CREEK
<b>WAU Acres:</b>	46,039
<b>Elevation Range:</b>	1,679 – 5,270 ft.
<b>Mean Elevation:</b>	2,305 ft.
<b>Average Precipitation:</b>	21 in./year
<b>Primary Forest Vegetation Zone:</b>	Douglas Fir

2. *Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*

This proposal is a representative example of the WAU at the same elevation and aspect.

b. What is the steepest slope on the site (approximate percent slope)?

65%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

*Note: The following table is created from state soil survey data. It is an overview of general soils information for the soils found in the entire sale area. The actual soil conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors.*

State Soil Survey #	Soil Texture	Number of Acres within the Proposal
7461	LOAM	67.3
7470	LOAM	27.4
7460	LOAM	32.3
4810	SILT LOAM	83.0

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

*No, go to question B-1-e.*

*Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.*

A DNR State Lands geologist remotely reviewed all units of the sale utilizing historic aerial photographs and GIS data from the DNR corporate database. The results of the geologist's review indicated the proposal area had no areas of instability within the proposal area. Remote review was field verified by State Land Foresters and confirmed that there were no areas of slope instability.

- 1) *Does the proposal include any management activities proposed on potentially unstable slopes or landforms?*

*No*  *Yes, describe the proposed activities:*

- 2) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

*Approx. acreage new roads: 5*

*Approx. acreage new landings: 4*

*Fill Source: Native material and commercial rock.*

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes. Some erosion could occur as a result of building new roads, installing culverts, and hauling timber. However, none is expected to discharge into typed waters due to minimal stream crossings and proper road design incorporating effective water control structures. Hauling will be restricted during wet conditions and spring break-up. Non-erodible surface material will be placed where necessary.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*

Less than 3% of the site will remain as gravel roads.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:  
(Include protection measures for minimizing compaction or rutting.)

- Coordinated skidding patterns and landing locations, effective contract administration, and normal road maintenance can minimize erosion potential.
- No felling, skidding, or other hauling activities will occur during spring break-up unless approved by the CA.
- Harvest and haul activities will be monitored and activities will be restricted where needed to prevent sediment delivery to streams.
- Roads have been designed to minimize erosion potential and conduct water onto naturally vegetated forest floors utilizing drivable dips, in or out-sloping of road surfaces, crowning, ditching, and installation of cross drains.
- Energy dissipating structures will be placed at the outfall of cross drains where necessary to prevent erosion. Culvert headwalls will be armored where necessary.
- Skid trails will be grass seeded, water barred, or have slash placed where necessary to prevent erosion. Grass seeding will also occur on cut and fill slopes where necessary.
- Road Plan has been designed by a forest engineer and reviewed and approved by a licensed engineer.

## 2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Minor amounts of engine exhaust from logging and road construction equipment and dust from vehicle traffic on roads will be emitted during proposed activities. Such emissions should result in no significant impact to air quality. If logging debris is burned after harvest is completed, it will adhere to the states Smoke Management Plan (SMP) regulations. There will be no emissions once the proposal is complete.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust abatement may occur to minimize fugitive dust on selected roads as needed between July 1st and October 15th or as directed by the CA, to maintain the road prism. Pile burning and prescribed fire will adhere to the requirements of the Smoke Management Plan (SMP). The SMP provides regulatory direction, operating procedures, and advisory information regarding the management of smoke and fuels on the forestlands of Washington State. The goals of the SMP are to protect human health and safety from the

effects of outdoor burning. The SMP is administered by DNR under authority described in the WA Clean Air Act.

### 3. Water

#### a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" as referenced on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)

No  Yes, describe in 3-a-1-a through 3-a-1-c below

#### a. Downstream water bodies:

All units are located within the Little Spokane/Deer Creek WAU. Streams located within the units are tributaries to Deer Creek, which is a tributary to the Little Spokane River.

No 303 d (temp) impacts are anticipated as no shade will be removed from Type F and Np waters except for road crossings. See buffer widths in table below.

#### b. Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in feet (per side for streams)
Un-named Stream	F	1	110' (35' outer zone of RMZ will be managed, retaining an average of 15 trees per acre.)
Deer Creek	F	1	110' RMZ
Un-named Stream	Np	8	50' (No harvest RMZ)

Deer Creek borders the north portions of Unit 1 and 2. Deer Creek also borders the east portion of Unit 2. The proposal will not be harvesting within any part of the Deer Creek RMZ.

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers.

Deer Creek lies to the north of the harvest units. No harvest activity will occur within 110 feet of the stream. No harvest activities will occur within the RMZ.

All Type Np streams within harvest units are protected by a 50 foot no cut riparian management zone.

The un-named Type F stream that is a tributary to Deer Creek, located between Unit 1 and 2, has a 75 foot no cut inner riparian zone on each side, and outer 35 foot riparian zones that consists of 15 trees per acre. (Retained trees are among the largest.)

Roads constructed in Units 1 and 2 were located to minimize impacts on RMZs as much as possible. Culvert installation will take place in summer when water flow is at its lowest.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

Yes (See RMZ/WMZ table above and timber sale maps which are available on the DNR website: <http://www.dnr.wa.gov/sepa>. Timber sale maps are also available at the DNR region office.)

*Description (include culverts):*

Four culvert installations are proposed over Type Np streams on the E284506E Road. Timber harvest may occur as close as 110 feet from Deer Creek, and 75 feet from an un-named Type F stream located between Units 1 and 2. Timber harvest may occur as close as 50 feet from Type Np streams within in Units 1 and 2.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Approximately 170 cubic yards of commercial rock will be used as fill over culvert crossings.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)

No

Yes, description:

Temporary diversion may be necessary, if water is present, while installing culverts on un-named Type Np streams. This may include creating a check dam and diverting water around the work area to prevent sediment delivery to typed water. Water will be returned

to the stream channel at the best possible location.

Water may be withdrawn from local sources during operations to facilitate dust abatement activities. Contractor is required to obtain all necessary permits.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No       Yes, describe activity and location:

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

- 7) Is there a potential for eroded material to enter surface water as a result of the proposal considering the protection measures incorporated into the proposal's design?

No       Yes, describe:

Soils and terrain susceptible to surface erosion are generally located on slopes steeper than 70%. The potential for eroded material to enter surface water is minimized due to the erosion control measures and operational procedures outlined in B-1-h.

- 8) What are the approximate road miles per square mile in the associated WAU(s)?

LITTLE SPOKANE/DEER CREEK = 4.1 (mi./sq. mi.)

- 9) Are there forest roads or ditches within the associated WAU(s) that deliver surface water to streams, rather than back to the forest floor?

No       Yes, describe:

None known. Any forest roads or ditches not functioning properly within the proposal will be addressed with the proposal.

- 10) Is there evidence of changes to channels associated with peak flows in the proposal area (accelerated aggradations, surface erosion, mass wasting, decrease in large organic debris (LOD), change in channel dimensions)?

No       Yes, describe observations:

There are indications of past high water events within the WAU, which appear to have occurred as natural events, mainly as spring runoff from snowmelt. The primary evidence is the scouring and deposition of materials observed in the stream channels after runoff waters have receded. This is a natural process that occurs each spring on streams throughout the WAU.

- 11) Describe any anticipated contributions to peak flows resulting from this proposal's activities which could impact areas downstream or downslope of the proposal area.

It is not likely the proposed activity will change the timing, duration, or volume of water during a peak flow event. Forest Practice Rules limit harvest unit size and proximity to other recent harvests. This proposal minimizes the extent of the road network, incorporates road drainage disconnected from stream networks, and implements riparian buffers which all have mitigating effects on the potential for this proposal to increase peak flows that could impact areas downstream or downslope of the proposal area.

Several protection measures have been designed within this proposal to minimize any contribution to peak flow events. Coordinated skidding patterns and landing locations, effective contract administration and normal road maintenance are expected to minimize erosion potential within and adjacent to the proposal area. Water bars, drivable dips, ditching, cross drains, out-sloping, monitoring and re-vegetation of cut slopes and skid trails will be used as needed to minimize the potential for soil erosion, mass wasting events and contribution to peak flows within the WAU. See B.1.h.

- 12) Is there a water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity?

No             Yes, describe the water resource(s):

*a. Is it likely a water resource or an area of slope instability listed in B-3-12 (above) will be affected by changes in amounts, quality or movements of surface water as a result of this proposal?*

No             Yes, describe possible impacts:

- 13) Describe any protection measures, in addition to those required by other existing plans and programs (i.e. the HCP, DNR landscape plans) and current forest practice rules included in this proposal that mitigate potential negative effects on water quality and peak flow impacts.

See B.1.h. for protection measures and haul restrictions.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No ground water will be withdrawn. Ground water recharge directly below culvert outlets may increase slightly. Reduction in water quality is not expected to occur as a result of activities from this proposal.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground.

- 3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity?

No       Yes, describe:

*a. Is it likely a water resource or an area of slope instability listed in B-3-b-3 (above) could be affected by changes in amounts, timing, or movements of groundwater as a result this proposal?*

No       Yes, describe possible impacts:

*Note protection measures, if any:*

No additional protection measures needed. See B.1.h. and B.3.a.2.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Snowmelt and rain are the main sources of water runoff. Runoff collected by road surfaces will be diverted through drainage structures, including drivable dips and water bars, onto the forest floor. Drainage structures will be located to prevent runoff from directly entering stream channels. No ditched water will directly flow into any typed waters. In addition, roads will be out-sloped, crowned and drivable dips will be utilized where appropriate. Impacts to water will be addressed further with the application of grass seed on exposed soils within road right of ways.

- 2) Could waste materials enter ground or surface waters? If so, generally describe.

No       Yes, describe:

*Note protection measures, if any:*

No additional protection measures will be necessary to protect these resources beyond those described in B.1.d.2, B.1.h, B.3.a.2, and B.3.a.13.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No change in drainage patterns is anticipated. Drainage structures will be installed to maintain naturally occurring drainage patterns.

- d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

See B.1.h. for protection measures in addition to those listed in the above sections.

See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-13, B-3-b-3, and B-3-c-2.

#### 4. Plants

- a. Check the types of vegetation found on the site:

Deciduous tree:

Alder  Aspen  Birch  Cottonwood  Maple  Western Larch

Other:

Evergreen tree:

Douglas-Fir  Engelmann Spruce  Grand Fir  Lodgepole Pine

Mountain Hemlock  Pacific Silver Fir  Ponderosa Pine  Sitka Spruce

Western Hemlock  Western Redcedar  Yellow Cedar

Other: Pacific yew

Shrubs:

Huckleberry  Rhododendron  Salmonberry  Salal

Other: ninebark, ocean spray, Rocky Mountain maple

Ferns

Grass

Pasture

Crop or Grain

Orchards  Vineyard  Other Permanent Crops

Wet Soil Plants:

Bullrush  Buttercup  Cattail  Devil's Club  Skunk Cabbage

Other:

Water plants:

Eelgrass  Milfoil  Water Lily

Other:

Other types of vegetation:

Plant communities of concern:

- b. What kind and amount of vegetation will be removed or altered? (*Also see answers to questions A-11-a, A-11-b and B-3-a-2.*)

All conifers are designated to be removed as part of this harvest proposal, except legacy trees, wildlife reserve trees, green recruitment trees, and vegetation within the RMZs. This proposal will remove approximately 5,000 MBF of mature conifer timber. The proposal was marked to leave at least six trees per acre, selected from the largest available. Understory vegetation will be disturbed and/or reduced within the proposed harvest area as a result of timber harvest and site preparation activities. It is expected that vegetation will re-establish within 2 to 3 years after harvest activities are complete.

Reserve trees were selected in accordance with DNR's Retention and Perpetuation of Biological Legacies and Green Trees Procedure and Forest Practices Rules. Trees were left individually and in clumps in order to be conducive to safe operations and allowing distribution of wildlife trees throughout the proposal. Additional reserve trees were selected throughout the stands, with a higher priority given to trees with unique structural characteristics, evidence of bird usage, large diameters, and full crowns. Species preference for reserve trees; ponderosa pine, western larch, western redcedar, Douglas-fir, lodgepole pine, grand fir, and western hemlock. Diameter of reserve trees range from 16 inches in diameter to 36 inches in diameter. Average reserve tree diameter is approximately 26 inches. Trees within the proposal area were marked with a blue band of paint identifying reserve trees.

The Department of Natural Resources Legacy Tree Procedure (PR14-006-091) and Forest Practice requirements will be met with this proposal.

- 1) *Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)*

Unit 1: To the east and west of the Unit 1 lies adjacent private ownership. The south borders DNR-managed lands with six year old reproduction in a mix of ponderosa pine and western larch. The north boundary borders DNR-managed lands stocked with 78 year old Douglas-fir and ponderosa pine.

Unit 2: To the south, Unit 2 borders DNR-managed lands stocked with six year old ponderosa and western larch reproduction. To the east the unit borders Inland Empire Paper Company that recently completed an overstory removal with advanced reproduction in the understory. The west, north and northeast portion of the unit is bordered by DNR-managed lands stocked with a 78 year old stand of mixed conifer timber.

- c. List threatened and endangered *plant* species known to be on or near the site.

None found in corporate database.

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Individual leave trees and clumps are identified across the harvest areas. Some clumps were selected for their species diversity or presence of legacy trees. Reserve trees will contribute to the site as a natural seed source, which will complement the future plantation. Native tree species will be planted on site after harvest and site preparation activities. Roads associated with this proposal will be seeded with natural grasses and forbs after harvest.

- e. List all noxious weeds and invasive species known to be on or near the site.

Spotted knapweed, St. Johnswort, common mullein, and bull thistle have been observed near the site.

## 5. Animals

- a. List any birds and other animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site. Examples include:

birds:

eagle  hawk  heron  owls  songbirds

other:

mammals:

bear  beaver  coyote  cougar  deer  elk

other: moose, gray wolf

fish:

bass  herring  salmon  shellfish  trout

other:

*amphibians/reptiles:*

frog  lizard  salamander  snake  turtle

other:

*unique habitats:*

balds  caves  cliffs  mineral springs  oak woodlands  talus slopes

other:

- b. List any threatened and endangered species known to be on or near the site (*include federal- and state-listed species*).

TSU Number	Common Name	Federal Listing Status	WA State Listing Status
1	Gray Wolf	Delisted 2011	Endangered
2	Gray Wolf	Delisted 2011	Endangered

c. Is the site part of a migration route? If so, explain.

Pacific flyway       Other migration route:

Explain:

Washington State is within the Pacific Flyway. No impacts are anticipated as a result of this proposal.

d. Proposed measures to preserve or enhance wildlife, if any:

1) *Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.*

Species /Habitat: Gray Wolf

Protection Measures: Gray wolves have been observed near the area of this proposal. No forest management restrictions are anticipated for wolves, as they are tolerant of disturbance. One exception is the possible requirement of a timing or distance restriction around an active den or rendezvous site. No wolf dens are known to exist within one mile of the proposal area. No harvest, timber hauling, road construction, or site preparation will occur within one mile of an occupied gray wolf den site from March 15 to July 30 or within ¼ mile of a confirmed gray wolf den site at other times of the year.

Species /Habitat: Riparian

Protection Measures:

- No harvest RMZs within the core and inner zone of Type F streams.
- No harvest RMZs on Type Np streams.

Species /Habitat: Uplands

Protection Measures:

- A minimum of 6 Legacy Trees, Wildlife Reserve Trees, and Green Recruitment Trees per acre were left clumped and scattered.
- Retention trees, wildlife reserve trees, green recruitment trees and snags will be left clumped throughout the units. These, in addition to down logs and woody debris, will be left to provide habitat for various species. The harvest will increase forage from tops and limbs of harvested trees in the short term. In the long term, forage will increase from the additional growth of new grasses, forbs and shrubs. Irregular shaped units and buffers should aid in providing hiding cover. Stream buffers on Type Np and Type F streams will provide habitat for animals as well as provide shade to streams protecting stream temperature.

e. List any invasive animal species known to be on or near the site.

Invasive species have not been observed on or near the site.

## 6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Petroleum fuel (diesel or gasoline) will be used for heavy equipment during active road building, timber harvest operations, and for transportation. No energy sources will be needed following project completion.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

## 7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

Minimal health hazard due to operating heavy equipment and the minor spillage of fuel and lubricating oils that are present with this type of operation. The risk of wildfires is always present and may be increased for approximately two years following harvesting due to logging slash.

- 1) Describe any known or possible contamination at the site from present or past uses.

None known.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Petroleum fuel and oil will be used during active road building and timber harvesting. Typically these substances are stored in small transfer tanks located in

passenger vehicles. No toxic or hazardous chemicals will be stored on site following active operations.

- 4) Describe special emergency services that might be required.

The Department of Natural Resources, private, and fire protection district suppression crews may be needed in case of wildfire. In the event of personal injuries, emergency medical services may be required. Hazardous material spills may require Department of Ecology and/or county assistance.

- 5) Proposed measures to reduce or control environmental health hazards, if any:

No petroleum-based products will be disposed of on site. If a spill occurs, containment and cleanup will be required. Spill kits are required to be onsite during all heavy equipment operations. The cessation of operations may occur during periods of increased fire risk. Fire tools and equipment, including pump trucks and/or pump trailers, will be required on site during fire season.

*NOTE: If contamination of the environment is suspected, the proponent must contact the Department of Ecology.*

#### b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Log trucks will use forest roads, county roads, and State Route 2. This is normal activity for this area and is consistent with existing traffic. Noise will be increased during daylight hours generated from the operation of machinery and power tools.

- 3) Proposed measures to reduce or control noise impacts, if any:

None.

### 8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. (*Site includes the complete proposal, e.g. rock pits and access roads.*)

The DNR-managed lands and private ownerships surrounding the units are managed for timber production. The Washington State Parks and Recreation Commission land, DNR-managed lands,

and private ownerships are utilized for dispersed recreational activities.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

This proposal site has been used as working forest lands. This proposal will retain the site in working forest lands.

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

This proposal is consistent with current and standard forestland harvest activities; there are no anticipated effects on this or adjacent lands that would affect normal forest land business operations. Equipment access, application of pesticides and timber harvesting are normal activities that would be expected on forest lands.

- c. Describe any structures on the site.

None.

- d. Will any structures be demolished? If so, what?

No.

- e. What is the current zoning classification of the site?

This proposal lies within the Spokane County Designated Forest Lands Zone.

- f. What is the current comprehensive plan designation of the site?

Under the comprehensive plan for forest lands, there are no restrictions pertaining to this proposal. The proposal will follow Washington State Forest Practice Rules, and will be consistent with the current comprehensive plan for Spokane County.

- g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

- i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This proposal will maintain or enhance compatibility with existing projected land uses such as timber production, recreation, and wildlife use. This project is consistent with current comprehensive plans and zoning classifications.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

## 9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

c. Proposed measures to reduce or control housing impacts, if any:

None.

## 10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

1) *Is this proposal visible from a residential area, town, city, recreation site, major transportation route or designated scenic corridor (e.g., county road, state or*

*interstate highway, US route, river or Columbia Gorge SMA)?*

*No*       *Yes, name of the location, transportation route or scenic corridor:*

The proposal area can be seen from the backside of the Mount Spokane Ski area looking north.

2) *How will this proposal affect any views described above?*

This proposal will resemble previous timber harvests in the area and views will change from a stand of mature timber to a view of a recent harvest with mature trees remaining around Type F, Np streams, and ponds. There will also be clumps and individual trees scattered throughout. This view will change to one of a young plantation after seedlings are planted and the new trees continue to grow.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Scattered leave trees and clumps of leave trees are scattered throughout the proposal area. Leave tree design should help minimize any impacts. Regeneration of young trees will occur two years after harvest and once new trees grow visual impacts will be minimized even further.

## **11. Light and glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

There may be glare from logging equipment during daylight hours, and vehicle headlamps during darkness

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No glare will be produced from the finished project.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None will be needed.

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

There is no designated recreation within the proposal area. However, hunting, fishing, hiking, and other informal outdoor recreation activities may occur within the proposal area.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

There may be some disruptions to recreational use during periods of harvesting and hauling.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

Road signs will be utilized to inform the public of log truck traffic.

## 13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

None known.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

No cultural resources were found after reviewing archaeological surveys online, historic preservation, GIS data, and field review. A cultural resource technician performed a remote review of the proposal area as well as a field review.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If a presently-unknown cultural resource is discovered during project operations, DNR will comply with the March 2010 Cultural Resources Inadvertent Discovery Guidance.

## 14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

North Elk-Chattaroy road, to East Blanchard road, to North Conklin road, to East Laurel road, to East Jackson road, to the E284506F road to Units 1 and 2.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

The site is not served by public transit nearby. The nearest transit stop is located approximately 12 miles west from the proposed area in Riverside, WA.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

Yes, see A-11-c. Road activities are on DNR-managed forest roads and private roads.

- 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area and any existing safety problem(s), if at all?*

This proposal should not result in an increase in vehicle trips per day upon completion of the proposal. Any impact will be temporary and limited to the period during which operations are being conducted. Access to existing roads in the sale area may be restricted during operations, as needed for safety. This proposal expands the network of DNR-managed forest roads in the area.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Approximately 10 to 15 truck trips per day while the operation is active. Peak volumes would occur during the yarding and loading activities between 4:00 a.m. and 4:00 p.m. of the operating period. The completed project will generate less than one vehicular trip per day. Estimates are based on the observed harvest traffic of past projects.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any:

None.

**15. Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

**16. Utilities**

a. Check utilities currently available at the site:

- electricity     natural gas     water     refuse service     telephone     sanitary sewer  
 septic system     other:

No utilities currently available on site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

**C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Robert Hechinger

Name of signee: Robert Hechinger

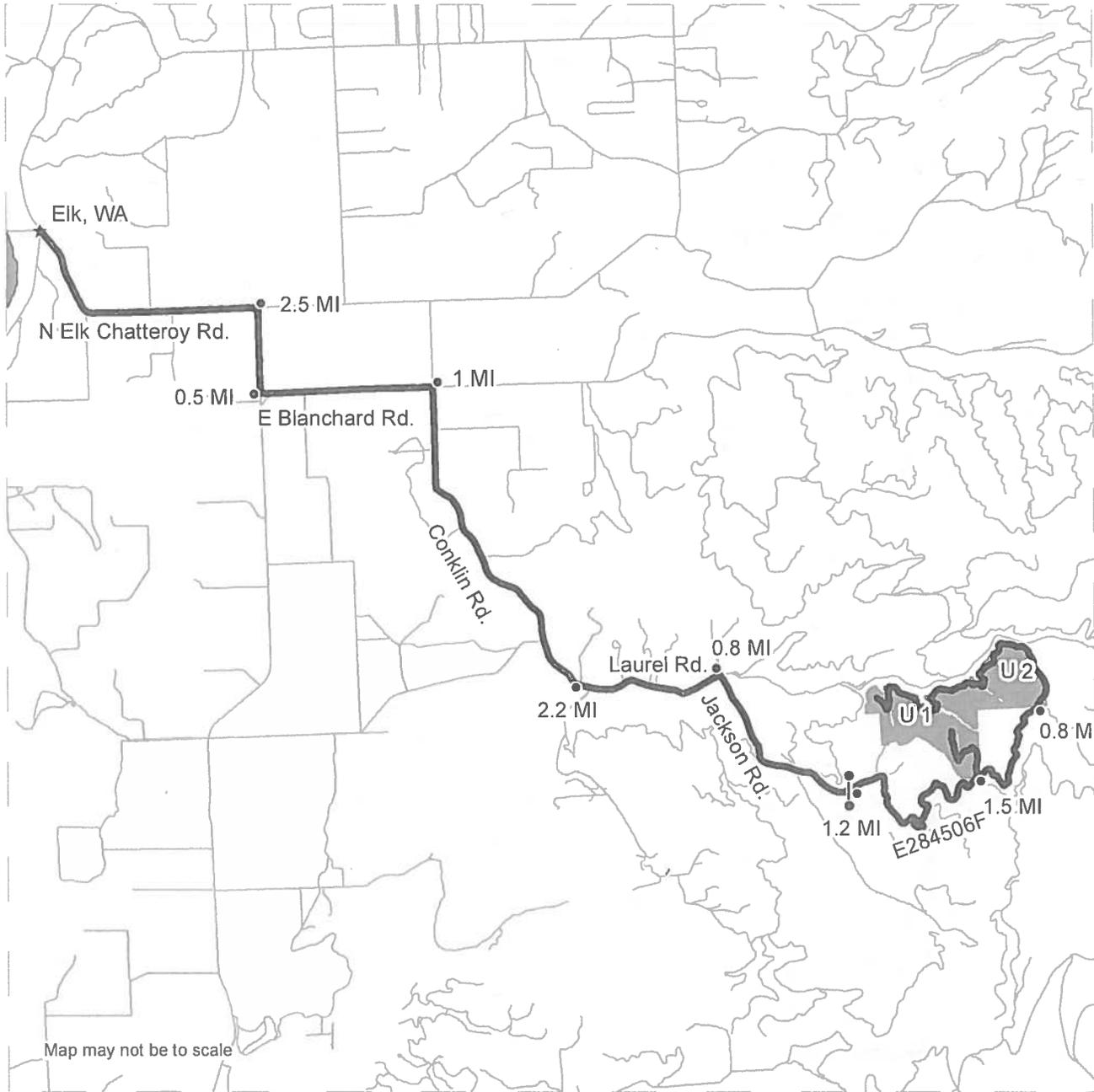
Position and Agency/Organization: Northeast Region Proprietary Forester, WADNR

Date Submitted: 4/4/19

# DRIVING MAP

SALE NAME: JACKSON  
 AGREEMENT#: 30-098225  
 TOWNSHIP(S): T28R45E, T29R45E  
 TRUST(S): Common School and Indemnity (3)

REGION: Northeast Region  
 COUNTY(S): Spokane  
 ELEVATION RGE: 2600-3160



**Legend:**

- Timber Sale Unit
- Haul Route
- Other Road
- Gate

**DRIVING DIRECTIONS:**

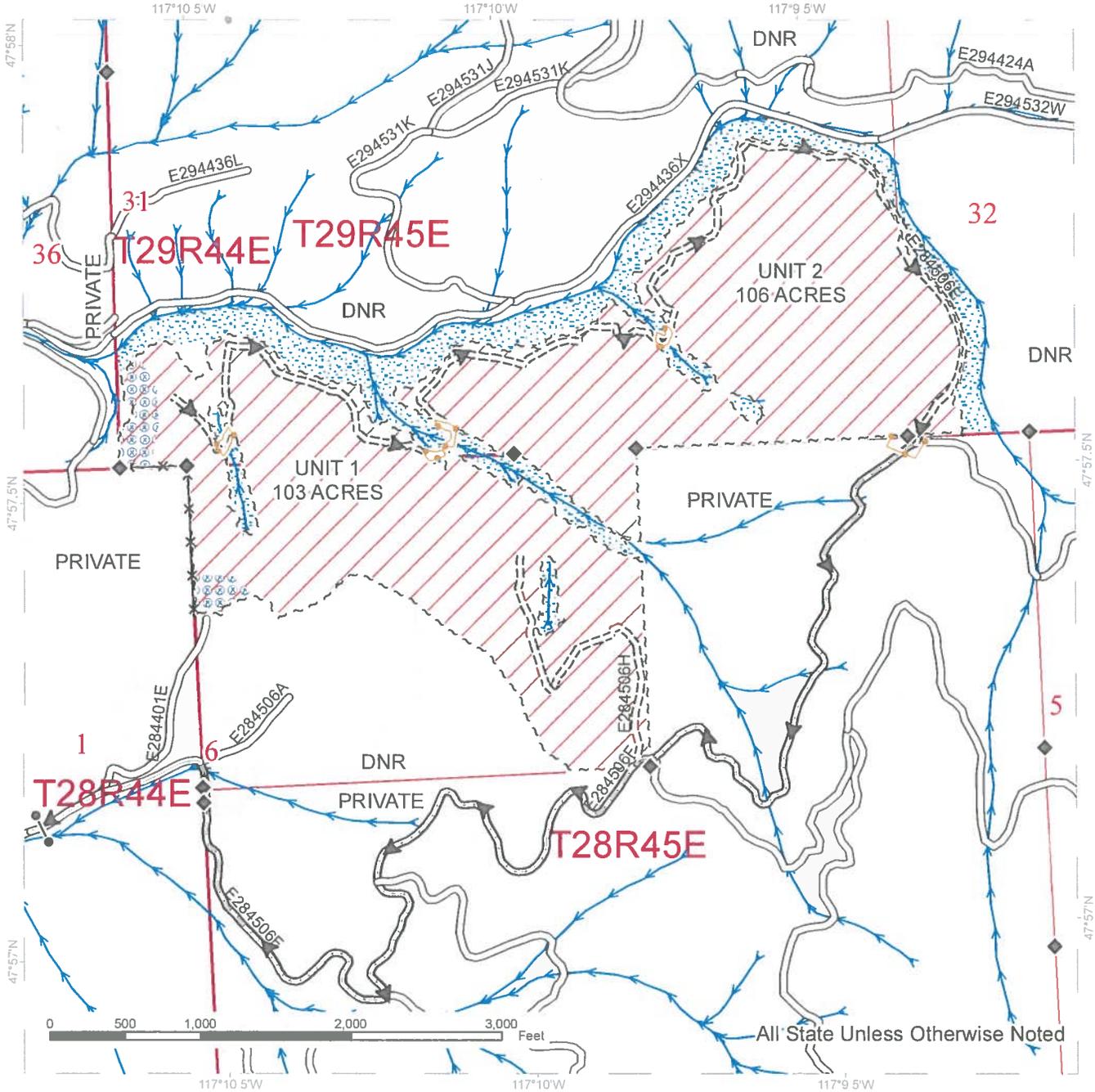
From Elk, WA travel south on N Elk Chatteroy Rd for 2.5 miles. Turn right to stay on N Elk Chatteroy Rd and travel 0.5 miles. Turn left onto E Blanchard Rd and travel 1.0 mile. Turn right onto N Conklin Rd and travel 2.2 miles. Continue straight onto E Laurel Rd and travel 0.8 miles. Turn right onto E Jackson Rd and continue 1.2 miles to the black gate. From the gate continue approximately 1.5 miles on the E284506F road to arrive at Unit 1. Travel another 0.8 miles on the E284506F road to arrive at Unit 2.



# TIMBER SALE MAP

**SALE NAME:** Q JACKSON  
**AGREEMENT #:** 30-098225  
**TOWNSHIP(S):** T28R45E, T29R45E  
**TRUST(S):** Common School and Indemnity (3)

**REGION:** Northeast Region  
**COUNTY(S):** Spokane  
**ELEVATION RGE:** 2600-3160



All State Unless Otherwise Noted

Variable Retention Harvest	County Road	Streams
Sale Boundary Tags	Existing Roads	Survey Monument
Take / Removal Trees	Required Pre-Haul Maintenance	Gate (<<Lock Type>>)
Public Land Survey Sections	Required Construction	
Riparian Mgt Zone	Haul_Route	
Hazard Abatement Area		

