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 under "SEPA Center." 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: **WINDY GAP BLOWDOWN** *Agreement #* **93160**

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

3. Address and phone number of applicant and contact person:
   Rob Hechinger
   225 S. Silke Road
   Colville, WA 99114
   (509) 684-7474

4. Date checklist prepared: **10/12/2015**

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

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

   a. *Auction Date:* **01/26/2016**
   b. *Planned contract end date (but may be extended):* **10/31/2016**
   c. *Phasing:*

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

Timber Sale:

a. *Site preparation:*

TSU NO :1	**PILE & BURN**	**10/01/2017**	**1 Acres**
TSU NO :2	**PILE & BURN**	**10/01/2017**	**1 Acres**

TSU NO :3	PILE & BURN	10/01/2017	3 Acres

b. *Regeneration Method:*

TSU NO :1	NATURAL	06/01/2017	10 Acres
TSU NO :2	NATURAL	06/01/2017	10 Acres
TSU NO :3	NATURAL	06/01/2017	67 Acres

c. *Vegetation Management:*

TSU NO :1	SEED GRASS	10/01/2016	1 Acre
TSU NO :2	SEED GRASS	10/01/2016	1 Acre
TSU NO :3	SEED GRASS	10/01/2016	3 Acres

d. *Thinning:*
The units will be assessed for future pre-commercial thinning (PCT) needs. Units may be treated 13-20 years after natural regeneration is established.

Roads: See 11.a. c.

Rock Pits and/or Sale: There is no rock pit development planned with this proposal.

Other: Fire wood cutting from slash piles may occur. Slash piles may be chipped for biomass if economically feasible.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

☐ *303 (d) – listed water body in WAU:* ☐ *temp* ☐ *sediment* ☐ *completed TMDL (total maximum daily load):*
☐ *Landscape plan:*
☐ *Watershed analysis:*
☐ *Interdisciplinary team (ID Team) report:*
☒ *Road design plan:* **WADNR draft road plan dated: 09/17/2015**
☐ *Wildlife report:*
☐ *Geotechnical report:*
☐ *Other specialist report(s):*
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☐ *Rock pit plan:*
☒ *Other: WAU maps reporting soil types, mass wasting potential, erosion potential, soil stability, and habitat typing; DNR TRAX; DNR Policy for Sustainable Forests; DNR Smoke Management Plan; State Soil Survey; DNR Lynx Habitat Management Plan (2006); Little Pend Oreille Road Management Block (RMB) for the DNR Road Management and Abandonment Plan (RMAP) No. R2302743; and "Identifying Old Trees and Forests in Eastern Washington" by Robert Van Pelt, September 2008.*

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.

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

☒ *FPA #* **3020553** ☐ *FHPA* ☒ *Burning permit* ☐ *Shoreline permit* ☐ *Incidental take 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*:

The proposal area includes three timber harvest areas totaling 91 acres and approximately 1,400 MBF of timber harvest. Unit 1 is 10 acres, Unit 2 is 14 acres, and Unit 3 is 67 acres. The mixed stands of Douglas-fir, lodgepole pine, and western larch were damaged from high winds associated with a thunderstorm.

The amount of damaged timber determined the decision to use Variable Retention Harvests (VRH). Six or more trees per acre will be left within the units to promote natural regeneration. Units 1 and 2 received less overall damage than Unit 3. The southern portion of Unit 3 was destroyed with few undamaged trees near Highway 20. Ground-based logging will be used in Units 1 and 2. Both ground-based and cable operations will be used in Unit 3. Cable operations will be used on steeper slopes above the streams and public roads to limit slope disturbance.

Pre-haul and post-haul maintenance is planned on 6,930 feet of existing road with 5,270 feet of new construction. Existing roads will be used to access Units 1 and 2. The new construction road is needed to access Unit 3 and support cable operations. There may be up to 599 feet of additional new road construction within the sale area, in the form of a short spur to facilitate access to landings, protect public resources, maintain ingress and egress, or provide for safety.

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		5,270	2	0

Reconstruction		0		0
Abandonment		0	0	0
Bridge Install/Replace				0
Culvert Install/Replace (fish)				0
Culvert Install/Replace (no fish)				

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.

a. *Legal description:* :

T35N R41E S10, 11, 12

b. *Distance and direction from nearest town (include road names):*

To Unit 1: From the Hwy 395 and Hwy 20 junction in Colville, travel 17.5 miles east on Hwy 20 to the Black Lake road. Turn left onto Black Lake road and travel .4 miles to the E 354111A road. Turn right onto the E354111A road and travel .15 miles to the landing area. Unit 1 is approximately 875 feet uphill from the landing.
To Unit 2: From the Hwy 20 and Black Lake junction, travel .03 miles on the Black Lake road to the Spruce Canyon road. Turn right on Spruce Canyon road and travel .3 miles to the E354114A road. Stay left and travel .5 miles on the E354114A road to the E354111B road. Turn Left on the E354111B road and travel .22 miles to Unit 2.
To Unit 3: From the E354111B junction travel .6 miles on the E354114A road to the 354102M road. Turn right onto the E354102M and travel .5 miles to the E354102L road. Turn left on the E354102L road and travel .25 miles to the start of the E354112J road. Follow the orange ribbons 470 feet to Unit 3. Unit 3 can also be accessed directly from the Spruce Canyon Junction with Hwy 395.
The E354102M road is currently blocked going in to Unit 3 but can be accessed by ATV.

c. Identify the names of all watershed administrative units (WAU). See also landscape/WAU map on DNR website: http://www.dnr.wa.gov/ResearchScience/sepa/Pages/Home.aspx under the topic "Current SEPA Project Actions – Timber Sales" for a broader landscape perspective.

WAU Name	WAU Acres	Proposal Acres
LAKES	**37,535**	**91**

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center for a broader landscape perspective.)

The Lakes WAU contains 37,535 acres. Department of Natural Resources managed lands in the WAU is approximately 16,608 acres (44%). Federal ownership is 14,278 acres (38%). State (non-DNR) is six acres and private and other public lands are 6,649 acres (18%). This proposal comprises approximately 0.2% of the total WAU and approximately 0.6% of the DNR ownership within the WAU. In the Lakes WAU there has been approximately 1,644 acres (approximately 4.3% of WAU) of even-aged harvest on DNR and non-DNR managed lands in the past seven years (1,098 acres on DNR and 546 on non-DNR land). There have been 654 acres (1.7% of WAU) of uneven-aged harvest on DNR and non-DNR managed lands in this WAU in the past seven years.

On federal lands, there have been fuels reduction projects in the area of the Little Pend Oreille Lakes.

Additional timber sales are planned on DNR managed lands in the Little Pend Oreille block. The "Oh Joy" timber sale is scheduled for harvest possibly in 2017 or later. It will be located in T35N R42E, sections 4, 5, 8, and 9. Additionally the "Tiger Stripes" timber sale is scheduled for harvest in 2018 or later. Both sales will harvest 4.5 to 6 mmbf. Unit 3 of the proposal was originally planned as Tiger Stripes Unit 1.

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 WAU or sub-basin(s)(landforms, climate, elevations, and forest vegetation zone).*

The Lakes WAU totals 37,535 acres. The WAU extends north from the Stevens and Pend Oreille County line, just inside the Little Pend Oreille National Wildlife Refuge, approximately 12 miles past the Little Pend Oreille Lakes, then transects to the west approximately four miles, then southwest approximately 10 miles to just past the Little Twin Lakes area, then southeast approximately eight miles back to the point of beginning. Elevations range from 2,900 feet to 5,566 feet, the average being 3,725. This area is mainly mountainous timbered lands with some natural openings.

Within the Lakes WAU, average precipitation ranges from 25 inches to 40 inches annually, with the

weighted average being 29 inches. A majority of this precipitation comes in the form of snow. Vegetation within the WAU varies with elevation and aspect. The lower elevations and south aspects are dominated with Douglas-fir and ponderosa pine on the drier sites. Higher elevations and northern aspects are dominated with a mixture of Douglas-fir, western larch, western red cedar, western white pine, western hemlock, grand fir and lodgepole pine. Vegetation zones within the WAU are the interior Douglas-fir, grand fir and interior are primarily cedar/hemlock zones.

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

The proposal does not differ from the WAU description. It lies at mid-range elevation and it has average precipitation for the WAU. The timber stands are primarily Douglas-fir, lodgepole pine, and western larch. These are seral species following a largescale fire event on cedar habitat types.

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 a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
4731	**STONY SANDY LOAM**	**40-65**	**26**	**LOW**	**MEDIUM**
5282	**SILT LOAM**	**25-40**	**23**	**LOW**	**MEDIUM**
7271	**VF.SNDY.LOAM**	**0-20**	**17**	**INSIGNIFIC'T**	**LOW**
4729	**STONY SANDY LOAM**	**0-40**	**12**	**LOW**	**MEDIUM**
7667	**STONY LOAM**	**0-40**	**8**	**LOW**	**MEDIUM**
5291	**STONY SILT LOAM**	**0-40**	**3**	**LOW**	**MEDIUM**
2935	**MUCK**	**0-1**	**0**	**INSIGNIFIC'T**	**N/A**

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

1) *Surface indications:*

Previous harvest units show little to no erosion and no mass wasting. Road surfaces are prone to erosion if grades exceed 7%. Road cut slopes usually take two years to stabilize.

2) *Is there evidence of natural slope failures in the sub-basin(s)?*

☒*No* ☐*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*

☐*No* ☒*Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:*

A road failure occurred over ten years ago south of the sale area. It was caused by a relief culvert that was too small. Water built up behind the culvert and saturated the road. The fill released as a debris torrent and travelled approximately 2,000 feet downhill. It was repaired with a proper sized culvert. There have been no problems since the repair.

A cut slope failed on a newly constructed road with the Tacoma Mixer timber sale. A spring developed in the 35 foot cut slope from increased ground water two years after road construction. It was located close to the creek near a new bridge location. The saturated slope failed and delivered sediment to Flodelle Creek. The cut slope was repaired by armoring the slope with rip rap and creating a French drain.

Associated management activity:

Both failures were associated with roads.

4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*

☒*No* ☐*Yes, describe similarities between the conditions and activities on these sites:*

The two previous failures involved draws that funneled water to specific points. There are no known similar areas on this site.

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

There are no identified areas of concern for Units 1 and 2. Unit 3 has steeper slopes that are composed of granitic sands. Cable yarding will be used to limit disturbance on these slopes above Amazon Creek and the Little Pend Oreille River. The new construction road in Unit 3 is located above the steeper slopes on a transition area near the ridge top.

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: 2 acres *Approx. acreage new landings:* 1 Acre
Fill Source: onsite

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

There is potential for some erosion to occur as a result of road and harvest activities associated with this proposal. Drivable dips, insloping or outsloping, road crowning and ditching, water barring, and grass-seeding will be employed to minimize the risk of erosion from roads and skid trails. See B.1.h. for additional protection measures.

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):*

There is no road rocking planned for the new road construction. There is the possibility of spot rocking portions of road if a wet spot or sandy area is encountered during road construction.

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

Proper road maintenance, construction, coordinated skidding patterns, landing locations, and effective contract administration are expected to minimize soil erosion potential. Harvest and haul activities will be monitored and activities will be restricted when needed to reduce or prevent sediment delivery, erosion, compaction, and rutting. Roads have been designed to minimize erosion potential and conduct water onto naturally vegetated forest floors utilizing drivable dips, in or outsloping of road surfaces, crowning, ditching, and installation of cross drains. Energy dissipating structures will be placed at the outfall of cross drains when necessary to prevent erosion. Culvert headwalls will be armored when necessary. Skid trails may have grass seed applied to exposed soils; water barred, or have slash placed where necessary to prevent erosion. Ditch lines and cut and fill slopes will be revegetated through grass seeding. Hauling on any roads, including county roads, will not occur during spring break up (March 1 to May 31) or during extreme wet weather conditions when excess rutting may occur unless approved by the contract administrator. Road construction, or reconstruction, will not take place from March 1 to May 31, unless approved by the contract administrator. Tree felling and skidding will not be permitted from March 1 to May 31, unless approved by the contract administrator.

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.

The proposal will involve vehicle emissions and dust from logging, skidding, hauling, and possibly slash pile chipping operations. Pile and/or broadcast burns will adhere to the state Smoke Management Plan.

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

No off-site sources of emissions or odors will affect this proposal.

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

Smoke management requirements will be followed if any burning is conducted.

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 timber sale map available at DNR region office, or forest practice application base maps.)*

a. *Downstream water bodies:* Gap Creek is west of Unit 1 and Amazon Creek is between Unit 2 and Unit 3. Both streams flow into the Little Pend Oreille River. The Little Pend Oreille River flows adjacent to Unit 2 and Unit 3. The Little Pend Oreille River flows into the Colville River near Arden, WA.

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)
Amazon Creek	F	1	110
Little Pend Oreille River	F	1	110
Little Pend Oreille River	S	1	110

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

Gap Creek is west of Unit 1 but not adjacent to the unit. Amazon Creek runs along the western boundary of Unit 3; it is a Type F stream with an associated wetland. The RMZ was measured from the edge of the meadow which is sometimes inundated with water. The Little Pend Oreille River is a Type F water along the east portion of Unit 3 and changes to a Type S water as it crosses north under Highway 20 along the western portion of Unit 3. Both Highway 20 and Spruce Canyon County Road separate the river from Unit 3. The RMZ core zones are road surface with inner and outer zones in areas extending above the roads. Damaged timber in the inner and outer zones is planned for removal with an Alternate Plan. Removing the damaged timber from the RMZ areas along the roads will improve public safety

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 map available at DNR region office.)*

Description (include culverts):

Damaged timber will be removed from inner and outer zones along Type F streams. The damaged timber was blown down uphill away from the streams. Removing the heavy amounts of blowdown will remove the layered blowdown and create a faster timeline for new forest vegetation on the site. This work will be done by submitting an Alternate Plan with the Forest Practice Permit. This is consistent with other landowners who experienced heavy damage. Stevens County has approved the removal of blowdown along the Little Pend Oreille River (Type S water) and landowners have been removing damaged timber within RMZs with Alternate Plans.

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.

None

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:*

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

☒*No* ☐*Yes, describe 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* ☐*Yes, type and volume:*

7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*

There are no signs of past mass wasting events other than the one road problem mentioned earlier in B.1.d.3. There are no soils listed above medium for mass wasting potential.

The soils are susceptible to erosion. Compacted road surfaces greater than 7% experience surface erosion in thunderstorm or heavy rain events. Previous harvests show little to no problems within harvested units.

8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*

☒*No* ☐*Yes, describe changes and possible causes:*

9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*

☒*No* ☐*Yes, explain:*

There is little or no anticipated adverse impact to stream flow or water quality as a result of activities associated with this proposal. Sale unit design, coordinated skidding patterns, operational restrictions, road design and prescriptions are expected to minimize any potential for adverse impacts. See B.1.h.

10) *What are the approximate road miles per square mile in the WAU and sub-basin(s)?*

4.1 miles

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?

☒*No* ☐*Yes, describe:*

11) *Is the proposal within a significant rain-on-snow (ROS) zone? If not,* ***STOP HERE*** *and go to question B-3-a-13 below. Use the WAU* <u>*or*</u> *sub-basin(s) for the ROS percentage questions below.*

☒*No* ☐*Yes, approximate percent of sub-basin(s) in significant ROS zone:*

<u>*Or*</u>*, approximate percent of WAU:*

12) *If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU* <u>*or*</u> *sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*

N/A

13) *Is there evidence of changes to channels associated with peak flows in the WAU* <u>*and*</u> *sub-basin(s)?*

☐*No* ☒*Yes, describe observations in the WAU and in the sub-basin(s):*

There are some 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 water has receded. This is a natural process that occurs each spring on streams throughout the WAU. There is also evidence of livestock use in some areas, which has some isolated effects. Beavers are active in multiple areas of the WAU. They are creating dams on several streams.

14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*

Road construction, hauling, yarding, and felling may be suspended if wet weather conditions threaten public resources within the sale area or along the haul routes. Hauling on all roads may be suspended during spring break-up or during wet conditions that would cause significant rutting of road surfaces. Drainage structures will be used where appropriate to minimize the risk of erosion. Proper road maintenance and drainage along the haul route will ensure any runoff is dispersed onto the forest floor. See B.1.h for additional protection measures. See A.13 for ownership, and harvest type and frequency within the WAU.

15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*

☒*No* ☐*Yes, possible impacts:*

16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.*

See B.1.h and B.3.a.14 for protection measures.

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

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 water 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 down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result this proposal?*

☒*No* ☐*Yes, describe:*

a. *Note protection measures, if any.*
None proposed.

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.

Snow melt and rain are the main source of water runoff. Runoff that is intercepted by road surfaces and ditches will be diverted onto the undisturbed forest floor.

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

☒*No* ☐*Yes, describe:*

None are anticipated with the protective measures proposed.

a. *Note protection measures, if any.*

No additional protection measures are anticipated with the protective measures proposed.

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

No

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

(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

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

☒deciduous tree:
☐alder, ☐maple, ☐aspen, ☐*cottonwood,* ☒*western larch,* ☐*birch,* ☐other:

☒evergreen tree:
☒*Douglas fir,* ☒*grand fir,* ☐*Pacific silver fir,* ☒*ponderosa pine,*
☒*lodgepole pine,* ☐*western hemlock,* ☐*mountain hemlock,*
☒ *Englemann spruce,* ☐*Sitka spruce,* ☐*red cedar,* ☐*yellow cedar,* ☐other:

☒shrubs:
☒*huckleberry,* ☐*salmonberry,* ☐*salal,* ☐*other:*

☐grass
☐pasture
☐crop or grain
☒wet soil plants:
☐cattail, ☐buttercup, ☐bullrush, ☐skunk cabbage, ☐*devil's club,*
☒other: **Willow**

☐water plants:
☐water lily, ☐eelgrass, ☐milfoil, ☐other:

☐other types of vegetation:
☐*plant communities of concern:*

b. What kind and amount of vegetation will be removed or altered? *(See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)*

1) *Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See color landscape/WAU and adjacency maps on the DNR website: http://www.dnr.wa.gov/ResearchScience/sepa/Pages/Home.aspx (Click on the DNR region under the Topic "Current SEPA Project Actions - Timber Sales.")*

Unit 1: Units 1 and 2 are adjacent to the Lower Gap Creek Timber Sale unit. It is a VRH harvest unit that was planted three years ago. The storm did significant damage to the reserve trees. The surrounding 85-95 year old timber stands are mixed species with Douglas–fir, lodgepole pine, and western larch as the primary species. There are a few older remnant ponderosa pine that survived the previous large scale fire event.

Unit 3: Three sides of the unit are surrounded by large wetlands, field and highways. The north side is adjacent to an 85-95 year old timber stand with Douglas-fir, lodgepole pine and western larch as the primary species.

2) *Retention tree plan:*

Leave trees and/or retention trees were selected in accordance with Department Legacy Tree Procedures and Forest Practice requirements. Leave tree preferences of unit harvest prescriptions will be based upon species, size, value to wildlife, health, location, and dominance. The logging operator will be encouraged to leave snags for wildlife unless they need to be felled for safety or operational reasons. Leave trees are randomly scattered and clumped throughout units. See prescription details in A.11.b.

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

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
None Found In Database Search				

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

Grass seeding road surfaces will provide some forage opportunity for animals while limiting noxious weeds. Clovers will be included in the grass seed to provide ground cover, limiting open ground for weed establishment.

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

Yellow Hawkweed is common though out the area. Common Mullen normally comes in on landing areas following harvest and slash pile burning. There is some Plumeless Thistle in the area. Plumeless Thistle patches are sprayed when found.

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: ☐hawk, ☒heron, ☐eagle, ☐songbirds, ☐*pigeon*, ☒other: goshawk

mammals: ☒deer, ☒bear, ☐elk, ☒beaver, ☒other: **Moose, cougar, coyote, lynx, bobcat**

fish: ☐bass, ☐salmon, ☒trout, ☐herring, ☐shellfish, ☐other:

unique habitats: ☐*talus slopes*, ☐*caves*, ☐*cliffs*, ☐*oak woodlands*, ☐*balds*, ☐*mineral springs*

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

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
1	93547	Grizzly bear	Threatened	Endangered
2	93548	Grizzly bear	Threatened	Endangered
3	93549	Grizzly bear	Threatened	Endangered

c. Is the site part of a migration route? If so, explain.
X☐ *Pacific flyway* ☐*Other migration route:* *Explain if any boxes checked:*

All of Washington State is considered part of 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.*

Retention trees, wildlife reserve trees, green recruitment trees and snags will be left scattered and 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 short term forage in the area from tops and limbs of harvested trees. In the long term, forage will increase from the additional growth of new grasses, forbs and shrubs.

There have been several goshawk nests located in the Little Pend Oreille parcel. The DNR Northeast Region Biologist conducts annual northern goshawk surveys to try and find locations of any additional goshawk nests. The harvest will have a seasonal timing restriction from 3/1 - 8/15 if an active nest is found nearby. The nearest known goshawk nest is 3.6 miles to the north.

There are no known resident grizzly bears in the area and the harvest area is not within a grizzly bear recovery zone. Grizzly bears may occasionally move through the area.

Gray wolves occur frequently in forested environments and wolves and tracks have been observed within a few miles of this proposal. Post-harvest conditions should provide higher quality habitat for ungulates.

The proposal is outside but adjacent to a Lynx LAU. There was a Lynx photographed on Highway 20 at Unit 3 within the last 10 years. Another photo was taken by USFW 0.6 miles away on Tacoma Creek road. There are occasional reported sightings but no known resident Lynx in the LPO area. Management of the units will differ from those within the Lynx LAU. Unlike units within the LAU, these future stands will be pre-commercially thinned to a lower stem count to create free-to-grow conditions.

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

None

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.

None

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.

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.

Diesel, gasoline, and hydraulic fluid will be used to operate logging equipment.

4) Describe special emergency services that might be required.

Washington Department of Ecology will be notified if any significant hazardous material spills occur and

appropriate action will be taken. Department of Natural Resources is available for fire suppression. Emergency medical or air ambulance will be available for personal injuries.

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

Compliance with existing state laws regarding environmental health hazards. Fire equipment will be required on site during fire season.

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.

During road construction, maintenance, and harvest activities there will be some noise associated with heavy equipment, chainsaws, and logging trucks. Most logging activities would occur between 3 AM and 5 PM.

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

None are expected to be necessary for this proposal.

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, federal lands and adjacent private lands are currently used for timber production and/or recreational activities such as hunting and hiking.

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 non-forest use?

The site is used as working forest land and for cattle grazing. There are no plans to convert the area to other uses.

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:

No

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?

Classified as forest. One dwelling per 20 acres

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

Designation is forest lands

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

The Little Pend Oreille River is designated as an S water adjacent to Units 2 and 3.

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

Stevens County recognized the impacts to landowners caused by the windstorm. Landowners have been allowed to harvest within inner and outer RMZ zones along the Type S water under alternate plans within the Forest Practices process.

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:

None are necessary.

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

None are necessary.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

There are no plans to change the land use away from forest land.

9. Housing

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

None

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

None

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

None are necessary.

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?

There are no structures planned for the site.

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

1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*

☒*No* ☐*Yes, viewing location:*

2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*

☐*No* ☒*Yes, scenic corridor name:*

State Highway 20

3) *How will this proposal affect any views described in 1) or 2) above?*

The view has been affected by the windstorm which caused a path of destruction six miles long. Unit 3 is directly adjacent to the highway with heavy amounts of blowdown and broke off trees.

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

An eight acre wind damaged area across the Little Pend Oreille River from Unit 3 and adjacent to Highway 20 will not be harvested. The area is environmentally sensitive with wet saturated soil conditions and multiple F streams. It will remain as evidence of the storm.
There is very little standing timber remaining along the highway in Unit 3. Harvesting the unit will clean up the hazard area and promote the establishment of natural regeneration, lessening the recovery time of establishing a new timber stand.

11. Light and glare

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

Possible glare from logging equipment during daylight.

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

No

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

No

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

None are necessary.

12. **Recreation**

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

The Little Pend Oreille Lakes are popular for fishing, swimming, boating, and camping. The Little Pend Oreille ORV trail system is popular for motorcycle, ATV, horseback, and bicycle riding, as well as hiking. The ORV trail system is located on DNR managed lands and USFS lands. Other uses in the general area include snowmobiling, hunting, berry picking, and firewood cutting.

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

The designated groomed snowmobile trail runs on the main road accessing Unit 2 and 3. This portion of the road may be closed to snowmobile use. An alternate parking area past Unit 3 could be used or snowmobilers could be re-routed to the Snow Park at Tacoma Creek.

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

Safety closures will be put in place during harvest operations. Cable operations create greater safety concerns. Warning signs will be posted and a portion of Spruce Canyon county road may be closed during adjacent cable operations. Spruce Canyon is a loop road so closing a portion will not impact the overall transportation system.

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 located on or near the site? If so, specifically describe.

There were no old structures found on the site. It is common to find old cabins and evidence of historic use throughout the Little Pend Oreille area. The nearest known cabin is approximately 0.5 miles away along Highway 20.

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.

There was no evidence found of use by tribes. The Little Pend Oreille State Land block was homesteaded ground that reverted back to public ownership. There are old cabins throughout the area with some evidence of very limited attempts at agriculture. The growing season is very short in the area so most attempts at homesteading failed. There have been no formal attempts to find and list resources throughout the area as a whole.

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.

None identified and DNR TRAX shows no known sites.

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 an unknown historic or cultural resource is discovered during the operation, the following process will occur:

1) Cease operations affecting the discovered site.

2) Physically identify the site on the ground so it can be located and impacts mitigated (a buffer if necessary).

3) Contact region state lands assistant and district manager, and work in collaboration on timing, confidentiality, and notification of tribes and other affected parties.

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.

The proposal will use Black Lake and Spruce Canyon county roads along with State Highway 20.

1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*

There are some safety concerns with the amount of ATV and snowmobiles use in the area. Warning signs will be posted and truck drivers will be told to keep their speed down.

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?

No. The nearest transit stop is in the town of Colville, approximately 18 miles west of the site.

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.

1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*

This proposal is not expected to have a significant impact on the current transportation system. Any impact at all will be temporary and limited to the period of time during which operations are being conducted. Access to existing roads in the sale area may be restricted during operations, as needed for safety.

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 nonpassenger vehicles). What data or transportation models were used to make these estimates?

This proposal should not result in a significant increase in vehicle trips per day upon completion of the proposal. It will increase approximately five to twenty log truck loads per day and one to five personal vehicles to and from the proposal at times when operations are active. Data from previous sales gives us estimates on how many truck loads we could expect per day.

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:

Road signing may be used to inform the general public of temporary road closures, delays, safety concerns, or other impacts to transportation.

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.

None are anticipated.

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

No impacts to public services are anticipated.

16. **Utilities**

a. Check utilities currently available at the site:
☒electricity ☐natural gas ☐water ☐ refuse service ☐telephone ☐sanitary sewer
☐septic system ☐other:

Powerlines in Unit 1.

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

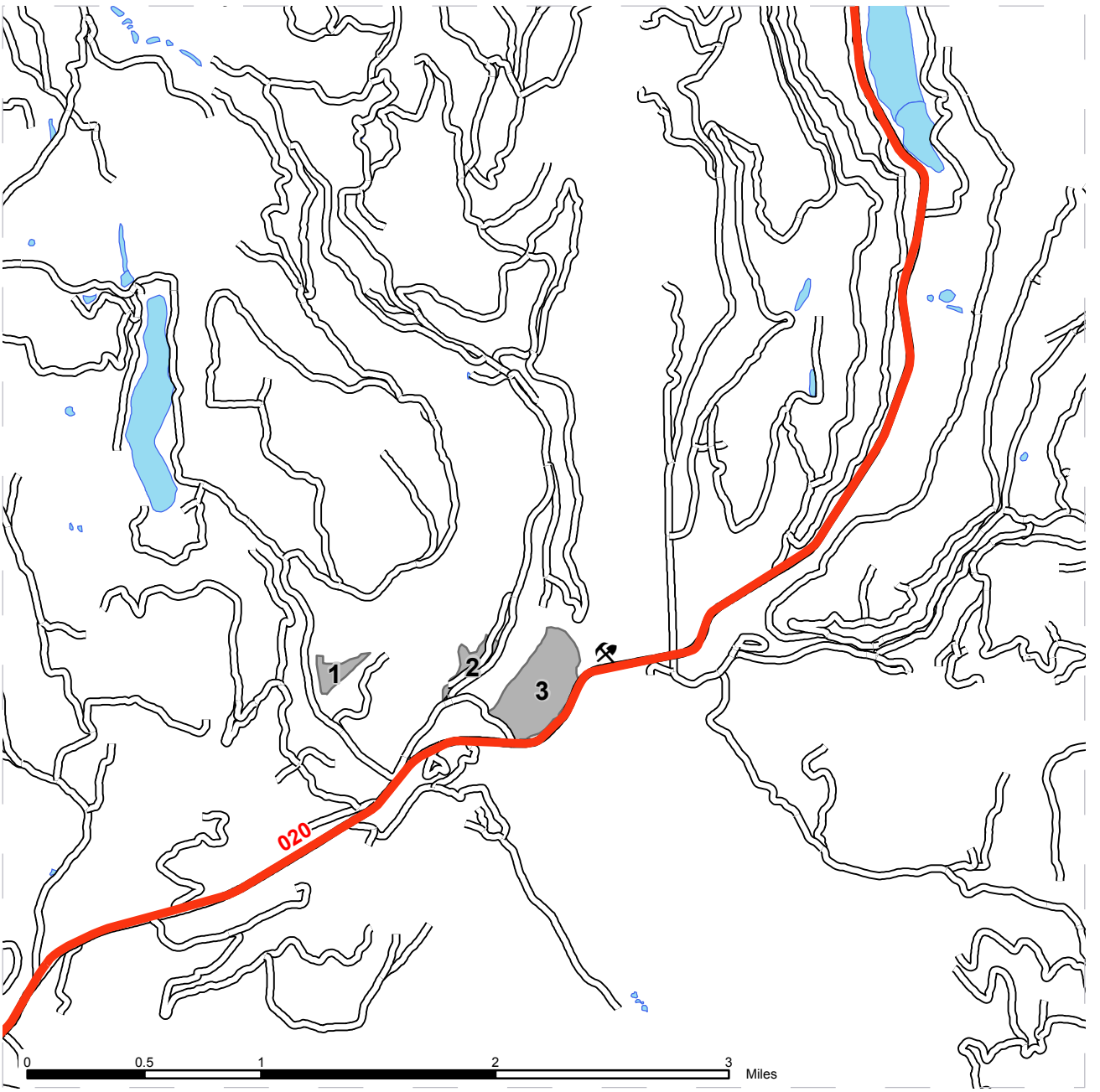
Position and Agency/Organization: Proprietary Forester, NE Region, WADNR

Date Submitted: 10/30/15

DRIVING MAP

SALE NAME: WINDY GAP SALVAGE
AGREEMENT#: Not Defined.
TOWNSHIP(S): T35R41E
TRUST(S): Common School and Indemnity(3), Normal School(8)

REGION: Northeast Region
COUNTY(S): STEVENS
ELEVATION RGE: 3054-3522



Timber Sale Unit
Highways
Other Route
Milepost Markers
Existing Rock Pit

DRIVING DIRECTIONS:

Sale location is approximately 20 miles East of Colville, WA.

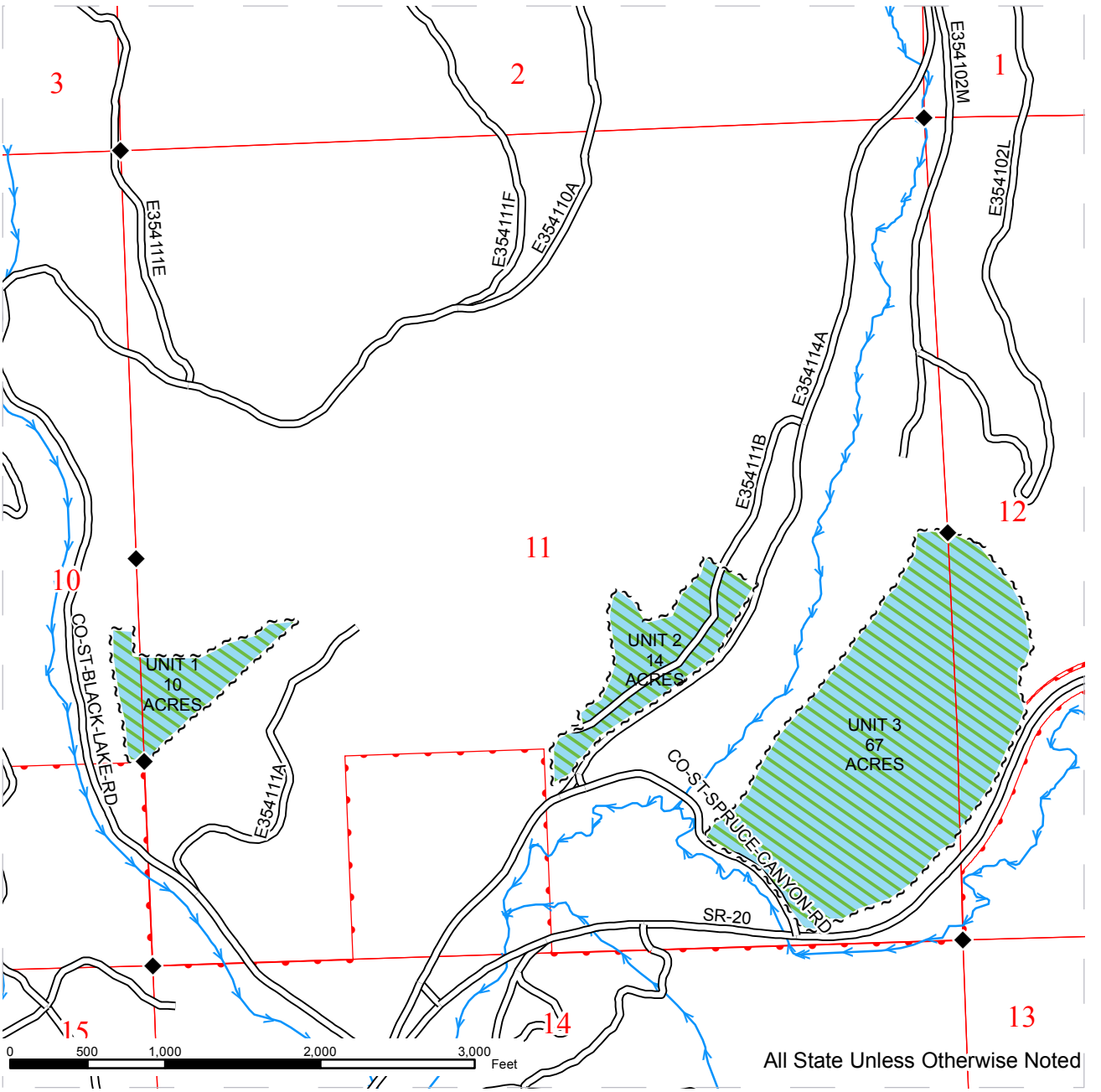
N

Prepared By: dzei490 Creation Date: 10/8/2015 Modification Date: 10/8/2015

TIMBER SALE MAP

SALE NAME: WINDY GAP SALVAGE
AGREEMENT#: Not Defined.
TOWNSHIP(S): T35R41E
TRUST(S): Common School and Indemnity(3), Normal School(8)

REGION: Northeast Region
COUNTY(S): STEVENS
ELEVATION RGE: 3054-3522



~ ~ ~ Sale Boundary Tags
Ground Skidding
General
Undefined Construction
Streams
Monumented Corners

N

Prepared By: dzei490 Creation Date: 10/8/2015 Modification Date: 10/8/2015