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: **GREMLIN**
Agreement # **30-103594**

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

3. Address and phone number of applicant and contact person:
South Puget Sound Region
950 Farman Ave N
Enumclaw, WA 98022
Contact: Audrey Mainwaring

4. Date checklist prepared: **01/09/2023**

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

6. Proposed timing or schedule (including phasing, if applicable):
a. *Auction Date:*
08/29/2023

b. *Planned contract end date (but may be extended):*
10/31/2025

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:
Site preparation, including an herbicide application, may be used to ensure that planting can be achieved at acceptable stocking levels to exceed Forest Practice standards following harvest. Slash piles on landings may be burned during the fall before planting.

b. Regeneration Method:
Unit 3 will be hand-planted with native conifer seedlings and Units 1 and 2 will be hand-planted with red alder seedlings following harvest.

c. Vegetation Management:
Possible treatments including an herbicide application, could occur following harvest. Treatments will be based on vegetative competition, and will ensure a free-to-grow status that complies with Forest Practices Standards.

d. Other:

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

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*: **Chehalis River**

☐ *temp*

☐ *sediment*

☒ *completed TMDL (total maximum daily load)*

☐ *Landscape plan:*

☐ *Watershed analysis:*

☐ *Interdisciplinary team (ID Team) report:*

☒ *Road design plan:* **Road Plan by Jacob Gross dated 2/1/2023**

☐ *Wildlife report:*

☐ *Geotechnical report:*

☒ *Other specialist report(s):* **Geologic Field Summary by Susie Wisehart LEG, dated 1/18/2023; Wetland Buffer Mitigation Plan by Alan Mainwaring, Region Biologist, dated 2/6/2023**

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

☒ *Rock pit plan:* **Included in Road Plan by Jacob Gross dated 2/1/2023**

☒ *Other:* **The following analyses, policies, procedures, documents, and data layers directly pertain to or were reviewed as part of this proposal:**

- **DNR Policies and Implementation**
  - **Policy for Sustainable Forests (PSF; 2006a)**
  - **Final Environmental Impact Statement on the Policy for Sustainable Forests (2006b)**
  - **Alternatives for the Establishment of a Sustainable Harvest Level for Forested State Trust Lands in Western Washington Final Environmental Impact Statement (2019)**
  - **Silvicultural Rotational Prescriptions**
  - **Land Resource Manager Reports and associated maps**
- **DNR Trust Lands Habitat Conservation Plan and Supplemental Information**
  - **Final Habitat Conservation Plan (HCP; 1997)**
  - **Final (Merged) Environmental Impact Statement for the Habitat Conservation Plan (1998)**
  - **Long-Term Conservation Strategy for the Marbled Murrelet Final Environmental Impact Statement (2019)**
  - **Final State Trust Lands Habitat Conservation Plan Amendment: Marbled Murrelet Long-term Conservation Strategy**
  - **Riparian Forest Restoration Strategy (RFRS; 2006)**
  - **Spotted Owl Habitat Layer**
  - **Marbled Murrelet Habitat Layer**
  - **WAU Rain-On-Snow GIS Layer and Reports**
- **Forest Practices Regulations and Compliance**
  - **Forest Practices Board Manual**
  - **Forest Practices Activity Maps**
  - **Trust Lands HCP Addendum and Checklist**

- **Supporting Data for Unstable Slopes Review**
    - **State Lands Geologist Remote Review (SLGRR)**
    - **Landslide Remote Identification Model (LRIM) tool**
    - **Forest Practices Statewide Landslide Inventory (LSI) screening tool**
- **Supporting Data for Cultural Resources Review**
    - **Historical Aerial Photographs**
    - **USGS and GLO maps**
    - **Department of Archaeology and Historic Preservation database for architectural and archaeological resources and reports (WISAARD)**
- **Additional Supporting Data for Policy Compliance**
    - **Weighted Old Growth Habitat Index (WOGHI)**
    - **State Soil Survey**
    - **DNR inventory layers, including RS_FRIS**
    - **Sustainable Forestry Initiative certification standards**
- **Reviews and communications with State Lands geologist, State Lands archaeologist, and Region biologist.**
- **Forest Practices Water Type Modification Form #SP-23-22-0011**
- **Stand Origin Assessment for Gremlin Timber Sale**

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.

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

☒ *FPA #* 2423446 ☒ *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:
The Gremlin Timber Sale consists of three variable retention harvest units and one right-of-way (R/W) unit located within the Capitol State Forest. The total area considered for harvest was 235 acres. The net timber sale area is approximately 140 acres after deducting leave tree acreage, existing road acreage, potentially unstable slopes, wetland management zones, and riparian management zones. Approximately 6,945 MBF of timber volume will be removed. Net unit acreage is as follows:

Unit 1: 14 acres
Unit 2: 31 acres
Unit 3: 93 acres

Unit 4 (R/W): 2 acres

Units 1 and 2 of this proposal lie within the Mox Chehalis Watershed Administrative Unit (WAU), and Units 3 and 4 (R/W) are located within the Porter Creek WAU.

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:

Unit	Origin Date	Major Timber Species	Type of Harvest
1	**1920-1930**	**Douglas-fir, Western Hemlock, Bigleaf Maple, Red Alder, Western Redcedar**	**VRH**
2	**1920-1930**	**Douglas-fir, Western Hemlock, Bigleaf Maple, Red Alder, Western Redcedar**	**VRH**
3	**1910-1920**	**Douglas-fir, Western Hemlock, Bigleaf Maple, Red Alder, Western Redcedar, Black Cottonwood, Sitka Spruce**	**VRH**
4	**1910, 1970**	**Douglas-fir, Western Hemlock, Bigleaf Maple, Red Alder, Western Redcedar**	**Right-of-Way**

- Origin dates were determined by sampling trees with an increment borer. Additional screening methods used include GIS Combined Origin Year, LiDAR Vegetation Height, 1951, 1958 and 2017 ortho photos.

Overall Unit Objectives:

The objective of this proposal is to produce revenue for the State Forest Purchase (2), Common School and Indemnity (3), and Forest Board Repayment (42) Trusts through the production of saw logs, poles, and pulp materials, while ensuring proper resource protection and conserving recreation access.

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		**5161**	**2**	**0**
Reconstruction		**1594**		**0**
Maintenance		**59402**		**0**
Abandonment		**3116**	**1**	**0**
Bridge Install/Replace	**0**			**0**
Stream Culvert Install/Replace (fish)	**0**			**0**
Stream Culvert Install/Replace (no fish)	**6**			
Cross-Drain Install/Replace	**30**			

Routine maintenance will occur on existing roads throughout the duration of this proposal.

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:*
T18-0N R5-0W S36 - Harvest
T18-0N R5-0W S35 - Harvest
T17-0N R5-0W S01 - Harvest
T17-0N R5-0W S02 – Harvest
T17-0N R5-0W S10 – Culvert Installation/Replacement
T17-0N R5-0W S11 – Harvest

T18-0N R4-0W S32 – Rock Pit; North Rim Quarry

b. *Distance and direction from nearest town:*
From Highway 12 in Malone, turn east onto Mox Chehalis Rd, and continue for 1.4 miles. Turn right (east) onto Ray Rd, and continue for 0.2 miles to the A-Line. For Unit 4 (R/W), continue on the A-Line for 1.9 miles, then turn right (east) onto the B-Line. Travel 0.1 miles on the B-Line, then take a slight left turn onto the B-0050. Travel 0.2 miles to the unit. For Unit 3, continue 0.5 miles on the A-Line from the A-Line/B-Line intersection. Then turn right onto the A-0600 road and travel 1.1 miles to the unit. For Units 1 and 2, continue northeast on the A-Line for 1.6 miles from the A-line/A-0600 intersection, then turn left onto the Old A-line. Continue straight onto the A-1600 in 0.1 miles. Travel 0.2 miles on the A-1600, then turn left onto the BPA-2638 for Unit 2, or continue straight through the gate on the A-1600 for 0.5 miles for Unit 1. For North Rim Quarry, continue for 2.5 miles on the A-

Line from the A-Line/Old A-Line intersection, then turn right (east) onto the A-4000. Continue 2.0 miles, then turn right (west) onto the A-4080.

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).*
Within the Porter Creek and Mox Chehalis Watershed Administrative Units (WAUs), agriculture and home sites are located in the valleys near the major streams, therefore peak flows and slope stability are the primary concerns. Forested stands within the WAUs appear to be primarily second and third growth stands. These WAUs are intensively managed for timber production, including variable retention harvest, thinnings, and partial cuts.

DNR analyzed carbon sequestration and carbon emissions from projected land management activities within its final environmental impact (FEIS) statement for the 2015-2024 Sustainable Harvest Calculation and the FEIS for the 2019 HCP Long-Term Conservation Strategy for the Marbled Murrelet. At the western Washington scale, land management activities on DNR-managed lands sequester more carbon than emitted. Individual activities, such as this proposal, are likely to emit some greenhouse gases, including CO2; however, at the landscape scale, DNR's sustainable land management activities, including this proposal, sequester more carbon than they emit. Evaluating carbon sequestration at the western Washington scale is appropriate because a determination of net carbon emissions must consider both the carbon sequestered and the carbon emissions from management within the same analysis area (western Washington).

Recognizing the climate and carbon benefits of working forests in Washington's Climate Commitment Act (RCW 70A.45.005), the legislature found that Washington should maintain and enhance the state's ability to continue to sequester carbon through natural and working lands and forest products. Further, "Washington's existing forest products sector, including public and private working forests and the harvesting, transportation, and manufacturing sectors that enable working forests to remain on the land and the state to be a global supplier of forest products, is, according to a University of Washington study analyzing the global warming mitigating role of wood products from Washington's private forests, an industrial sector that currently operates as a significant net sequesterer of carbon. This value, which is only provided through the maintenance of an intact and synergistic industrial sector, is an integral component of the state's contribution to the global climate response and efforts to mitigate carbon emissions." RCW 70A.45.090(1)(a).

The legislature also found that the 2019 Intergovernmental Panel on Climate Change (IPCC) report "identifies several measures where sustainable forest management and forest products may be utilized to maintain and enhance carbon sequestration. These include increasing the carbon sequestration potential of forests and forest products by maintaining and expanding the forestland base, reducing emissions from land conversion to non-forest uses, increasing forest resiliency to reduce the risk of carbon releases from disturbances such as wildfire, pest infestation, and disease, and applying sustainable forest management techniques to maintain or enhance forest carbon stocks and forest carbon

sinks, including through the transference of carbon to wood products" (2020 Washington Laws Ch. 120 §1(2)).

DNR is legally required (RCW 79.10.320) to periodically calculate a sustainable harvest level and manages state trust lands sustainably. DNR has also maintained (statewide) a forest management certificate to the Sustainable Forestry Initiative standard since 2006. In managing state trust lands sustainably, DNR sequesters more carbon than it emits while conducting land management activities such as this proposal.

The timber harvested from DNR-managed lands is used to produce climate-smart forest products. The climate impacts of DNR's land management are analyzed in multiple environmental impact statements that have informed the Board of Natural Resources' decisions and are consistent with the IPCC, which states that "[m]eeting society's needs for timber through intensive management of a smaller forest area creates opportunities for enhanced forest protection and conservation in other areas, thus contributing to climate change mitigation.

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.*
The Department of Natural Resources has a Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concerning threatened and endangered species and their habitats. The applicable Habitat Conservation Plan (HCP) strategies incorporated into this proposal include:

- **Retaining Riparian Management Zones (RMZ) to protect water quality, stream bank integrity, stream temperatures, and provide down woody debris. RMZs will develop older riparian forest characteristics that, in combination with other strategies, will help support older riparian forest dependent wildlife and aquatic species.**

- **Wetland Management Zones (WMZ) will protect water quality, sensitive wetland soils, and to maintain hydrologic function and natural water flow. WMZs will develop older wetland forest characteristics that, in combination with other strategies, will help support older forest dependent wildlife and aquatic species.**

- **Retaining a minimum of 8 trees per acre (greater than 10 inches diameter at breast height) clumped and scattered throughout the units. This strategy will provide legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination, these features will provide elements of older forest habitat characteristics within the new plantation.**

Agency policies and guidelines from the Policy for Sustainable Forests incorporated into this proposal include:

- **Generally limiting even-aged harvests to less than 100 acres per unit.**

Development of older forests is an expected outcome of the 1997 Trust Lands Habitat Conservation Plan (HCP), and a policy objective stated in DNR's Policy for Sustainable

Forests. Landscape assessments made in May 2021, demonstrate that through implementation of the HCP and other Policies and laws, older forest targets will be met in conservation areas over time. These conservation areas include identified long-term forest cover under the marbled murrelet long-term conservation strategy, riparian areas, areas conserved under the multispecies conservation strategy, potentially unstable slopes, spotted owl nest patches, and spotted owl habitat that must be maintained to comply with the northern spotted owl conservation strategy (within NRF and South Puget Planning Unit dispersal management areas).

- **The South Coast HCP Planning Unit will meet at least 10% older forest within conservation areas by 2100.**

Current Forest Practice Rules also require that:

- **Potentially unstable slopes and landforms are evaluated and rule-identified landforms with the potential to delivery to public resources are excluded from the sale area.**
- **Allowing green-up (regenerated stands that are either 4 feet tall or 5 years of age) of adjacent stands to minimize impacts to watershed hydrology.**
- **Best management practices for road construction and maintenance is implemented to prevent sediment delivery to typed waters and avoid improper drainage patterns that may create slope failures.**
- **After harvest, tree seedlings will be planted to reforest the site and may be complemented by the natural regeneration that is expected to occur.**

c. *Briefly describe any specific mitigation measures proposed, in addition to the mitigation provided by plans and programs listed under question A-13-b.*
All landforms that were determined to be rule-identified landforms according to the Forest Practices Board Manual were excluded from the sale or protected with non-tradeable leave tree areas.

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 anticipated that this proposal will contribute to any environmental concerns.

e. *Complete the table below with the reasonably foreseeable future activities within the associated WAU(s) (add more lines as needed). Future is generally defined as occurring within the next 7 years. This data was obtained from DNR's Land Resource Manager System on the date of processing this checklist and may be subject to change*.

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
MOX CHEHALIS	18655	6002	603	0	208
PORTER CREEK	25452	23943	3216	0	66

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

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):
☐ Flat, ☐ Rolling, ☐ Hilly, ☐ Steep Slopes, ☐ Mountainous, ☒ Other: **The proposal varies from flat terrain to relatively steep slopes**

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

WAU:	MOX CHEHALIS
WAU Acres:	18655
Elevation Range:	33 - 1819 ft.
Mean Elevation:	408 ft.
Average Precipitation:	56 in./year
Primary Forest Vegetation Zone:	Western Hemlock

WAU:	PORTER CREEK
WAU Acres:	25452
Elevation Range:	25 - 2663 ft.
Mean Elevation:	1101 ft.
Average Precipitation:	58 in./year
Primary Forest Vegetation Zone:	Western Hemlock

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 WAUs at the same elevation and aspect.

b. What is the steepest slope on the site (approximate percent slope)?
89%

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 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
6639	SILT LOAM
5670	CLAY LOAM
6640	SILT LOAM
1008	LOAM
7619	GRAVELLY SILT LOAM

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 Licensed Engineering Geologist remotely reviewed all units of this sale utilizing LiDAR, orthophotos, and other data sets available in the DNR GIS database. A field review was conducted in and around all units by foresters with training in unstable slopes identification as well as State Lands Licensed Engineering Geologist and Qualified Expert (LEG and QE) on July 19th and November 9th, 2022 to further evaluate the presence of potentially unstable slopes. Based on the State Lands LEG and QE and foresters' field reviews, there are potentially unstable landforms as defined by Forest Practices rule-identified landforms (RILs). Two bedrock hollows, two toes of deep seated landslides >65%, one Category E: Recent Shallow Landslide, and several inner gorges were identified in and around the units. All RILs have been excluded from the sale by non-tradeable leave tree areas, and timber sale boundaries.

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

☐ *No* ☒ *Yes, describe the proposed activities:*
Cables will be suspended over potentially unstable slopes, but no yarding will occur through or over these landforms.

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

- **Two toes of deep seated landslides >65% slope were excluded from proposed harvest with non-tradeable leave trees using a buffer of 1.5-2 crown widths. A Category E recent, shallow landslide in Unit 3 was protected with non-tradeable leave trees using a buffer of 1.5-2 crown widths. Two bedrock hollows were identified around Unit 3. One was bound out of the harvest and the other was protected with non-tradeable leave trees. Both received a buffer of 2 crown widths. Inner gorges identified around all unit occur outside the sale boundary within RMZs, except one inner gorge in Unit 3 was protected with non-tradeable leave trees using a buffer of 1.5-2 crown widths.**
- **Remote and field reviews were conducted to ensure that potentially unstable slopes were excluded from the harvest areas.**
- **No tailholds will be allowed within and no timber will be yarded across Forest Practices Rule-Identified Landforms.**
- **Cross-drains and ditch-outs will be utilized to minimize the potential for mass wasting and slope failures associated with poor drainage by dispersing water onto stable forest floor.**
- **Skid trails may be water barred post harvesting activities, if necessary to avoid concentrating surface water runoff.**
- **Roads will be constructed during dry weather conditions as much as possible; road construction that includes construction across a Type 4 stream and through the WMZ of a fen wetland will be restricted to July 1-September 30.**
- **Most Type 5 streams and their headwalls have been protected with leave tree clumps.**

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**
Approx. acreage new landings: **0.7**
Fill Source: **North Rim Quarry or native material**

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.

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):*
0.1% 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.)
- **Erosion control and reduction measures are addressed in the sale layout and harvest system design.**
- **The no harvest RMZs and WMZs (except road right of way) will function to protect streams and wetlands from sediment delivery.**
- **Ditches and culverts will be utilized and placed so as not to concentrate runoff directly above potentially unstable slopes or areas identified as bedrock deep-seated landslides.**
- **Non self-leveling ground-based harvesting will only occur on slopes measuring 45 percent**

and less, and self-leveling shovels may occur on slopes measuring 55 percent and less. Ground based equipment will be restricted when potential for excessive soil disturbance exists.

- **The proposal will be harvested utilizing lead-end suspension to minimize soil disturbance.**
- **New road construction was designed to protect streams and wetlands from sediment delivery.**
- **Roads will be crowned, ditched and cross-drained. Cross-drains may be installed and maintained.**
- **Seasonal timing restrictions will prohibit road construction during wet weather conditions.**
- **Leave tree clumps were left around the headwalls of most Type 5 streams and seeps; other Type 5 streams will be protected with a 30-foot Equipment Limitation Zone.**
- **Harvested areas will be replanted with coniferous species.**
- **Road construction and harvesting operations may be restricted during saturated soil conditions. Road construction and abandonment that includes crossing a Type 4 stream and through the WMZ of a fen wetland will be restricted to July 1-September 30.**
- **Skid trails are to be water barred post harvesting activities, if necessary.**
- **Drainage control devices such as culverts (including energy dissipaters), cross drains, and waterbars will be utilized to allow for proper drainage.**

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.
Harvest operations and the removal of timber will result in minor amounts of CO2 emissions from the direct proposal site using diesel and petroleum fueled logging equipment, trucks and passenger vehicles. See A.13.a. for details regarding completed analyses of carbon emissions and sequestration on DNR-managed lands in western Washington. If landing debris is burned after harvest is completed, smoke will be generated. 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.
Carbon dioxide emissions associated with harvested wood products are analyzed in Alternatives for the Establishment of a Sustainable Harvest Level Final Environmental Impact Statement (2019) and the Long-Term Conservation Strategy for the Marbled Murrelet Final Environmental Impact Statement (2019).

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
If landing debris is burned, it will be in accordance with Washington State's Smoke Management Plan. A burn permit will be obtained before burning occurs.

Following harvest, native tree species will be planted on site at a level higher than existed prior to harvest resulting in regeneration of the forest stand and initiating carbon sequestration through forest stand growth.

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: **Porter Creek, West Fork Porter Creek, Mox Chehalis Creek**

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)
Unnamed Stream	**3**	**2**	**195**
Unnamed Stream	**3**	**3**	**192**
Unnamed Stream	**4**	**8**	**100**
Porter Creek	**1**	**1**	**195**
West Fork Porter Creek	**1**	**1**	**195**
Forested Wetland	**Wetland > ¼ Acre < 1**	**1**	**100**
Non-Forested Wetland	**Wetland > 1 Acre**	**1**	**195**

** Additionally there was a non-forested wetland >1 acre and a forested wetland >1 acre within 200 feet of the proposal that did not impact the boundary due to other typed waters that were closer to the proposed harvest boundary.

b. *List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers.*
RMZ/WMZs for this proposal are designed in accordance with the Department's HCP procedures and their stream type identified by the stream's physical characteristics per the water typing system for Forested State Trust HCP lands. All RMZs are measured horizontally from the edge of the 100-year floodplain. All WMZs are measured horizontally from the wetland edge.

Any construction, including the pipe installation, on the B-0050 Ext. road will be seasonally restricted to July 1 through September 30. Road construction through the WMZ of a fen wetland will be mitigated by measures outlined in Biologist Memo dated 2/6/2023. Road waste and debris will be moved to a distance no closer than 50 feet from a stream or wetland.

Disposal areas for organic debris during road construction will not occur within 100 feet of

streams or wetlands.

Local knowledge of prevailing wind direction, and no evidence of extensive windthrow determined no wind buffers were necessary.

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):
Harvest will occur within 200 feet of streams and wetlands, but beyond the buffer distances listed above. Trees may be cut in RMZs and WMZs for safety needs, but will be left in place to provide large woody debris functions.

Timber harvest may occur over Type 5 streams and wetlands less than ¼ acres. Type 5 streams or wetlands less than ¼ acres may have tail-hold cables strung over them and/or timber yarded across them. Leave trees were placed along most of the Type 5 streams and most of the forested wetlands less than ¼ acre. Type 5 streams also receive a 30-foot equipment limitation zone, except crossing where approved by contract administrator, to maintain stream function, stream bank integrity, and minimize possible sediment delivery.

There will be culvert placements at multiple Type 5 stream road crossings, and there will be a temporary pipe installation on a Type 4 stream on a new construction road.

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:*
Temporary diversion or pumping may occur during the culvert installations and replacements on typed streams if water is present.

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

☐ *No* ☒ *Yes, describe activity and location:*
The installation of a temporary culvert in a Type 4 stream, four permanent culverts in Type 4 streams and one permanent culvert in a Type 5 stream will occur within

the 100-year floodplain. See Forest Practice Application for live water temporary culvert information and locations.

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.
It is not likely that any waste materials will be discharged into the surface water(s). However, minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the adjacent surface water(s) as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.

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)?*
MOX CHEHALIS = 6.4 (mi./sq. mi.), PORTER CREEK = 5.4 (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:*
It is likely some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road construction, reconstruction, and/or maintenance standards will be applied that address this issue by installing cross-drains to deliver ditch water to stable forest floors.

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 is evidence of changes to channels across the WAU(s). These changes are a result of natural events such as spring runoff from snowmelt and significant storm events. Channel migration, scouring, and deposition of material can be seen in channels across the WAU(s); this indicates those channels historically experience higher water levels and peak flows

11) *Describe any anticipated contributions to peak flows resulting from this proposal's activities which could impact areas <u>downstream or downslope of the proposal area.</u>*
It is not likely the proposed activity will change the timing, duration, or volume of water during a peak flow event. This proposal limits harvest unit size and proximity to other recent harvests, minimizes the extent of the road network, incorporates road drainage disconnected from stream networks, and implements wide 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.

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):*
There are several inner gorge areas downstream and downslope from the proposed activity. Based on the protection measures outlined in B.1.d.2, B.1.h, and B.3.a.16., no measurable impacts are anticipated.

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:*
Protection measures outlined in question B.1.d.2.

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.*

- **Type 3 and Type 4 no-harvest RMZ and wetland WMZs will maintain forest cover.**
- **Most Type 5 streams have been protected with leave tree clumps, and a 30-foot Equipment Limitation Zone will be utilized to maintain stream function, stream bank integrity, and minimize possible sediment delivery.**
- **The proposal's harvest units are each less than 100 acres to minimize impacts to watershed hydrology.**
- **Allowing green-up (regenerated stands that are either 4 feet tall or 5 years of age) of adjacent stands to minimize impacts to watershed hydrology.**
- **See B.1.d.2 and B.1.h. for further 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 water will be withdrawn or discharged.

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.
Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to

the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site. All spills are required to be contained and cleaned-up. This proposal is expected to have no impact on ground water.

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:*
There are several inner gorge areas downstream and downslope from the proposed activity. Based on the protection measures outlined in B.1.d.2, B.1.h, and B.3.a.16., no measurable impacts are anticipated.

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:*
Protection measured outlined in B.1.d.2.

Note protection measures, if any:

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.
Water runoff, including storm water, from road surfaces will be collected by roadside ditches and diverted onto the forest floor via ditch-outs and cross drain culverts.

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

☐ *No* ☒ *Yes, describe:*
Waste materials, such as sediment or slash, may enter surface water.

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 changes to drainage patterns are expected.

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- 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: **Cascara**

☒ Evergreen tree:

☒ *Douglas-Fir* ☐ *Engelmann Spruce* ☐ *Grand Fir* ☐ *Lodgepole Pine*

☐ *Mountain Hemlock* ☐ *Noble Fir* ☐ *Pacific Silver Fir* ☐ *Ponderosa Pine*

☒ *Sitka Spruce* ☒ *Western Hemlock* ☒ *Western Redcedar* ☐ *Yellow Cedar*

☐ Other:

☒ Shrubs:

☒ *Huckleberry* ☐ *Rhododendron* ☒ *Salmonberry* ☒ *Salal*

☒ *Other:* **Oregon grape, vine 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).*

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 north and south are 100-year-old second growth RMZ buffers. To the east is a 23-year-old conifer plantation. To the west is a 7-year-old conifer plantation and a 29-year-old conifer plantation.

Unit 2: To the north, south, and west are 100-year-old second growth RMZ and WMZ buffers. To the east is a non-forested BPA right-of-way corridor.

Unit 3: To the east and south are 110-year-old second growth RMZ buffers. To the north is a 27-year-old conifer plantation. To the northwest is a 38-year-old conifer plantation. To the west is a 28-year-old conifer plantation, and 110-year-old second growth RMZ and WMZ buffers.

Unit 4 R/W: The eastern portion of this unit is surrounded by 110-year-old WMZ buffer, and the western portion is surrounded by a 60-year-old second growth stand that was commercially thinned in 2014.

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:
Retention tree clumps are identified across the harvest area. A combination of Douglas-fir, western hemlock, western red cedar, Sitka spruce, bigleaf maple and red alder were left for green tree retention and snag recruitment. Retention tree numbers were based on leaving an average of eight trees per acre. Trees were mostly left in clumps. This type of leave tree pattern is conducive to a safe harvest operation and allows the distribution of wildlife trees throughout the proposal. Wind firm trees with defects such as split or broken tops, dominant crowns, large diameters and large limbs were favored as leave trees to enhance wildlife potential. All units will be replanted with native species following harvest.

The stands and the mature RMZ and WMZ stands adjacent to the units have multi-layered canopies with scattered small to large snags and a moderate component of large down woody debris. Within some of the larger leave tree clumps, there are some components of older large down woody debris within the undisturbed vegetation.

e. List all noxious weeds and invasive species known to be on or near the site.
Himalayan blackberry is the only known noxious or invasive species found onsite. A comprehensive list of plants found throughout Grays Harbor County can be found on the County's website.

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: **Douglas squirrel, mountain beaver**
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).*
None found in corporate database

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:*
Explain:
All of Washington State is considered part of the Pacific Flyway. There are wetlands in the vicinity that are used by migrating waterfowl. No impacts are anticipated as a result of this proposal.

d. Proposed measures to preserve or enhance wildlife, if any:
This sale has been designed to comply with the Department's HCP and provides for the protection of wildlife and their habitats. Clumped leave trees provide nesting, roosting and foraging areas for avian species. Well engineered and constructed roads reduce potential water quality impacts for downstream fish populations. Grass seeding exposed soil aids water quality and provides forage for ungulates. Large diameter leave trees, and leave trees with unique structure, will remain post-harvest to enhance the wildlife habitat value of the future stand. The regenerated stand will be composed of conifer species.

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

Species /Habitat: **Aquatic Habitat**
Protection Measures: **No-harvest RMZs on Type 3 and 4 streams. 100 foot no-harvest buffers on WMZs for forested wetlands great than ¼ acre in size but less than 1 acre. 195 foot no-harvest buffer on WMZ for a fen wetland greater than 1 acre in size.**

Specific habitat protection measures for road construction of the B-0050 Ext. through the WMZ of a fen wetland and across a Type 4 stream include:

- **A Type 5 stream adjacent to the Type 4 stream feeding into the fen was selected as a permanent harvest deferral site. This in-kind acreage set aside is 0.66 acres, 0.11 larger than the WMZ removal.**
- **A total of four conifer trees were cut and left within the WMZ as down woody debris.**
- **Six logs (3 conifer minimum, 3 may be hardwoods), 20 inches in diameter by 20 feet long must be placed by the Purchaser in the WMZ/RMZ as part of road abandonment.**
- **Abandonment of the road and associated stream crossing following harvest.**

- **Road construction and abandonment activities within the WMZ/RMZ are restricted between October 1 – June 30 any given year.**
- **Creation of six snags within the WMZ.**

Species /Habitat: **Upland Habitat**
Protection Measures: **A minimum of 8 leave trees per acre were left clumped and scattered. Snags will be left where operationally feasible. Older large down woody debris will be left onsite.**

e. List any invasive animal species known to be on or near the site.
Invasive animal species known to be in the geographic area include:

- **Starlings**
- **House sparrows**
- **Eurasian collared-dove**
- **Bullfrogs are found throughout the lowlands of Washington.**
- **Nutria are found in lakes, wetlands, sloughs, drainage ditches, and irrigation canals along the Columbia River and north to Skagit County.**
- **There are several exotic leaf rollers of concern that are present in Washington.**

None of these species were 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.

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-based fuel and lubricants may be used and stored on site during the operating life of this project.

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.
There will be short term, low level and high level noise created by the use of harvesting equipment and hauling operations within the proposal area. This type of noise has been historically present in this geographical area.

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.)
Current use of site and adjacent land types: The state land surrounding the units is managed for timber production and recreation by the DNR. Adjacent land use includes private residences and BPA transmission lines.

This proposal will not change the use of or affect the current/long term land use of areas associated with this proposal.

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:
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?
County G5 General Development Five in Grays Harbor County

f. What is the current comprehensive plan designation of the site?
Rural Development in Grays Harbor 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 project is consistent with current comprehensive plans and zoning classifications.

m. Proposed measures to ensure the proposal is compatible with nearby 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:*
Parts of this proposal may be visible from nearby recreation sites (Porter Falls Trail) and nearby residences. Unit 2 may be visible from a private residence approximately 1,800 feet to the west of the western boundary of the unit.

2) *How will this proposal affect any views described above?*
This proposal will resemble previous timber harvests in the area and background views will change from a stand of mature timber to a view of a recent harvest with mature trees remaining around Type 3, Type 4, WMZs, and some Type 5 streams. There will also be leave tree clumps scattered throughout each harvest unit. 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:

Leave tree clumps will be scattered throughout each harvest unit, in conjunction with the RMZs and WMZs, to reduce aesthetic impacts.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
None.

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?
None.

d. Proposed measures to reduce or control light and glare impacts, if any:
None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?
Porter Falls Trail is a non-motorized hiking trail near the proposed area. Porter Creek Campground is within a mile of the proposed site. Informal recreational activities include hunting, berry picking, sightseeing, 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.
The Porter Falls trail may be temporarily closed 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:
The Porter Falls Trail affected by the harvest units will be posted with signs to inform trail users of the activity. The trail will be closed while cable yarding activities take place in Unit 3. The District Recreation Manager was notified of the future activity and will be kept informed on start dates for this proposal when activities enter the proximity of the trail. Additionally, logging activities are restricted to weekdays to reduce noise for recreationists at the nearby campground.

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.
Documented sites (GH00189 and GH00210) are in and adjacent to the proposal.

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 other than those associated with the sites listed in B-13-a above.

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.
A desk review was completed by a DNR Cultural Resources technician. The technician reviewed DNR land management records, a historic map of the Mason County Logging Company system, Government Land Office plat maps and historical United States Geological Survey topographic quadrangles. The Department of Archaeology and Historic Preservation's WISAARD database was also reviewed. Potential cultural resources were identified in these materials, and field reviewed by DNR cultural resource technicians on 7/21/22. A field review by a State Lands Archaeologist occurred on 10/18/2022. A DNR cultural resources technician was present in the field on this project during layout.

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 PR14-004-010, Discovery of Skeletal Remains or Cultural Resources.

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.
Highway 8, Mox Chehalis Road, Ray Road, and Cooper Road NW provide access to the A-line and other forest roads.

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. Nearest transit spot is approximately 10 miles away in McCleary, 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.

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 project will have minimal to no additional impacts on the overall transportation system 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 available at this site. BPA transmission lines are adjacent to Units 1 and 2 of this proposal.**

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: Brandon Mohler

Name of signee **Brandon Mohler**

Position and Agency/Organization **State Lands Assistant Region Manager/DNR**

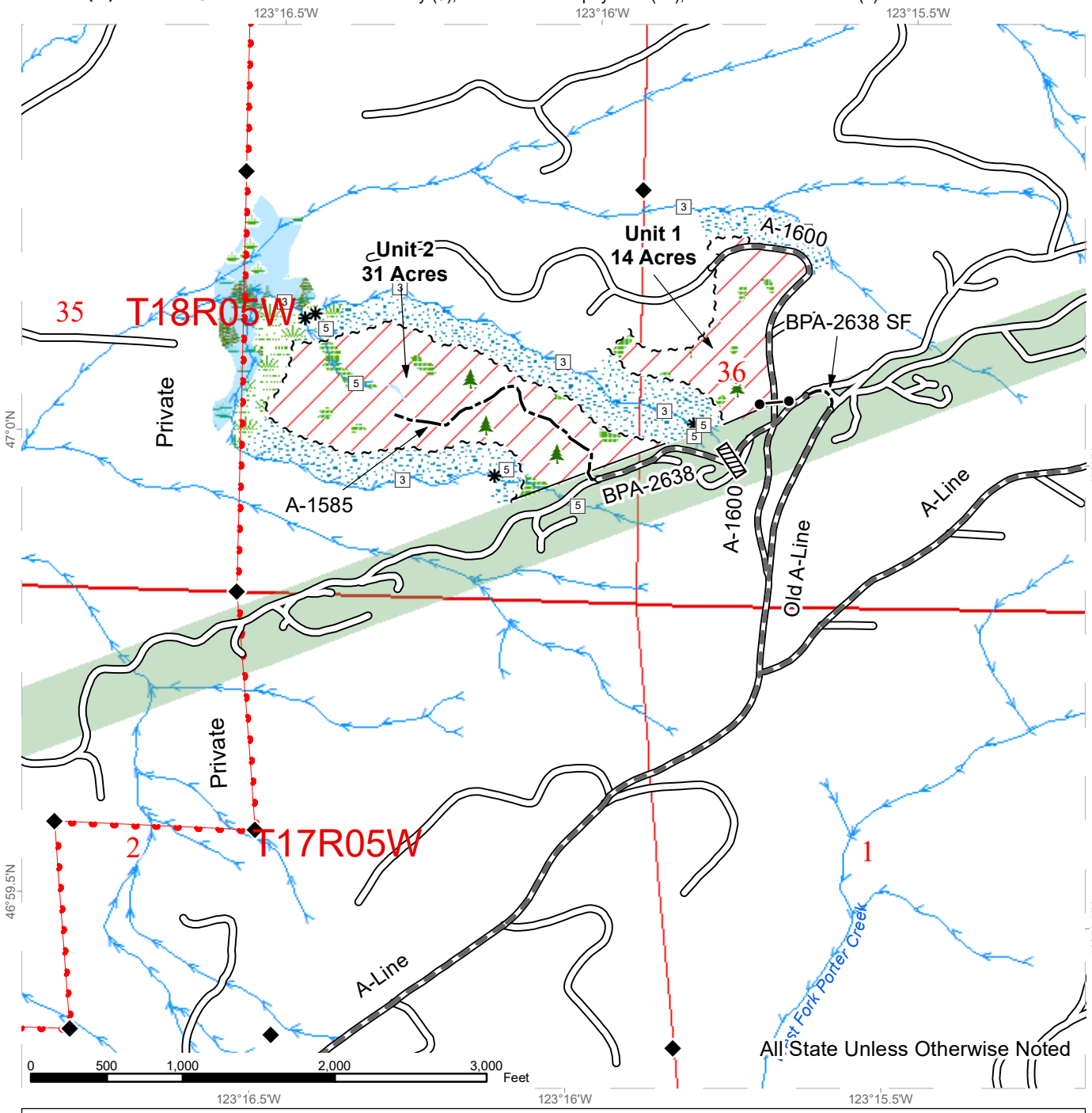
Date Submitted: June 1, 2023

AEM 5-9-23

TIMBER SALE MAP

SALE NAME: GREMLIN
AGREEMENT #: 30-103594
TOWNSHIP(S): T17R5W, T18R5W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2)

REGION: South Puget Sound Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 200-920



Variable Retention Harvest	Streams	BPA Corridors
Sale Boundary Tags	Stream Type	Wetlands - Non-forested
Property Line	Stream Type Break	Leave Tree Area
Timber Type Change	Survey Monument	Riparian Mgt Zone
Existing Roads	Culvert	Forested Wetland
Required Pre-Haul Maintenance	Gate (Master H-957)	Wetland Mgt Zone
Optional Construction	Leave Tree Area <1/4-acre	

N

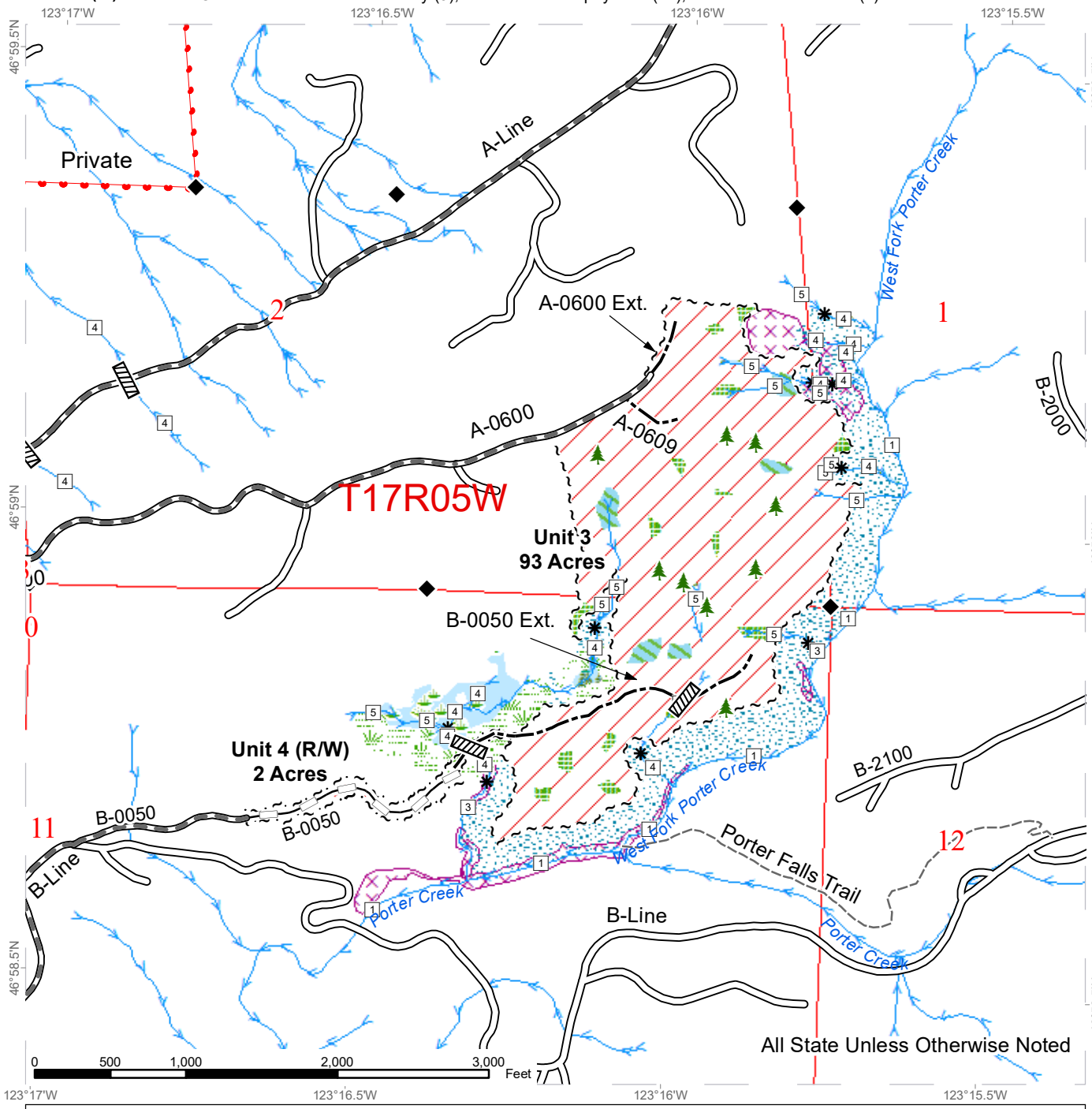
Prepared By: bcov490

Modification Date: astu490 5/8/2023

TIMBER SALE MAP

SALE NAME: GREMLIN
AGREEMENT #: 30-103594
TOWNSHIP(S): T17R5W, T18R5W
TRUST(S): Common School and Indemnity (3), Forest Board Repayment (42), State Forest Purchase (2)

REGION: South Puget Sound Region
COUNTY(S): Grays Harbor
ELEVATION RGE: 200-920



- Variable Retention Harvest
- Sale Boundary Tags
- Right of Way Tags
- Property Line
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Optional Reconstruction
- Streams
- Stream Type
- Stream Type Break
- Survey Monument
- Culvert
- Leave Tree Area <1/4-acre
- Wetlands - Non-forested
- Non-Tradeable Leave Clump
- Leave Tree Area
- Riparian Mgt Zone
- Forested Wetland
- Wetland Mgt Zone
- Tailhold Restriction Area
- Recreation Trails

N

Prepared By: bcov490

Modification Date: astu490 5/8/2023