

## *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:* **BROKE**  
*Agreement #* **30-105211**

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: **03/20/2024**

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

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

a. *Auction Date:*

**10/29/2024**

b. *Planned contract end date (but may be extended):*

**10/31/2026**

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 Practices standards following harvest. Slash piles on landings may be burned during the fall before planting.**

b. *Regeneration Method:*

**Unit 1-5 will be hand planted with native conifer seedlings.**

c. *Vegetation Management:*

**Possible treatments including an herbicide application to treat noxious weeds, may 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 4/15/2024.**

*Wildlife report:*

*Geotechnical report:*

**Other specialist report(s): Geologic Field Summary- Sentinel Unit 4 (applies to Unit 5 of the Broke Timber Sale) by Susie Wisheart Lands Licensed Engineering Geologist and Qualified Expert, dated 11/20/2020**

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

**Rock pit plan: Included in Road Plan by Jacob Gross, dated 4/15/2024**

*Other:*

**Additionally, 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)**
  - **Identifying Stands to Meet Older Forest Targets in Western Washington (Estep and Buffo 2021)**
  - **Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington (May 2024)**
  - **Identifying Mature and Old Forests in western Washington by Robert Van Pelt (Van Pelt, R. 2007)**
  - **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)**

- USFWS letter to DNR, signed 10/27/2021 clarifying projections of forest types and stand structural conditions on Washington DNR State Trust Lands
- 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
  - Land Deed
  - 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
  - Stand origin and development stage assessments for Broke Timber Sale
- **Reviews and communications with licensed State Lands geologist, State Lands archaeologist, and Region biologist**

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 # 2423996*     
  *FPH*     
  *Board of Natural Resources Approval*  
 *Burning permit*     
  *Shoreline permit*   
  *Existing HPA*  
 *Other: Road Use Permit with Weyerhaeuser*

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:*

**This proposal is located on forested state trust lands identified in DNR's sustainable harvest calculation as lands available for revenue generation for trust beneficiaries and contributes to sustainable harvest levels for Western Washington approved and adopted by the Board of Natural Resources (DNR resolution 1560).**

**This proposed project is on forested trust land. The purpose of this project is to generate revenue for the beneficiaries associated with the underlying trusts through the sale and removal of timber. In addition to producing revenue for trust beneficiaries, this proposal meets conservation and long-term site productivity objectives by protecting soil health and potentially unstable slopes, and protecting and restoring riparian and wetland habitat, as well as supplying sustainably grown timber to local mills.**

**The Broke Timber Sale proposal consists of a timber sale area and associated areas contributing to long-term forest cover. Areas where timber harvest is inconsistent with one or more of the agency's objectives have been excluded from planned harvest and contribute to conservation areas through long-term forest cover (e.g. potentially unstable slopes, riparian and wetland buffers, old growth stands, or habitat for state or federally listed species needed to meet DNR's Habitat Conservation Plan objectives and other conservation commitments, etc.).**

**The original proposal area of Broke Timber Sale considered for harvest was approximately 281 acres. Final proposal design includes 190 net acres of timber sale and, not including 5 acres of existing road, 86 acres contributed to long-term forest cover through the protection of streams, riparian management zones, and potentially unstable slopes.**

**The Broke timber sale consists of five variable retention harvest (VRH) units harvesting approximately 7,020 MBF of merchantable timber.**

**Each unit net acreage is as follows:**

**Unit 1- 73 acres**

**Unit 2- 55 acres**

**Unit 3- 9 acres**

**Unit 4- 37 acres**

**Unit 5- 16 acres**

**Roadwork associated with this timber sale consists of forest road construction, abandonment of temporary forest road construction, and maintenance. Maintenance will consist of replacing stream culverts to improve natural flow capacity, cleaning culverts and**

catch basins, reconstructing ditches, application of rock, installing drain structures, grading, and other tasks outlined in the road plan.

This proposal is located within the South Coast HCP Planning Unit in the Porter Creek Watershed Administrative Unit (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:***

The stands within the harvest units are comprised of one naturally regenerated unit and four planted stands of naturally regenerated Douglas-fir and western hemlock with a lesser component of noble fir, western red cedar, and red alder in the main canopy. The understory vegetation is sparse, consisting primarily of sword fern and salal. There is little to no presence of shade tolerant species within the lower or mid-canopy due to lack of light penetrating the main canopy. There is also minimal structure within stands with what is present consisting of large old-growth stumps and smaller second-growth diameter competitive mortality trees. The stage of stand development for the harvest areas within this proposal on the stand level scoring using the Van Pelt guide (2007) includes Biomass Accumulation/Stem Exclusion. The adjacent areas conserved in RMZs and WMZs associated with this proposal are similar stand types as the adjacent harvest areas.

| Unit | Origin Date | Major Timber Species  | Type of Harvest |
|------|-------------|---|-----------------|
| 1    | Post-1940s  | Douglas-fir, Western Hemlock, Noble fir, Western Red Cedar, Red Alder | VRH             |
| 2    | Post-1960s  | Douglas-fir, Western Hemlock, Noble fir, Western Red Cedar, Red Alder | VRH             |
| 3    | Post-1960s  | Douglas-fir, Western Hemlock, Noble fir, Western Red Cedar, Red Alder | VRH             |
| 4    | Post-1960s  | Douglas-fir, Western Hemlock, Noble fir, Western Red Cedar, Red Alder | VRH             |
| 5    | Post-1960s  | Douglas-fir, Western Hemlock, Noble fir, Western Red Cedar, Red Alder | VRH             |

- Methods used to determine origin date include GIS Combined Origin Year RS-FRIS 3.0, LiDAR Vegetation Height, 1958 orthophoto and field sampling.

***Overall Unit Objectives:***

**Short Term Objectives**

1) Create revenue based on fair market timber value for the State Forest Purchase (2), Common School and Indemnity (3), Charitable/Educational/Penal & Reformatory Institution (6) and Scientific School (10) Trusts through the harvest of the existing stand.

- 2) Retain legacy trees for the future stand and to maintain biological diversity, productivity of the site, and protect water quality, fish, and wildlife habitat.
- 3) Maintain existing recreational trails and continue to provide recreational opportunities.

**Long Term Objectives**

- 1) Actively manage for long-term site productiveness for intergenerational benefit to the trusts, primarily through revenue generation for trust beneficiaries through timber stand management: a series of silviculture activities will be scheduled as needed in the sale area as the new stands develops. The primary objective of each treatment is to ensure growth of a healthy, resilient stand of native species to create revenue for the trusts.
- 2) Resource Protection: The protection of soil productivity and water quality. The harvest prescription has been crafted to prevent soil erosion and limit soil compaction. Large coarse woody debris will be left to contribute to site productivity.

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                             |          | 0                         | 0                 | 0                         |
| Reconstruction                           |          | 3,051                     |                   | 0                         |
| Maintenance                              |          | 107,479                   |                   | 0                         |
| Abandonment                              |          | 520                       | 0.36              | 0                         |
| Bridge Install/Replace                   | 0        |                           |                   | 0                         |
| Stream Culvert Install/Replace (fish)    | 0        |                           |                   | 0                         |
| Stream Culvert Install/Replace (no fish) | 2        |                           |                   |                           |
| Cross Drain Install/Replace              | *15      |                           |                   |                           |

- \*15 cross drain culverts includes 3 contingency culverts depending on need.
- Routine maintenance will occur on roads used throughout the life 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:

- T17-0N R4-0W S02 – Harvest, rock pit; Larch Pillar Quarry, waste area
- T17-0N R4-0W S09 - Harvest
- T17-0N R4-0W S01 – Harvest, culvert replacement
- T17-0N R4-0W S03 - Harvest
- T17-0N R4-0W S10 - Harvest

**T17-0N R4-0W S04 - Harvest**  
**T17-0N R4-0W S11 – Harvest, culvert replacement**

*b. Distance and direction from nearest town:*

**From Highway 12 in Malone:**

**Turn east onto Mox Chehalis Road, and continue for 1.3 miles.**

**Turn right (east) onto Ray Road and continue for 0.1 miles to the A-Line.**

**Continue on the A-Line for 1.4 miles, then turn right (east) onto the B-Line and travel 1.0 mile.**

**Continue straight onto B-Line and travel 1.0 mile.**

**Turn right onto the B-1000 Road and continue for 4.0 miles to reach Unit 1.**

**To reach Unit 2, continue on the B-1000 Road for 2.1 miles.**

**To reach Unit 3 and Larch Pillar Quarry, continue on the B-1000 Road for 0.3 miles.**

**To reach Unit 4, continue on the B-1000 Road for 0.2 miles.**

**To reach Unit 5, continue on the B-1000 Road for 0.4 miles.**

*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 Watershed Administrative Unit (WAU), 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 WAU appear to be primarily second and third growth stands. The WAU is actively 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 CO<sub>2</sub>; 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.
- 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.
- The Porter Creek Sub-basin #6 will be managed on basin specific prescriptions. A

**total of 120.6 acres is proposed to be harvested in the significant ROS zone. According to the Porter Creek WAU Sub-Basin Hydrologic Maturity Report there will be a surplus of 211.4 hydrologically mature acres within Porter Creek Sub-basin #6 after proposed harvest. Standard forest practice regulations apply.**

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

- **Assessing for and protecting significant historic, archaeological, and cultural areas.**
- **Generally limiting even-aged harvests to less than 100 acres per unit.**

**The General Silviculture Strategy (policy) in the Policy for Sustainable Forests emphasized that older forest targets will be accomplished over time and that DNR intends to actively manage structurally complex forests to achieve older-forest structures (i.e. stands with older forests identified by structural characteristics) across 10 to 15 percent of each western Washington HCP planning unit in 70 to 100 years.**

**In May 2024, the DNR produced a document titled ‘*Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington*’, which is incorporated by reference in this Addendum. This document describes the background, historical analyses regarding attainment of older forest conditions in western Washington, and updated data and modeling analyses showing when the various HCP planning units across western Washington are expected to attain a level of older forest conditions through implementation of the HCP and other conservation objectives, and outlined as targets within the PSF.**

**This landscape assessment identifies the existing structurally complex forests of existing structurally complex stands, and additional stands suitable to be managed for older forest targets over time. The identified stands are located in conservation areas and deferred stands unavailable for regeneration harvest. These stands include areas identified as 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, old growth, Natural Areas and Natural Resource Conservation Areas, and other conservation areas deferred from regeneration harvest.**

**The results from the May 2024 landscape assessment, and included in the above-referenced memorandum, show that while the South Coast HCP Planning Unit does not currently contain 10 to 15 percent older forest conditions, it demonstrates that through implementation of the HCP and other Policies and laws, stands containing structurally complex forests or managed for older forest targets in conservation areas is projected to exceed 10 percent in the South Coast HCP Planning Unit by 2100 (Table 1). Stands currently identified to meet older forest targets are represented in the attached map titled, “2021 Older Forest Within Conservation S. Coast” (2024). Additionally, those stands projected to meet older-forest targets are depicted in the attached map titled, “Projected 2100 Older Forest Within Conservation S. Coast” (2024).**

**Table 1. Percent area western Washington HCP planning units with older-forest stands in conservation areas by decade through 2120. With plot discounts and disturbance factor.**

| <b>ADJUSTED QUERY OUTPUT (WITH PLOT DISCOUNT &amp; DISTURBANCE FACTOR)</b> |             |             |             |             |             |             |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>HCP Planning Unit</b>   | <b>Year</b> |             |             |             |             |             |             |             |             |             |             |
|  | <b>2021</b> | <b>2030</b> | <b>2040</b> | <b>2050</b> | <b>2060</b> | <b>2070</b> | <b>2080</b> | <b>2090</b> | <b>2100</b> | <b>2110</b> | <b>2120</b> |
| COLUMBIA   | 1.1%        | 1.2%        | 1.4%        | 1.8%        | 2.6%        | 4.3%        | 6.8%        | 10.1%       | 14.0%       | 17.3%       | 18.9%       |
| N. PUGET   | 3.2%        | 3.9%        | 4.9%        | 6.2%        | 7.9%        | 10.2%       | 13.2%       | 16.7%       | 20.6%       | 23.9%       | 25.0%       |
| OESF   | 10.2%       | 10.7%       | 11.0%       | 11.7%       | 12.6%       | 13.9%       | 16.0%       | 20.1%       | 25.0%       | 28.4%       | 29.6%       |
| S. COAST   | 0.2%        | 0.3%        | 0.6%        | 1.2%        | 2.2%        | 3.6%        | 6.0%        | 8.8%        | 12.3%       | 16.0%       | 18.7%       |
| S. PUGET   | 1.7%        | 2.1%        | 2.7%        | 3.6%        | 4.6%        | 6.1%        | 8.4%        | 11.3%       | 14.4%       | 17.2%       | 18.7%       |
| STRAITS  | 1.8%        | 2.5%        | 3.2%        | 4.3%        | 5.6%        | 7.4%        | 9.9%        | 12.6%       | 15.0%       | 17.9%       | 19.3%       |

Additionally, DNR has designated forest stand acreage in each HCP planning unit to meet or exceed the policy's 10% older forest target.

The Broke Timber Sale is not identified as one of those stands designated to meet older-forest targets over time. In the Broke Timber Sale 190 net acres are being harvested, while 86 acres are being conserved from the overall area considered for harvest (31% of the proposal area) for potential unstable slopes, streams, and riparian management zones that will contribute to older forests over time. Following the timber sale, the variable retention harvest units will be replanted with native, conifer tree species that will be supplemented by natural regeneration expected to occur as a result of the conservation areas in and around the harvested units.

Current Forest Practice Rules also require that:

- Potentially unstable slopes and landforms are evaluated and rule-identified landforms with the potential of 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 are 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. A fill slope failure on the B-1000 Road within Unit 5 has been reconstructed and keyed into stable subsurface to improve slope stability.

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?

No.

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 |
|--------------|-----------------|-----------------------|---|---|--|
| PORTER CREEK | 25452           | 23943                 | 2942  | 0   | 55   |

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: **Flat, steep slopes**

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

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

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 WAU at the same elevation and aspect.**

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

**92%**

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       |
|---------------------|--------------------|
| 3851                | V.COBBLY LOAM      |
| 7503                | GRAVELLY SILT LOAM |
| 4241                | SILT LOAM          |
| 0663                | 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 and Qualified Expert (LEG & QE) 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 on 11/20/2020, 1/31/2024, 2/14/2024, 2/15/2024 and 3/8/2024 to further evaluate the presence of potentially unstable slopes. Based on the State Lands LEG & QE and foresters' field reviews, there are potentially unstable landforms as defined by Forest Practices rule-identified landforms (RILs). A Category E recent shallow landslide, two shallow landslides, 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.

- **Inner gorges identified around Units 2, 3, 4, and 5 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. A Category E recent, shallow landslide within Unit 5 is protected with non-tradeable leave trees using a buffer of 1.5-2 crown widths. One shallow landslide identified around Unit 5 occurred outside the sale boundary within an RMZ. One alluvial fan identified around Unit 2 occurs outside the sale boundary within an RMZ.**
- **Remote and field reviews were conducted to ensure that potentially unstable slopes were excluded from the harvest area.**

- No tailholds will be allowed within and no timber will be yarded across Forest Practices Rule-Identified Landforms.
  - Cross drains and ditchouts 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-harvest activities, if necessary to avoid concentrating surface water runoff.
  - Road work will be restricted to the typical dry season, unless approved otherwise, to reduce soil and stability impacts.
  - Harvest activities in Unit 5 are restricted to the typical dry season for additional slope stability protection.
  - Road maintenance to improve drainage on the B-1000 Road in Unit 5 was performed by DNR to direct ditch flow away from potentially unstable landforms.
  - Harvest methods were designed to prevent the need for construction of new roads.
  - 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:* **0**

*Approx. acreage new landings:* **0.3**

*Fill Source:* **Larch Pillar 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 road work on existing forest 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):*  
**Approximately 1% of the site will remain as gravel roads. No additional roads will be constructed as part of this proposal.**
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:  
*(Include protection measures for minimizing compaction or rutting.)*
- **No additional roads will be constructed as part of this proposal.**
  - **Erosion control and reduction measures are addressed in the sale layout and harvest system design.**
  - **The no harvest RMZs will function to protect streams and wetlands from sediment delivery.**
  - **Ditches and culverts will be improved 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 suspended when potential for excessive soil disturbance exists.**
  - **The proposal will be harvested utilizing lead-end suspension to minimize soil**

disturbance.

- Roads will be crowned, ditched and cross drained. Cross drains may be installed and maintained.
- Seasonal timing restrictions will limit 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.
- Skid trail closure and landing drainage requirements are to reduce impacts to water quality.
- 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.

**Minor amounts of engine exhaust from logging and road construction equipment and dust from vehicle traffic on roads will be emitted during proposed activities. If landing debris is burned after harvest is completed, smoke will be generated. There will be no emissions once the proposal is complete.**

**Harvest operations and the removal of timber will result in minor amounts of CO<sub>2</sub> emissions from the direct proposal site. See A.13.a. for details regarding completed analyses of carbon emissions and sequestration on DNR-managed lands in western Washington.**

- 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. Trees will be planted within the footprint of the burned piles to facilitate the sequestration of carbon.**

**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, South Fork Porter Creek, Black River Chehalis River.**

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) |
|---|------------|--------------------|--|
| South Fork Porter Creek                                 | 3          | 1                  | Average 150                                      |
| Unnamed Stream  | 3          | 1                  | Average 150                                      |
| Unnamed Stream  | 4          | 13                 | Minimum 100                                      |

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

**RMZs 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.**

**Disposal areas for organic debris during road re-construction will not occur within 100 feet of streams.**

**Local knowledge of prevailing wind direction 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, but beyond the buffer distances listed above. Trees may be cut in RMZs 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 0.25 acres may have tailhold 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 0.25 acres. Type 5 streams also receive a 30-foot equipment limitation zone, except at crossing locations approved by the Contract Administrator, to maintain stream function, stream bank integrity, and minimize possible sediment delivery.**

- 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.

**Two culverts on existing roads crossing Type 4 streams will be replaced. Onsite fill will be removed and replaced during this activity.**

- 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 culvert replacements associated with streams if water is present at time of work.**

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

No       Yes, describe activity and location:

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

**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)?*  
**PORTER CREEK = 5.5 (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 work 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 downstream or downslope of the proposal area.*  
**It is not likely the proposed activity will change the timing, duration, or volume of water during a peak flow event. 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):

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

No             Yes, describe possible impacts:

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

- **Type 3, and Type 4 no-harvest RMZs will maintain forest cover.**
- **Type 4 stream culvert replacements are an upgrade in size from original culverts to allow improvement of stream flow considering peak flow impacts.**
- **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 100 acres or less 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.**
- **Skid trail closure and landing drainage requirements are to reduce impacts to water quality.**
- **Contract requires Purchaser and all contractors operating on this project to prevent delivery of sediment to streams during any operations.**
- **See B.1.d.5 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:

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

No             Yes, describe possible impacts:

*Note protection measures, if any:*

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 ditchouts 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:

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:

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: A 6-year-old conifer plantation is immediately adjacent to the north and west. To the east is 60-year-old conifer, to the south is 70-year-old conifer in the Riparian Management zone.**

**Unit 2: 40-year-old conifer is immediately adjacent to the north, to the west is 50-year-old conifer. To the east is 55-year-old conifer in the Riparian Management zone, to the south is 60-year-old conifer in the Riparian Management zone.**

**Unit 3: Larch Pillar quarry is immediately adjacent to the north and just beyond that is 50-year-old conifer. To the west is a 60-year-old conifer in the Riparian Management zone. To the east and south is a 60-year-old conifer in the Riparian Management zone.**

**Unit 4: 50-year-old-conifer is immediately adjacent to the north. To the west, east and south is 60-year-old conifer in the Riparian Management zone.**

**Unit 5: A parcel owned by Weyerhaeuser Company is immediately adjacent to the north. To the west, east and south is 55-year-old conifer in the Riparian Management zone.**

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, noble fir, 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. Many retention tree clumps protect potentially unstable slopes, to provide additional protection for streams, wetlands smaller than 0.25 acres, and cultural resources, as well as lessen visual impacts from recreation trails. This clumped 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 conifer seedlings following harvest. Planted seedlings will come from a native seed source that has been selected to better withstand the future effects of climate change. In addition to planted seedlings, the next stand will contain naturally regenerated seedlings from seed sources of the leave trees and adjacent RMZ stands. After planting, the need for noxious weed treatments will be assessed and occur if necessary. Noxious weed treatments will reduce competition from non-native species and promote continued growth of native species.

The stands and the mature RMZ 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.  
**Scotch broom, woodland groundsel, oxeye daisy, false dandelion, tansy ragwort, Himalayan blackberry, evergreen blackberry.**

## 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: crows, woodpecker, blue jays

mammals:

bear  beaver  coyote  cougar  deer  elk

other: squirrels, mice, voles, bats

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. 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. 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: **Site height index no-harvest RMZs on Type 3 streams and 100 foot no-harvest RMZs on type 4 streams.**

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 forest road work activities, timber harvest operations, rock pit expansion, if occurs, 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:  
**Some road work is optional, allowed to not occur unless necessary as determined by the harvest needs of the Purchaser of the project contract.**

## 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.  
**Only those petroleum-based fuel and lubricants necessary for operation and maintenance of equipment during active operations 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 includes private commercial forestland owned by Weyerhaeuser Company.**

**This proposal will not change the use of or affect the current/long term land use of this area nor nearby or adjacent properties.**

- 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?

**Long Term Forestry in Thurston County, County G5 General Development Five in Grays Harbor County.**

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

**Designated Long-Term Forest Lands in Thurston County, 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:  
**This Proposal will be visible from the Larch Trail West, Larch Trail East, and Twin peaks recreation trails.**

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 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?  
**Larch Trail West, Larch Trail East, and Twin Peaks are motorized recreation trails in and around the proposed area. Informal recreational activities including hunting, berry picking, sightseeing, and other informal outdoor recreation activities may occur within the proposed area.**
- b. Would the proposed project displace any existing recreational uses? If so, describe.  
**There may be temporary disruptions to recreational use during periods of harvesting and hauling.**
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

**Leave trees were placed in areas to provide aesthetic benefit of trail users where possible. The portions of recreation trails affected by the harvest units will be posted with signs to inform trail users of the activity. Portions of the trails within the harvest units will be closed while logging activities take place. Trail re-routes will be posted. Portions of the trails affected during this proposal will be restored to original condition following the completion of all activities. 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 trails.**

### **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.  
**TN00538 is adjacent to the proposal area but is not eligible for listing in national or state registers.**
- 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.**
- 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.  
**Proposed activity will avoid any identified cultural resources. If presently-unknown skeletal remains, cultural resources, or both become known during project operations, DNR will comply with Discovery of Skeletal Remains or Cultural Resources procedure.**

### **14. Transportation**

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 12, Mox Chehalis Road, Porter Creek Road, Noschka Road SW, and Sherman Valley Road SW provide access to the forest roads which access the harvest units.**

a. 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 15 miles away in Olympia, WA.**

b. 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.**

c. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.  
**No.**

d. 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.**

e. 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.**

f. 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:

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**

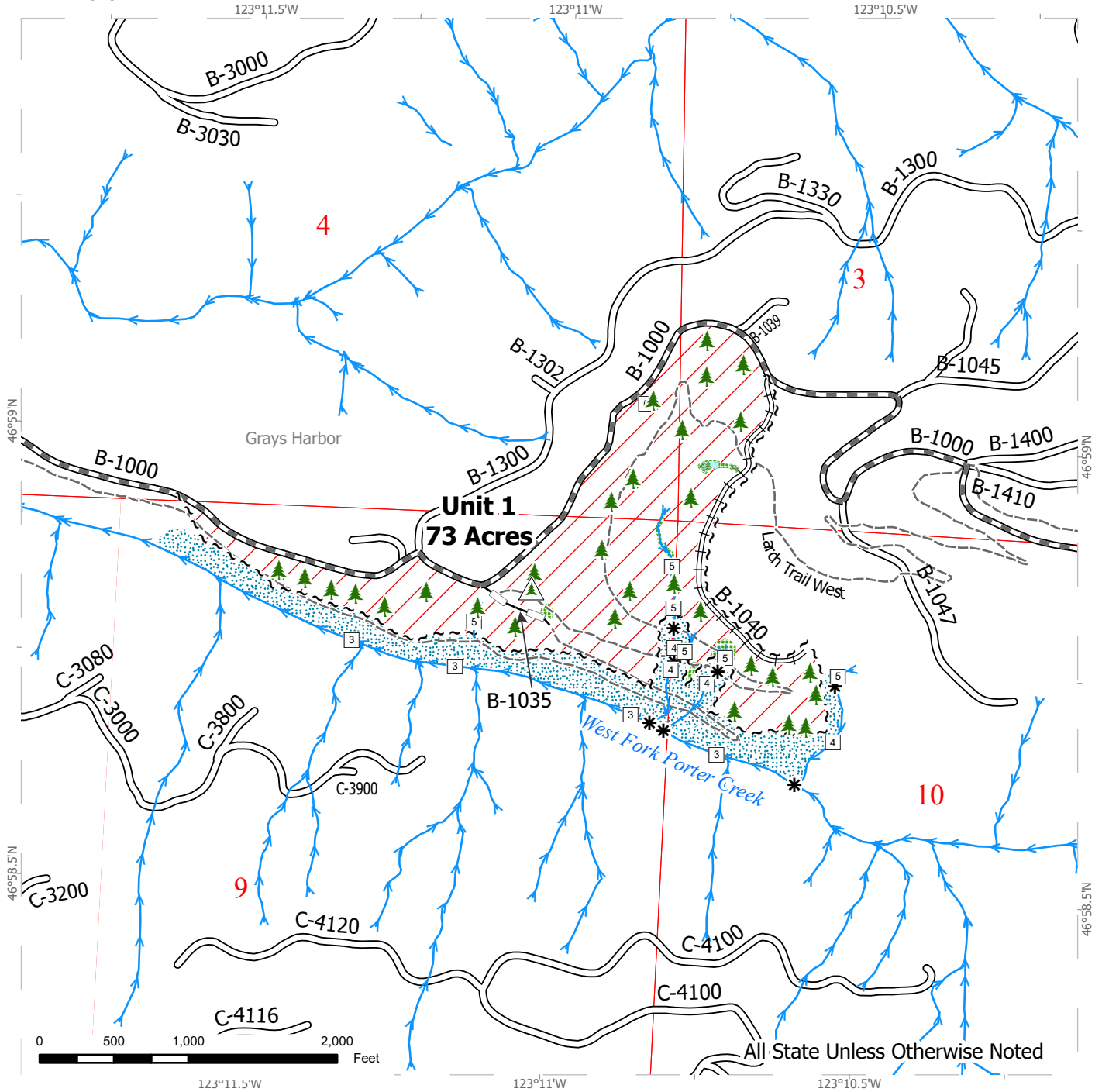
Date Submitted: 7/16/2024

AEM 7/15/24

# TIMBER SALE MAP

**SALE NAME:** BROKE  
**AGREEMENT #:** 30-105211  
**TOWNSHIP(S):** T17R4W  
**TRUST(S):** Charitable/Educational/Peal & Reformatory Instit. (6), Common School and Indemnity (3), Scientific School (10), State Forest Purchase (2)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Grays Harbor, Thurston  
**ELEVATION RGE:** 1000-2520



All State Unless Otherwise Noted

|                    |                               |                              |
|--------------------|-------------------------------|------------------------------|
| Sale Area          | Existing Roads                | Public Land Survey Townships |
| Sale Boundary Tags | Required Pre-Haul Maintenance | Public Land Survey Sections  |
| Leave Tree Area    | Required Reconstruction       | Property Line                |
| Forested Wetland   | Optional Reconstruction       | Leave Tree Area <1/4-acre    |
| Riparian Mgt Zone  | Trails                        | Non-Tradeable Leave Trees    |
|                    | Streams                       |                              |
|                    | Stream Type                   |                              |
|                    | Stream Break                  |                              |

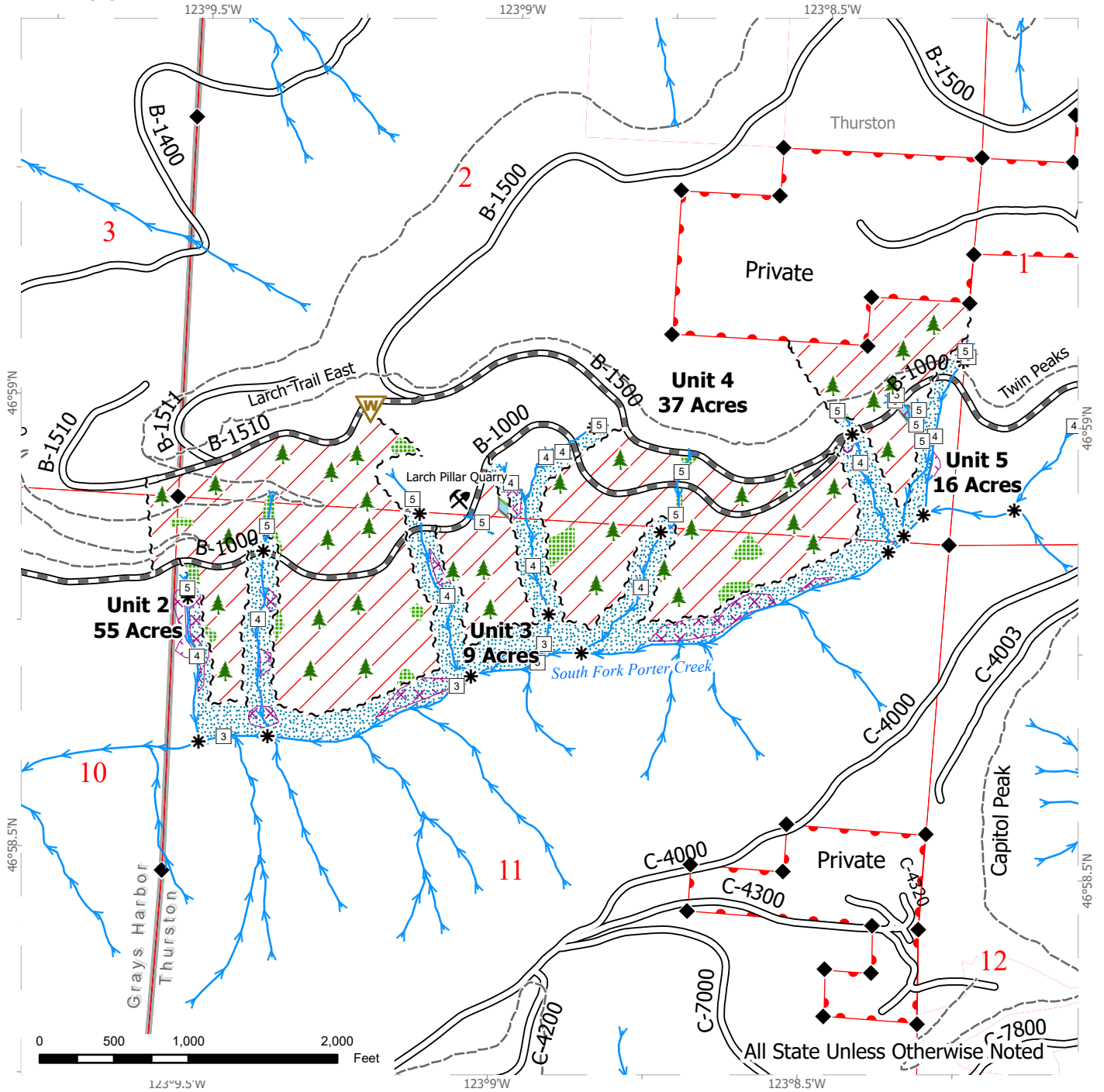




# TIMBER SALE MAP

**SALE NAME:** BROKE  
**AGREEMENT #:** 30-105211  
**TOWNSHIP(S):** T17R4W  
**TRUST(S):** Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3), Scientific School (10), State Forest Purchase (2)

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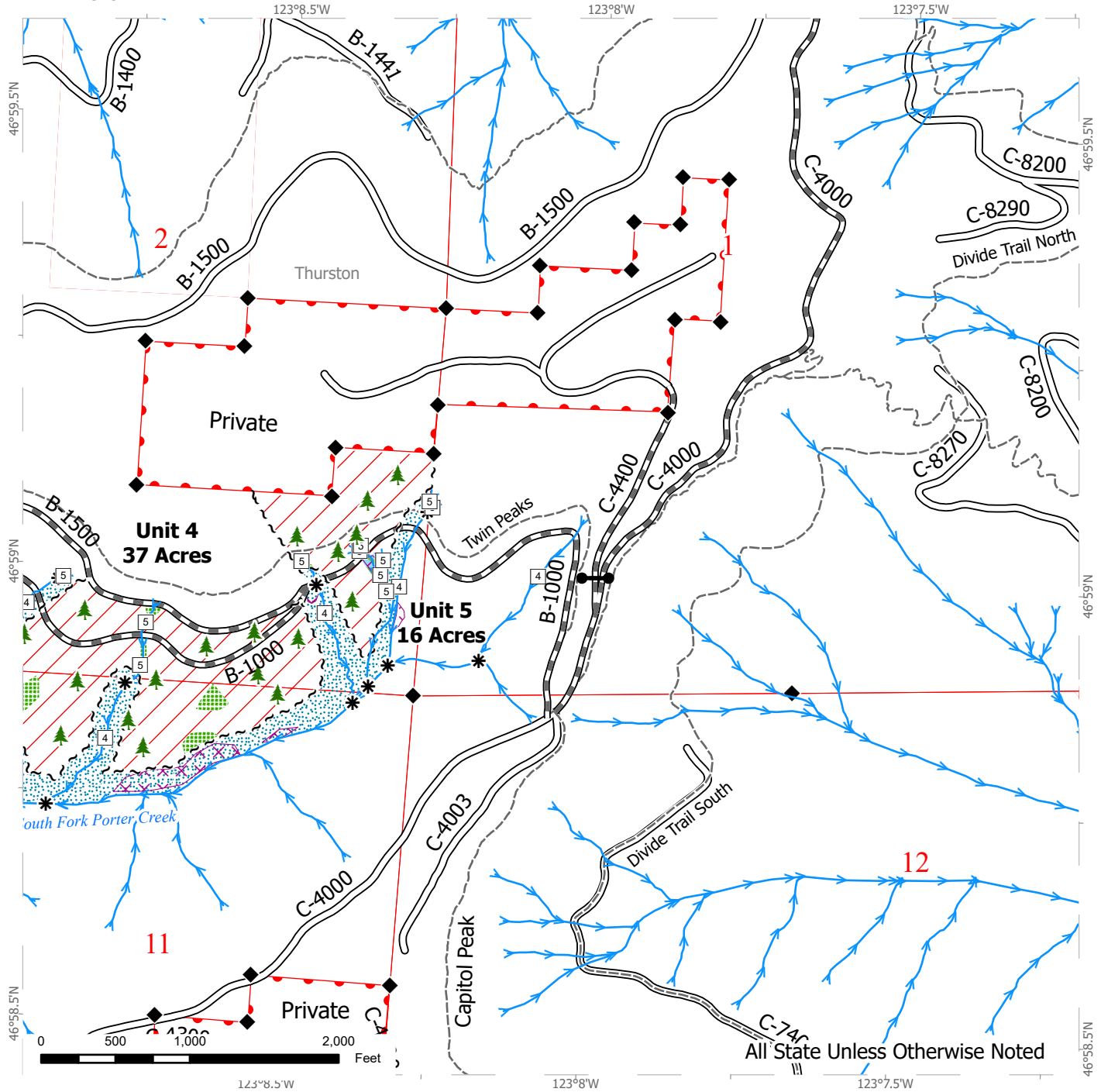
|                               |                               |                              |
|-------------------------------|-------------------------------|------------------------------|
| Sale Area                     | Existing Roads                | Survey Monument              |
| Sale Boundary Tags            | Required Pre-Haul Maintenance | Public Land Survey Townships |
| Leave Tree Area               | Trails                        | Public Land Survey Sections  |
| Non-Tradeable Leave Tree Area | Streams                       | Property Line                |
| Riparian Mgt Zone             | Stream Type                   | Leave Tree Area <1/4-acre    |
| Tailhold Restriction Area     | Stream Break                  | Larch Pillar Quarry          |
|                               |                               | Waste Area                   |



# TIMBER SALE MAP

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**TOWNSHIP(S):** T17R4W  
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**ELEVATION RGE:** 1000-2520



All State Unless Otherwise Noted

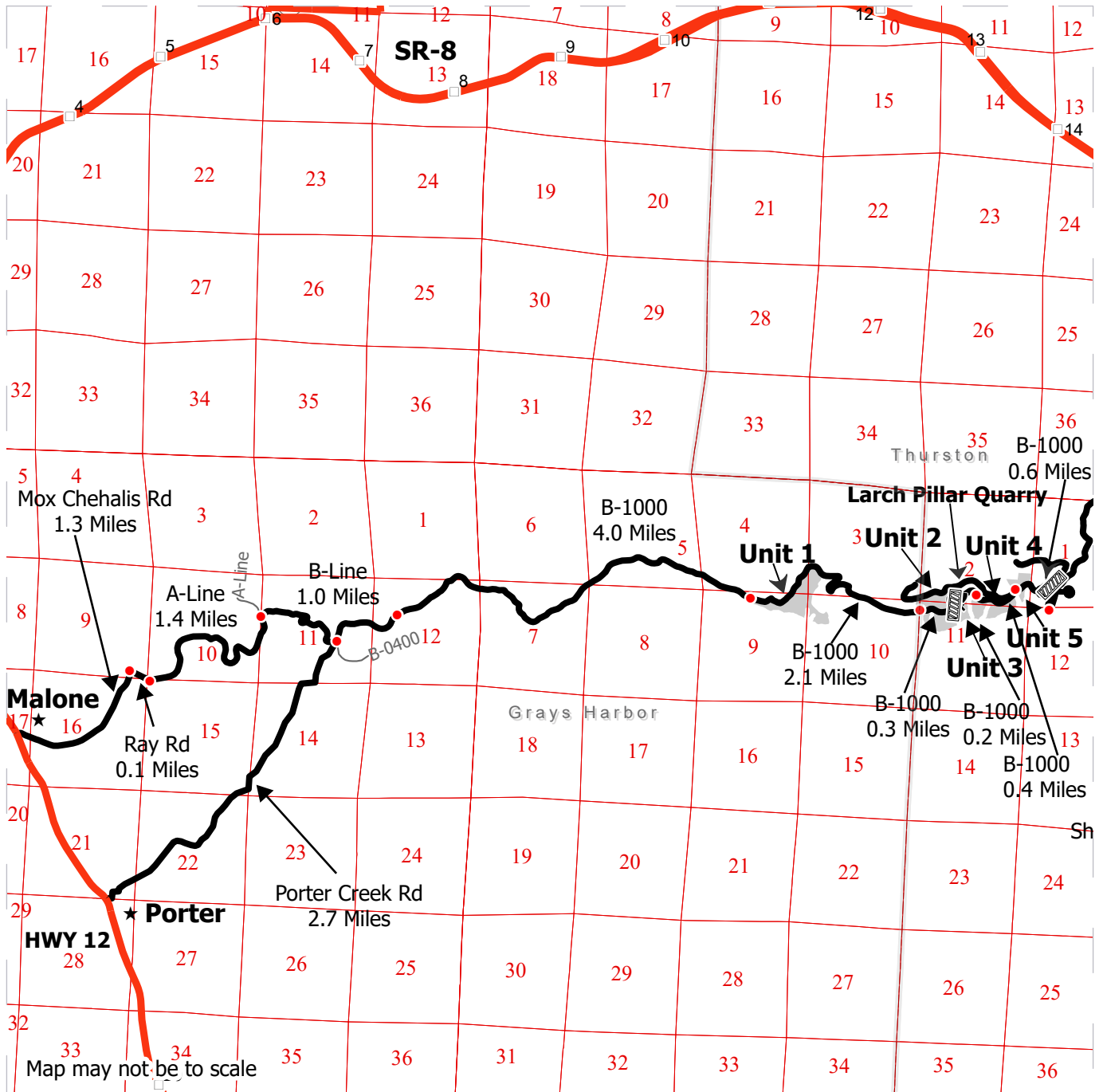
|                               |                               |                              |
|-------------------------------|-------------------------------|------------------------------|
| Sale Area                     | Existing Roads                | Survey Monument              |
| Sale Boundary Tags            | Required Pre-Haul Maintenance | Public Land Survey Townships |
| Leave Tree Area               | Trails                        | Public Land Survey Sections  |
| Non-Tradeable Leave Tree Area | Streams                       | Property Line                |
| Riparian Mgt Zone             | Stream Type                   | Leave Tree Area <1/4-acre    |
| Tailhold Restriction Area     | Stream Break                  | Gate                         |



# DRIVING MAP

**SALE NAME:** BROKE  
**AGREEMENT #:** 30-105211  
**TOWNSHIP(S):** T17R4W  
**TRUST(S):** Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3), Scientific School (10), State Forest Purchase (2)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Grays Harbor, Thurston  
**ELEVATION RGE:** 1000-2520



|                    |                   |
|--------------------|-------------------|
| Sale Area          | Town              |
| Haul Route         | County Boundaries |
| Other Road         | Highway           |
| Distance Indicator | Milepost Markers  |
| Gate (H-957)       |                   |
| Culvert            |                   |
| Rock Pit           |                   |

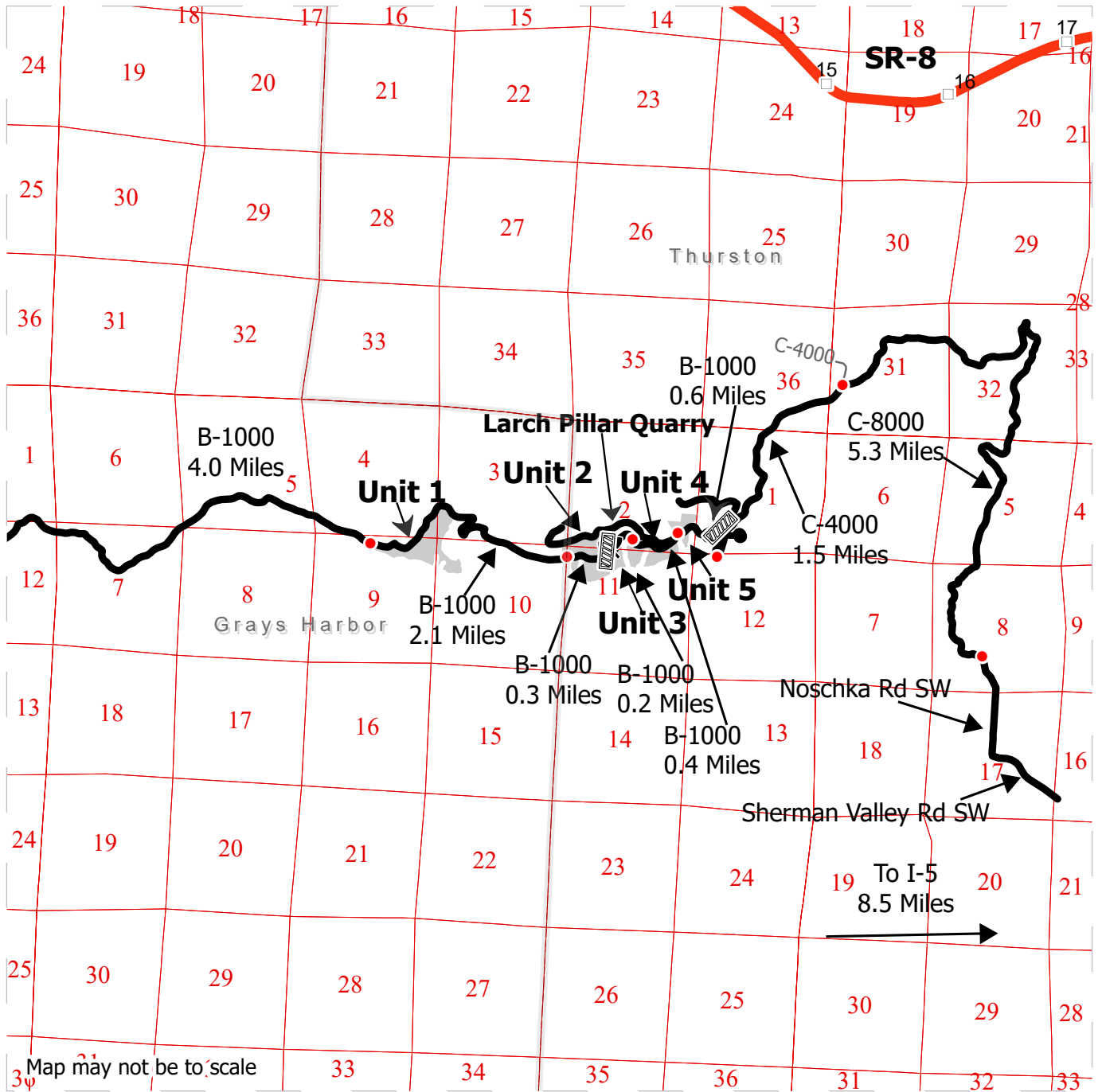
**DRIVING DIRECTIONS:**  
See Attached Driving Directions



# DRIVING MAP

**SALE NAME:** BROKE  
**AGREEMENT#:** 30-105211  
**TOWNSHIP(S):** T17R4W  
**TRUST(S):** Charitable/Educational/Penal & Reformatory Instit. (6), Common School and Indemnity (3), Scientific School (10), State Forest Purchase (2)

**REGION:** South Puget Sound Region  
**COUNTY(S):** Grays Harbor, Thurston  
**ELEVATION RGE:** 1000-2520



|                    |                   |
|--------------------|-------------------|
| Sale Area          | County Boundaries |
| Haul Route         | Highway           |
| Other Road         | Milepost Markers  |
| Distance Indicator |                   |
| Gate (H-957)       |                   |
| Culvert            |                   |
| Rock Pit           |                   |

**DRIVING DIRECTIONS:**  
 See Attached Driving Directions



## **Broke Driving Directions**

From Highway 12 in Malone:

Turn east onto Mox Chehalis Rd, and continue for 1.3 miles.

Turn right (east) onto Ray Rd and continue for 0.1 miles to the A-Line.

Continue on the A-Line for 1.4 miles, then turn right (east) onto the B-Line and travel 1.0 miles.

Continue straight onto B-Line and travel 1.0 miles.

Turn right onto the B-1000 and continue for 4.0 miles to reach Unit 1.

To reach Unit 2, continue on the B-1000 for 2.1 miles.

To reach Unit 3 and Larch Pillar Quarry, continue on the B-1000 for 0.3 miles.

To reach Unit 4, continue on the B-1000 for 0.2 miles.

To reach Unit 5, continue on the B-1000 for 0.4 miles.