

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: **RIDGE ENDER**
Agreement # **30-104444**

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

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

DNR Northwest Region Contact Person: Laurie Bergvall
919 N. Township St. Telephone: 360-856-3500
Sedro-Woolley, WA 98284

4. Date checklist prepared: **03/07/2023**

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

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

a. Auction Date:
05/29/2024

b. Planned contract end date (but may be extended):
05/29/2027

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: **Harvest units may be treated with herbicides prior to planting. Assessment for treatment will occur after completion of harvest.**

b. Regeneration Method: **Hand plant conifer seedlings in the VRH portions of the proposal within two years after completion of harvest.**

c. Vegetation Management: **Treatment to be assessed in 3-5 years. Competing vegetation may be treated by manual cutting and/or herbicide. Thinning treatment to be assessed in 10 to 15 years for pre-commercial thinning. A commercial thinning is possible in 25 to 45 years.**

d. Other: **The HK-ML, PT-14, HK-15, PT-15, PT-1405, PT-ML, and HK-18 roads will be used for future forest management activities. Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and grading as necessary.**

Rock Pits: **The HK-1801 and HK-27 hardrock pits will be used for future management activities.**

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:
 - temp **Olney Creek**
 - sediment
 - completed TMDL (total maximum daily load)
- Landscape plan:
- Watershed analysis:
- Interdisciplinary team (ID Team) report:
- Road design plan: **Ridge Ender Road Plan**
- Wildlife report:
- Geotechnical report: **Ridge Ender Engineering Geologic Risk Assessment**
- Other specialist report(s): **Level 1 hydrologic change analysis for proposed timber sale in sub-6 of Olney Creek dated June 12, 2023**
- Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):
- Rock pit plan:
- 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

Referenced documents may be obtained at the region office responsible for this proposal.

Geotech Report and Level 1 Hydrologic Change Analysis are available w/FPA 2819254 on FPARS 2/2/2024 BH

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 # 2819254 FPHP Board of Natural Resources Approval
 Burning permit Shoreline permit Existing HPA
 Other:

FPA 2819254 is available on FPARS 2/2/2024 BH

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 a combination of Variable Retention Harvest (VRH) and right-of-way comprised of 146 net harvest acres, with an estimated harvest volume of 6,602 MBF of timber.

Approximately 220 acres were considered for this proposal; this has been reduced to 165 gross acres due to operational feasibility, wildlife habitat, and stream/wetland buffers. The resulting timber sale consists of multiple units as well as right-of-ways totaling approximately 146 net harvest acres after deducting leave tree areas and existing roads.

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:

- Stands originated between 1919 – 1963
- Approximately 85 – 130 feet tall
- Basal area ranges between 243 – 291 square feet per acre
- Composed primarily of western hemlock, Douglas-fir, and western redcedar

Overall Unit Objectives:

- Generate revenue for the State Trust Beneficiaries
- Protect water quality, maintain site productivity, and maintain wildlife habitat
- This proposal meets or exceeds all guidelines set forth in the DNR Habitat Conservation Plan (HCP), Policy for Sustainable Forests, and the Forest Practices Rules and Regulations.

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 (#)	Steepest Side Slope Road Crosses
Construction		6980	2.6		65
Reconstruction				0	
Abandonment				0	
Temporary construction**		4520	1.3		65
Bridge Install/Replace	2				
Culvert Install/Replace (fish)	0				
Culvert Install/Replace (no fish)	5				

**Of the length listed for Construction in the above table, a portion(s) of the length listed may or may not be built as forest road that is constructed and intended for use during the life of an approved forest practices application, then abandoned.

FPA indicates 11,500 feet of total road construction and 4,520 feet of abandonment 2/2/2024 BH

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:

Includes timber harvest units, rock pits, pre-haul maintenance, and road work:
Township 28 North, Range 9 East, Section 6
Township 28 North, Range 8 East, Section 1
Township 28 North, Range 8 East, Section 2
Township 28 North, Range 8 East, Section 11
Township 28 North, Range 8 East, Section 12

b. Distance and direction from nearest town:

Approximately 10 miles, by road, northeast of Sultan, Washington. The sale is accessed from Sultan Basin Road.

13. Cumulative Effects

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

This proposal may temporarily affect elements of the environment to varying degrees including geology, surface water movement/quantity/quality, soils, air quality, noise, aesthetics, plants and animals, and recreation.

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 sustainably managed lands sequester more carbon than emit, including this proposal. 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)."

The legislature further finds 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.

DNR is legally required (RCW 79.10.320) to periodically calculate a sustainable harvest level and manage state trust lands sustainably. DNR has also maintained (statewide) a forest management certificate to the Sustainable Forestry Initiative standard since 2006.

Thus, managing state trust lands sustainably, DNR sequesters more carbon than emits while conducting land management activities such as this proposal.

DNR manages state trust lands for numerous objectives including a trust fiduciary – revenue-producing objective. The timber that DNR harvests is used to produce climate smart forest products. This objective is documented in multiple environmental impact statements that have informed the Board of Natural Resources’ decisions and is consistent with the IPCC which states that “Meeting 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’s Habitat Conservation Plan (HCP) outlines strategies to protect federally listed threatened and endangered species, and species that are in danger of being listed in the future, as well as uncommon habitat types found on forest lands in western Washington. HCP riparian buffers intended to protect salmon and trout habitat were applied to this proposal, and will be applied to all future sales in the vicinity.

The HCP identifies large, structurally unique trees and snags as uncommon habitats that need to be protected. An average of 8 trees per acre will be left in the proposed harvest area. These trees will function for future snag and large structurally unique tree recruitment.

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 North Puget HCP Planning Unit will meet at least 10% older forest within conservation areas by 2070.

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

- **Retaining Riparian Management Zones (RMZs) 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 clumped and scattered throughout the units. This strategy will provide legacy elements for recruitment for future snags, coarse woody debris, multi-layered stands, and large diameter trees. This in combination with**

landscape level stand retention will provide for continuity structure, function, and composition between forest generations.

- Analyzing, designing, and constructing roads to minimize effects on the environment.
- 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.
- Evaluating the proposal for potential slope instability, and excluding areas that exhibited indicators of potentially unstable slopes.
- Remote and field reviews were conducted to ensure that all identified potentially unstable slopes that were interpreted as having potential to adversely impact public resources or public safety, were excluded from the harvest areas.
- No tailholds will be allowed within and no timber will be yarded across any identified Forest Practice rule-identified landforms.

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
OLNEY CREEK	19802	8942	755	85	59
SULTAN RIVER	23383	12946	465	227	228

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:

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

WAU:	OLNEY CREEK
WAU Acres:	19802
Elevation Range:	104 - 4819 ft.
Mean Elevation:	1322 ft.
Average Precipitation:	62 in./year
Primary Forest Vegetation Zone:	Western Hemlock

WAU:	SULTAN RIVER
WAU Acres:	23383
Elevation Range:	95 - 3097 ft.
Mean Elevation:	1015 ft.
Average Precipitation:	55 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)?
134% *FPA indicates ground-based equipment will be limited to sustained slopes 35% or less and self-leveling equipment may be used on sustained slopes 55% or less. Tethered equipment may be utilized on this proposal 2/2/2024 BH*
- 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
1956	GRAVELLY LOAM/SILT LOAM
8106	GRAVELLY LOAM
1949	SILT LOAM
5660	GRAVELLY LOAM/SILT LOAM
1955	GRAVELLY LOAM/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.

Timber will be harvested in the ground water recharge area of a dormant deep-seated glacial landslide. Road construction will involve the establishment of a log-stringer bridge over a one-sided inner gorge. A bedrock hollow was identified adjacent to the proposal and has been excluded from the harvest unit. A channel migration zone is present outside of sale boundaries, but within 200 feet of proposal boundaries.

The statewide landslide inventory (LSI) screening tool indicates no presence of polygons mapped as landslides within the proposed harvest unit boundaries. This landslide database is maintained by the Washington State Department of Natural Resources, Forest Practices Division. The LSI includes landslides mapped during many different projects including large-scale geological mapping, watershed analyses, landscape planning, and landslide hazard zonation, in addition to other case studies and mapping efforts. A large majority of landslides identified by these projects are mapped by remote review with minimal field verification. In addition, dormant and ancient deep-seated landslides are mapped in many projects included in the LSI. A large number of the remotely identified landslides and deep-seated features have been mapped with a questionable, probable, or unknown certainty. As a result, the LSI database is meant to be used as a screening tool and field verification is a necessary step in confirming the absence, presence, and extent of mapped features, as well as their actual level of activity/instability.

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

No Yes, describe the proposed activities: **Road construction and bridge crossing over a one-sided inner gorge; road construction and timber harvest within the boundaries of a groundwater recharge area associated with a dormant glacial deep seated landslide.**

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

The proposal area was office and field reviewed by a DNR State Lands Licensed Engineering Geologist (Forest Practices Qualified Expert). As part of this review the Washington Geological Survey (WGS) landslide inventory, Forest Practices landslide inventory (LSI), and landslide hazard zonation (LHZ) databases were screened in and around the proposal area for published landslide information.

Features were excluded from the harvest area, as was detailed prior in B.1.d

Ground-based equipment operations will be generally limited to sustained slopes 35% or less unless using self-leveling and/or tethered equipment. Self-leveling equipment may be utilized on sustained slopes 55% or less with the approval of the contract administrator.

Roads are mostly located on gentle terrain. Roads located on steeper terrain use full bench construction methods and/or armored embankments. Additionally, bridge construction has a higher likelihood of passing debris than a dipped fill crossing.

Proposed harvest is limited to 30% or less of the topographic groundwater recharge

area (GWRA) of the glacial deep-seated landslide (DSL). The proposed road construction in the topographic GWRA to DSL is designed to maintain natural surface water flow paths. Proposed culverts are sites such that ditch line water captured by the proposed roads outside the topographic GWRA will not be routed into the topographic GWRA of the DSL.

The inner gorge crossing will require full bench construction at the bridge approach. The abutments will be armored with shot rock.

See also Engineering Geologic Risk Assessment for the Ridge Ender Timber Sale dated September 12, 2023.

- 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: 3.9

Approx. acreage new landings: 0.5

Fill Source: Native fill or rock

Road construction will utilize standard cut and fill methodology, full bench construction with end haul or side cast to obtain grade and alignment. Native soil and rock will be excavated from the road prism and used for fill in the sub-grade and over cross drains and stream crossings.

- 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. Road construction will expose bare soil. Road plan requirements include the use of grass seed or other revegetation methods to protect exposed soils from erosion.**
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Less than 3% of the site will remain as gravel roads.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: *(Include protection measures for minimizing compaction or rutting.)*
For road work, rock haul and log haul, appropriate drainage devices including proper culvert size and placement, drain dips, water bars, and ditching will be used as necessary to reduce surface erosion on roads. Energy dissipaters will be installed with culverts to reduce erosion. Relief pipes will be strategically placed to minimize the amount of road ditch water that enters surface waters. Slopes that are exposed of vegetative cover during road work activities will be revegetated or straw mulched to reduce erosion and sediment-laden runoff. Storm patrols may be conducted on roads to identify and address potential erosion problems. RMZ buffers as described in B.3.a.1.b and B.3.a.1.c will be retained.

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 CO₂ 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.

Following harvest, native tree species will be plants 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:

All streams associated with the proposal are tributaries to the Skykomish 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)
Olney Creek	1	1	200
Unnamed Stream	3	9	188
Unnamed Stream	4	18	100
Unnamed Stream	5	35	Does Not Apply
Wetland (Greater than 1 Acre)	Open	1	188
Wetland (Greater than 1 Acre)	Forested	1	188
Wetland (Less than 1 acre but greater than 0.25 acre)	Forested	1	100

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers. RMZ/WMZ buffers as listed in B.3.a.1.b as well as the proposed measures to reduce or control erosion described in B.1.h provide protection measures for the surface waters in the vicinity of the proposal area. Buffers on type 3 streams were determined using 100-year species specific site index. Windthrow was only observed in higher elevation, exposed timber. Type 3 streams and their associated RMZs are located in lower lying drainages and extensive windthrow has not been observed in these drainages or in the stands immediately adjacent to the type 3 streams identified with this proposal. Type 5 streams within the sale area have 30-foot equipment limitation zones, except at designated crossings. The crossings will be as close to perpendicular as possible and may require log cribbing, culvert installation, or other approved methods to be in place to protect channels and banks. Timber will be felled and yarded away from all streams when possible. Timber harvest will not occur within RMZs with the exception of the removal of timber in right-of-ways to facilitate new road construction.

Road work and hauling will not be allowed November 1 to March 31 unless the operator formulates a plan to minimize impacts to water and other resources and the Contract Administrator (CA) approves.

Ditchwater will be diverted through relief culverts or topographic controls prior to stream crossing to keep sediment out of stream. Exposed soils will be grass seeded.

- 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.) (Note: Timber Sale maps are DRAFT at the point of submission of this SEPA.)

Description (include culverts): Culvert and bridge installation in typed water

crossing(s) and VRH adjacent to the RMZ(s). Timber will be felled immediately adjacent to RMZs/WMZs, and within RMZs described in the table in B.3.a.1.b. Timber will be felled away from unmanaged RMZs/WMZs where practical in order to avoid damage to trees within the RMZ/WMZ, see B.3.1.c. Timber harvested within RMZs will be felled away from the stream channel.

Road construction may take place over type 3, 4, and 5 streams. Ground-based equipment may cross over type 5 streams at designated crossing locations. All culverts will be removed during road abandonment unless a section of road is to be retained for future access.

Ditchwater will be diverted through relief culverts or make use of topographic controls prior to stream crossings to keep sediment out of streams. Exposed soils will be revegetated. See Road Plan and Specifications for this proposal (available at the Northwest Region office) for more information.

See B.3.a.1.b and B.3.a.1.c for additional RMZ and WMZ protection measures.

- 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:

When necessary to protect water quality, or as required by permit, stream flow may be temporarily diverted around construction area during fish passage structure installations.

- 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)?*

OLNEY CREEK = 4.3 (mi./sq. mi.), SULTAN RIVER = 3.9 (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.

Olney Creek sub-basin 6 was evaluated for changes in peak flow that could result from this proposal. This sub-basin was evaluated because it is managed for hydrologic maturity in the Rain-on-Snow zone. The evaluation determined that the sub-basin has a "low" sensitivity to the proposed harvest and so standard forest practice regulations apply. See A.8 for further information.

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) **WDFW Wallace River Hatchery**

15 **Wallace River Hatchery appears to be approx. 4.5 miles from the proposal area 2/2/2024 BH**

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

As stated in B.3.a.11, this proposal is not expected to cause a significant increase in peak flows. In order to minimize the risk of road failures during peak flow events, all culverts utilized in new road construction will be sized to withstand a 100-year flood event. Culverts and ditches will be maintained so that they remain functional. Storm patrols will be conducted as necessary on existing and newly constructed roads to identify and address potential erosion problems.

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: **WDFW Wallace River Hatchery**

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: **The road plan is designed to reduce potential**

hydrologic impacts to the natural hillslope hydrology through the use of appropriately located relief culverts. See Engineering Geologic Risk Assessment for further details.

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 slash, may enter surface water. Sediment control measures are intended to prevent sediment from entering surface waters and any sediment that enters surface waters would be minimal and for a short duration.

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*: **Oregon Grape**
- 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: **Clubmoss**
- 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*).

As described in A.11, the overstory vegetation will be removed, with the exception of an average of eight trees per acre of 10 inches DBH or greater. This will ensure that a portion of the live trees that are best suited to the site, and/or exhibits desirable wildlife habitat characteristics will be left on site. Most of the current shrubs and herbaceous plants will be disturbed to varying degrees during the timber removal process of this proposal.

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

Lands adjacent to the proposal area consist of DNR managed lands with stands approximately 5 – 10 years old as well as riparian management areas in the 60 – 105 year range.

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

None found in corporate database, none observed on-site during field operations.
None found per FPRAM 2/2/2024 BH

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

A minimum of 8 trees per acre, clumped and scattered, are distributed across the proposal area. These clumps include all tree species currently found in the proposal area. These clumps were located around features that will contribute to the maintenance of biological diversity such as snags, down logs, areas with extensive understory development, and large wind firm conifer trees. These retention features are intended to model natural biological legacies that often follow natural

disturbances such as wildfire, wind, and flood. This in combination with landscape level stand retention will provide for continuity in structure, function, and composition between forest generations. The site will be revegetated after harvest. See green tree retention plan in A.13.b, and regeneration method in A.7.b.

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

No noxious weeds or invasive species were found in a database search of DNR’s corporate database searched on July 5, 2023. However, the presence of Himalayan blackberry, Scotch broom, and Butterfly bush have all been confirmed in the field on or adjacent to the proposal area.

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 (barred owl, determined using photo ID) songbirds

other:

mammals:

bear beaver coyote cougar deer elk

other: **Douglas squirrel, bobcat**

fish:

bass herring salmon shellfish trout

other:

amphibians/reptiles:

frog lizard salamander snake turtle

other:

unique habitats:

balds caves cliffs mineral springs oak woodlands talus slopes

other:

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

TSU Number	Common Name	Federal Listing Status	State Listing Status
RIDGE ENDER U5	Marbled murrelet	Threatened	Endangered

See B.5.d.1 for description of adjacent marbled murrelet habitat area. Northern Goshawk, Marbled Murrelet Detection area, and within 1.5 mile buffer of Marbled Murrelet Occupied Site 2/2/2024 BH

- 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:

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

Species /Habitat: **Mature Forest Components**

Protection Measures: **Retention tree plan described in A.13.b and B.4.d.**

Species /Habitat: **Marbled Murrelet**

Protection Measures: **The sale overlaps areas that our predictive model indicates are “Possible” Long-Term Forest Cover (LTFC) in the Marbled Murrelet Long-term Conservation Strategy (LTCS). LTFC are the combination of lands that provide marbled murrelet conservation throughout the landscape through other forest retention measures associated with the 1997 HCP (e.g riparian management, unstable slopes, old-growth, northern spotted owl), as well as natural areas, gene pool reserves, and marbled murrelet specific conservation as outlined in the MM LTCS. “Possible” suggests that some features which would require retention of forest cover (e.g stream, unstable slope) may exist in those areas, but requires field verification to confirm the actual existence and map the specific location of such features. Following the “verification,” LTFC is maintained as applicable. This proposal excludes all verified LTFC and associated habitat and is consistent with the requirements of the MM LTCS. Road construction will occur through an unmanaged RMZ with overlapping P-stage and unverified LTFC. This is consistent with the Marbled Murrelet LTCS.**

Species /Habitat: **Stream and wetland riparian habitat**

Protection Measures: **All activities associated with this proposal will meet or exceed Forest Practices standards and the Habitat Conservation Plan. Riparian buffers are designed to maintain the functions of riparian ecosystem processes that influence the quality of salmonid freshwater habitat. Water temperature, stream bank integrity, sediment load, detrital nutrient load, and delivery of large woody debris were the principal considerations used for designing the riparian buffer widths.**

See also B.1.h, B.3.a.1, B.3.a.2, B.3.a.3, B.3.a.4, B.3.a.9, B.3.c, B.3.d and B.4.d

Species/Habitat: **Bald**

Protection Measures: **One bald is located within unit 1. This feature is protected with a leave tree area. No rare plant species were observed on this bald.**

Species/Habitat: **Cliff**

Protection Measures: **Two cliffs are located just outside of the northwestern and northeastern corners of unit 5C. Both are protected by leave trees. This will help retain screening and overall microclimate during and after harvest.**

Species/Habitat: **Cave**

Protection Measures: **One cave is present and has been provided with a 30-foot buffer, resulting in full exclusion from proposal area.**

- e. List any invasive animal species known to be on or near the site.
No invasive animal species were found in a database search of DNR's corporate database searched on July 5, 2023, and none observed on-site during field layout.

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.
There is minimal anticipated hazard from heavy equipment operations. There is a slight chance of hydraulic or oil spills from equipment operating on the site. There is also a potential fire hazard if operations occur in moderate to severe fire weather conditions during summer months. The timber sale contract contains language that addresses hazardous materials spill prevention, hazardous material spill containment, control, and cleanup, and hazardous material release reporting. If any toxic or hazardous chemical spill occurs, or if past contamination is discovered, the Department of Ecology will be notified. The contract also contains language for operations during fire season.
 - 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 site is comprised of working forest lands managed by the DNR. All lands directly adjacent are similarly managed by the DNR.

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

- 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 oversized 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?
Forest Land.

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

- 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:*

Sultan Basin Road

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

This proposal will resemble previous timber harvests in the area and background view will change from a stand of mature timber to a view of a recent harvest with mature trees remaining scattered throughout the units and clumped around type 5 streams and wildlife features.

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

Timber harvesting is a normal occurrence in the vicinity of the proposal, and recent timber harvests are visible throughout the area. Within and around the proposal area, un-harvested stands, stream buffers, and leave tree clumps will remain to reduce the visual impact. These residual stands will break up the view of the harvested area considerable, and will help maintain the aesthetic quality of the area. This sale does not represent a significant departure from the usual and common activities. Additionally, the proposal area will be revegetated.

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?
Informal recreational opportunities exist in the vicinity. These include hiking, mountain biking, hunting, fishing, and foraging.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
There may be some disruptions to recreational use during periods of harvesting and hauling.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None.

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.
No.
None found per FPRAM 2/2/2024 BH
- 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.
Three individual locations were identified that contain material evidence of past logging activity. The locations were assessed by the Department's Archaeologist and were not found to have significant cultural importance. Where possible, sites have been protected using leave trees and exclusion from proposal boundaries.
None found per FPRAM 2/2/2024 BH
- 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 archaeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
A cultural resource survey and field review was conducted by a Department Archaeologist and Cultural Resource Technicians on April 26, 2023.
The Tulalip Tribes, Stillaguamish Tribe of Indians, and Snoqualmie Indian Tribe were contacted regarding cultural resource conflicts. No response has been received as of this submission.
- 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.
DNR's timber sale contracts contain enforceable measures for protection of any undiscovered historic and cultural resources that might be encountered during operations.

If presently-unknown skeletal remains, cultural resources, or both become known during project operations, DNR will comply with the Discovery of Skeletal Remains or Cultural Resources procedure.

Where possible, cultural resources have been excluded from the proposal through the usage of leave trees or exclusion from sale boundaries.

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.
Sultan Basin Road. Please see WAU and adjacency maps on the DNR website under "SEPA." Sultan Basin Road is the only public road in the vicinity of the proposal, however there are no public streets or highways that directly serve the proposal site. There will be no addition of public roads to access the site as a result of this proposal.
- 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 7.3 miles away.
- 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 as all new construction will occur on State managed land. A slight increase in truck traffic will be evident on county roads in the area during active operations.
- 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:

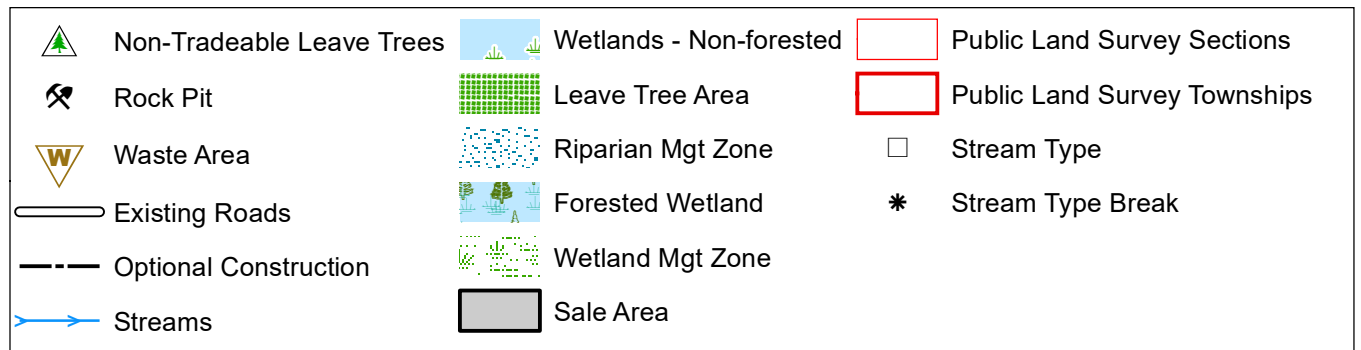
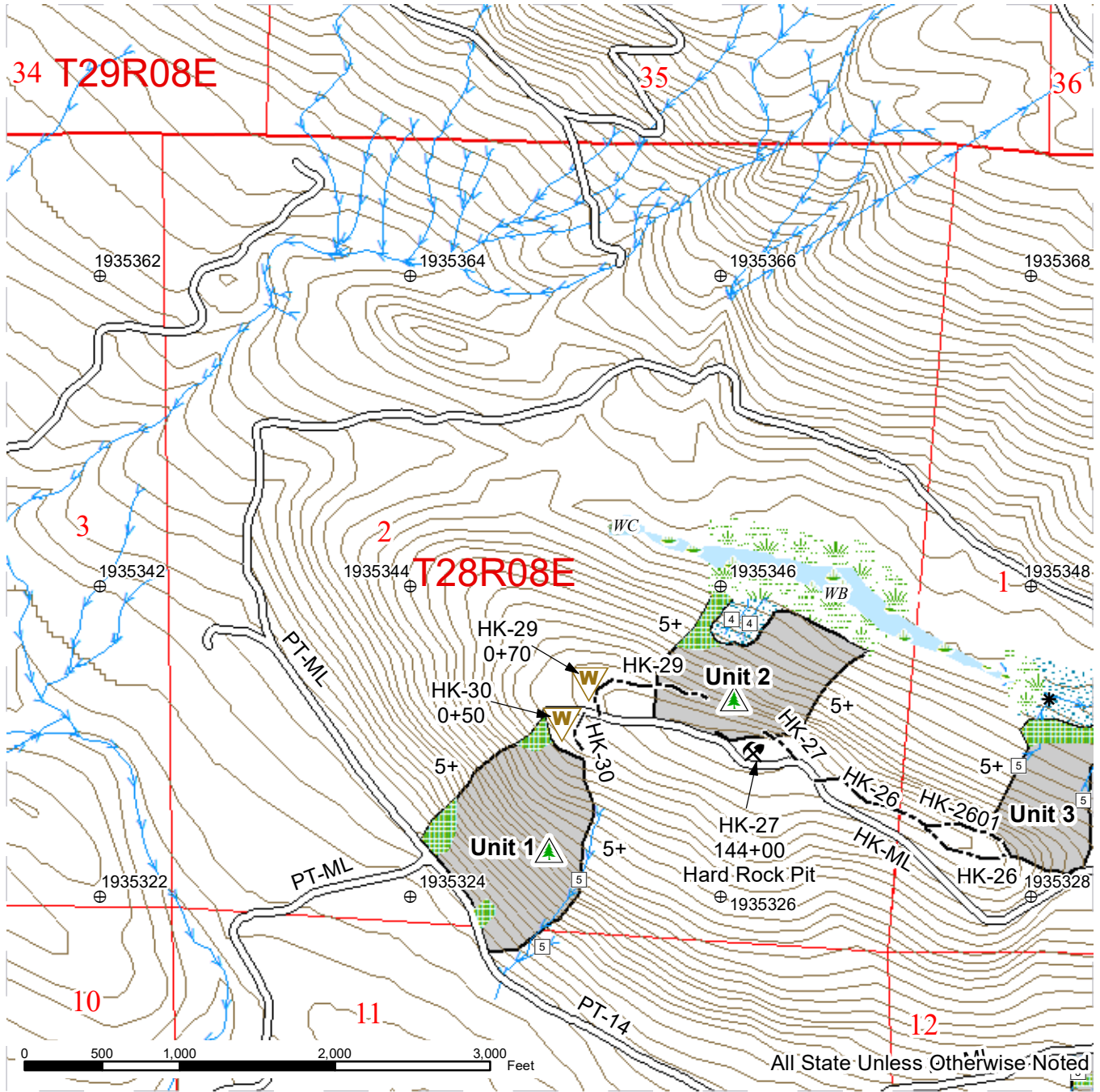
b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.

FOREST PRACTICES ACTIVITY MAP

SALE NAME: RIDGE ENDER SORTS
 APPLICATION #: TBD by FP Staff

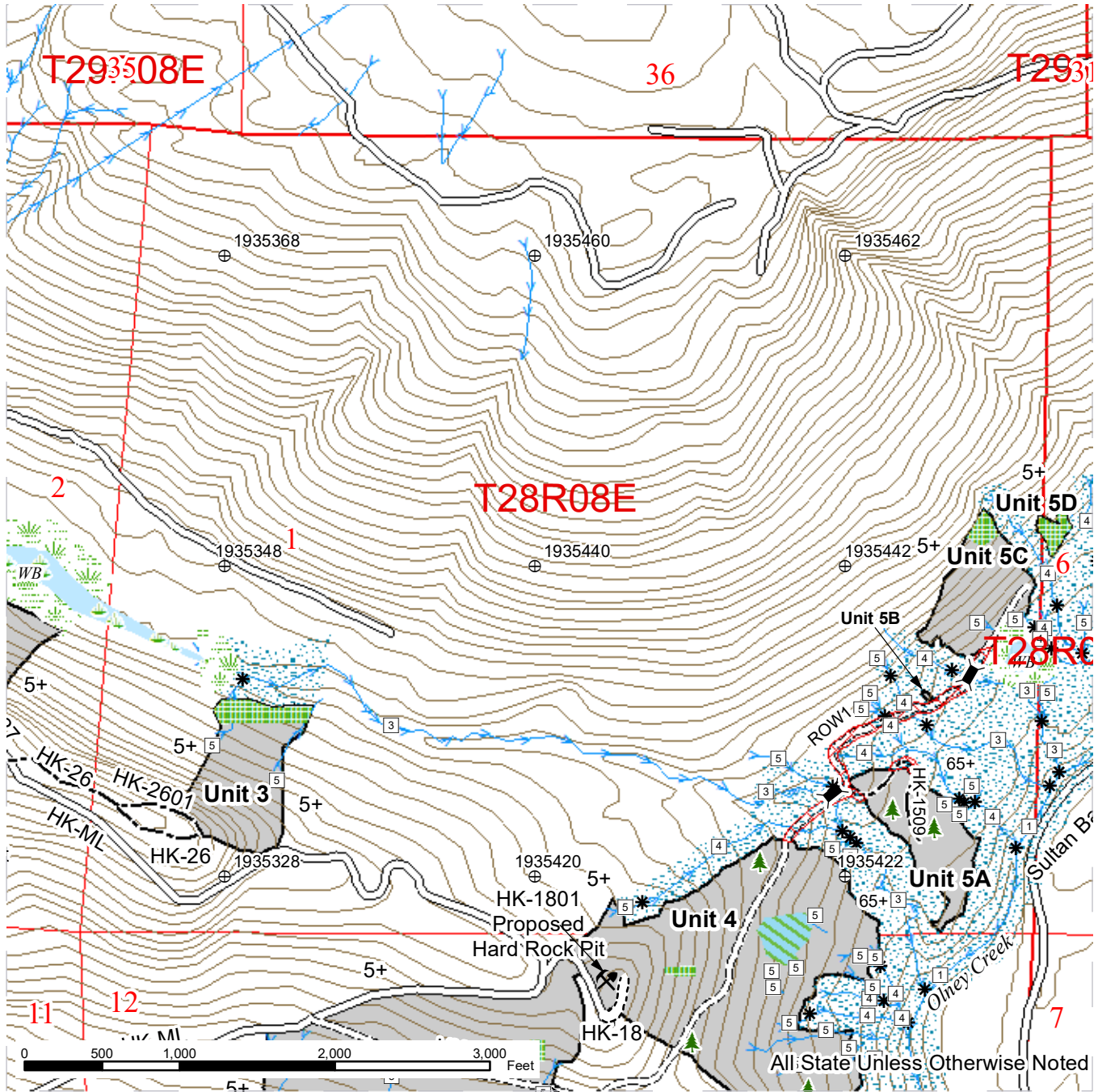
COUNTY(S): Snohomish
 TOWNSHIP(S): T28R08E, T28R09E



FOREST PRACTICES ACTIVITY MAP

SALE NAME: RIDGE ENDER SORTS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
 TOWNSHIP(S): T28R8E, T28R9E



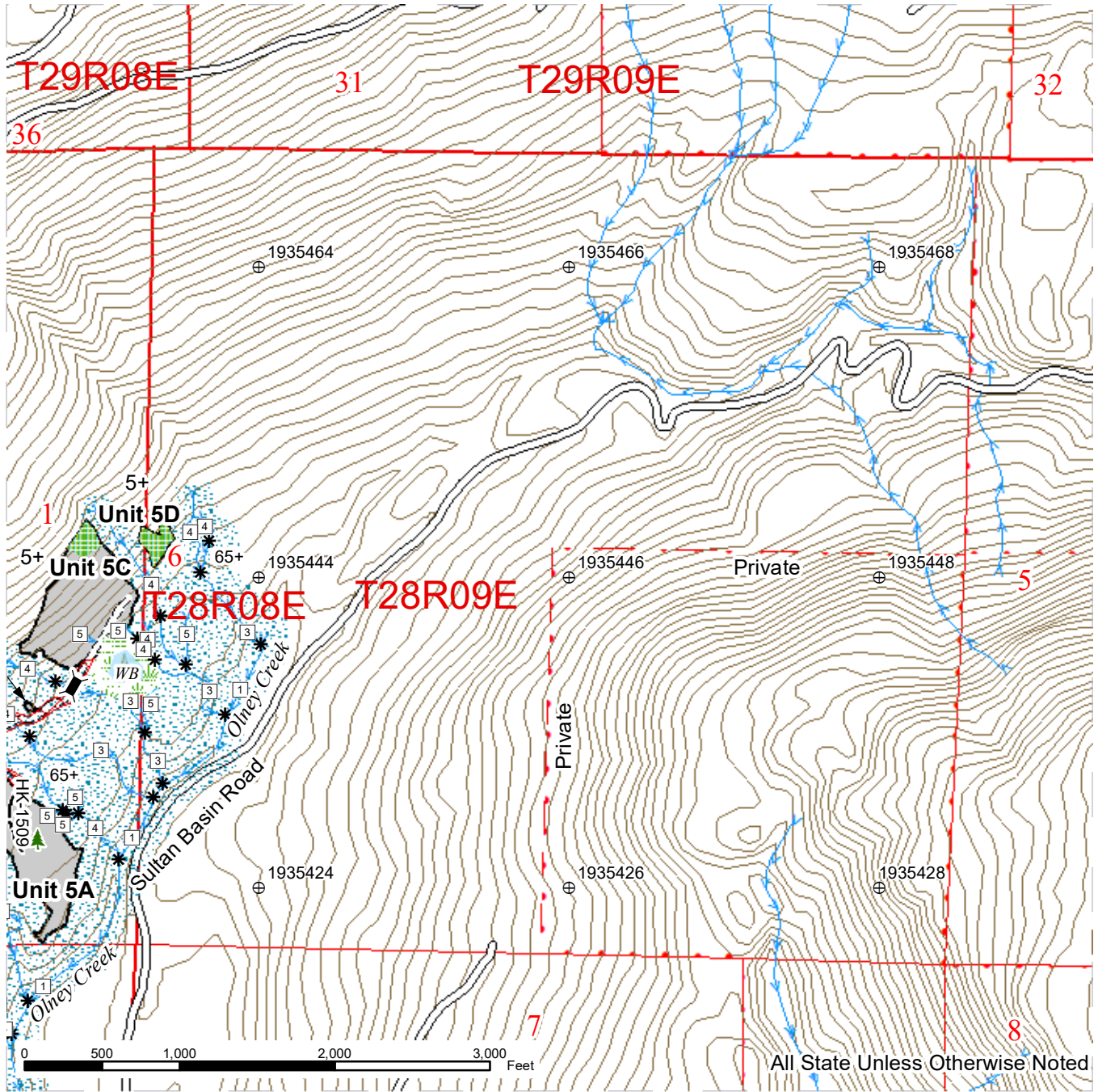
Bridge	Right of Way	Sale Area
Leave Tree Area <1/4-acre	Wetlands - Non-forested	Public Land Survey Sections
Rock Pit	Non-Tradeable Leave Clump	Public Land Survey Townships
Existing Roads	Leave Tree Area	Stream Type
New Construction	Riparian Mgt Zone	Stream Type Break
Optional Construction	Forested Wetland	
Streams	Wetland Mgt Zone	



FOREST PRACTICES ACTIVITY MAP

SALE NAME: RIDGE ENDER SORTS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
 TOWNSHIP(S): T28R8E, T28R9E

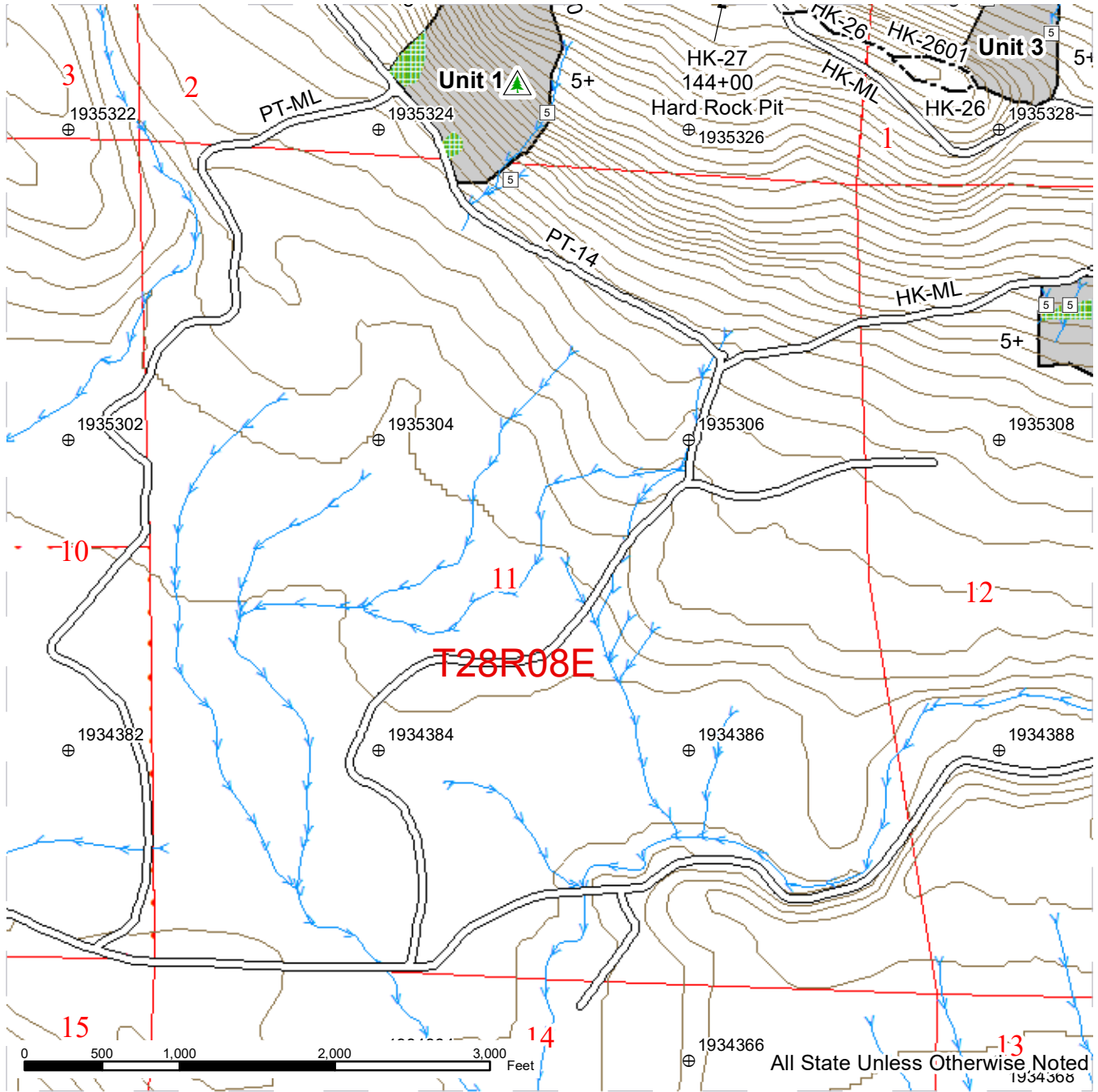


	Bridge		Right of Way		Public Land Survey Sections
	Leave Tree Area <1/4-acre		Leave Tree Area		Public Land Survey Townships
	Existing Roads		Riparian Mgt Zone		Stream Type
	New Construction		Forested Wetland		Stream Type Break
	Optional Construction		Wetland Mgt Zone		
	Streams		Sale Area		

FOREST PRACTICES ACTIVITY MAP

SALE NAME: RIDGE ENDER SORTS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
 TOWNSHIP(S): T28R8E, T28R9E



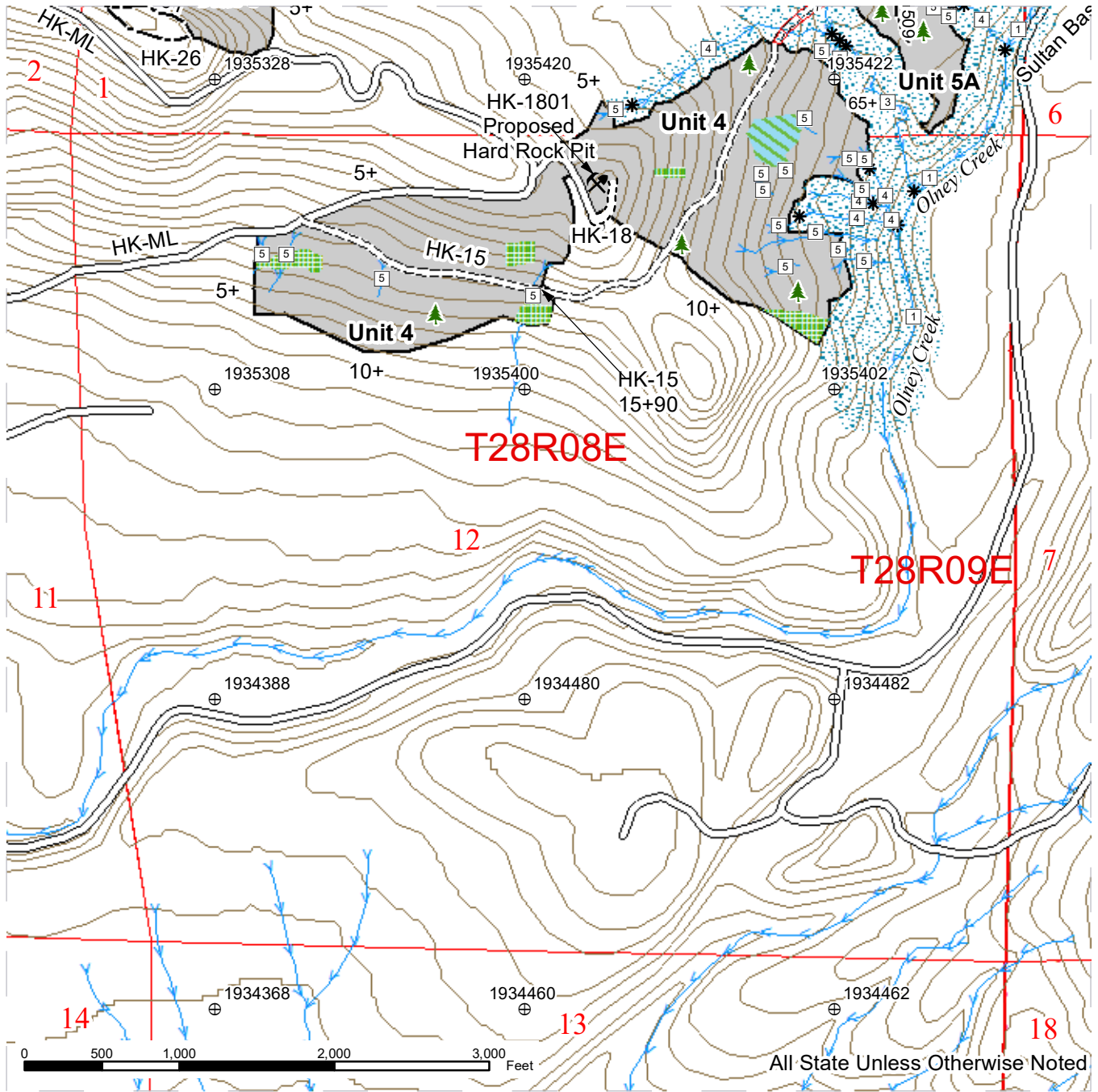
Non-Tradeable Leave Trees	Sale Area
Existing Roads	Public Land Survey Sections
New Construction	Public Land Survey Townships
Optional Construction	Stream Type
Streams	Stream Type Break
Leave Tree Area	



FOREST PRACTICES ACTIVITY MAP

SALE NAME: RIDGE ENDER SORTS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
 TOWNSHIP(S): T28R8E, T28R9E



	Bridge		Streams		Public Land Survey Sections
	Leave Tree Area <1/4-acre		Right of Way		Public Land Survey Townships
	Rock Pit		Non-Tradeable Leave Clump		Stream Type
	Existing Roads		Leave Tree Area		Stream Type Break
	New Construction		Riparian Mgt Zone		
	Optional Construction		Sale Area		

