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: **ROCKIT LAUNCH SWT**
Agreement # **30-106713**

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

3. Address and phone number of applicant and contact person:
Washington Department of Natural Resources
South Puget Sound Region
950 Farman Avenue North
Enumclaw, WA 98022
Contact: Audrey Mainwaring
(360) 825-1631

4. Date checklist prepared: **05/29/2024**

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

6. Proposed timing or schedule (including phasing, if applicable):
a. *Auction Date:*
02/25/2025

b. *Planned contract end date (but may be extended):*
10/31/2027

c. Phasing:
Flying squirrel next box installation is planned by DNR staff following harvest.

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:
None.

b. Regeneration Method:
Does not apply as this proposal is a thinning and, since a fully stocked stand will remain post-harvest, no planting will occur.

c. Vegetation Management:
None.

d. Other:
Road maintenance assessments will be conducted and may include periodic ditch and culvert

cleanout, and grading as necessary.

Rock will be obtained from the Zig Zag Pit and a commercial rock source for road building and associated forest 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*

☐ *sediment*

☐ *completed TMDL (total maximum daily load)*

☒ *Landscape plan:* **South Puget HCP Planning Unit Final EIS (SPS FLP 2010)**

☐ *Watershed analysis:*

☐ *Interdisciplinary team (ID Team) report:*

☒ *Road design plan:* **Included in Road Plan, dated 8/2/2024.**

☒ *Wildlife report:* **Rockit Launch SWT Wildlife and Riparian Forest Habitat Assessment by Nick Meboe, Assistant Region Biologist, dated 8/1/2024.**

☐ *Geotechnical report:*

☒ *Other specialist report(s):* **Geologic Field Summary for the Rockit Launch SWT Timber Harvest, Lewis County, Pierce County, Washington by Susie Wisehart, State Lands Licensed Geologist, dated 8/1/2024, Level 1 hydrologic change analysis for sub-basin 6 of Reese Creek WAU by Jeff Keck, dated October 1, 2024.**

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

☒ *Rock pit plan:* **Included in the Road Plan, dated 8/2/2024**

☒ *Other:* **Additionally, the following was reviewed and consulted in design of this proposal:**
Additionally, the following was reviewed and consulted in design 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)**
  - **Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington, May 2024 (Revised September 2024)**
  - **Identifying Mature and Old Forests in western Washington by Robert Van Pelt (2007)**
  - **Silvicultural Rotational Prescriptions**
  - **Land Resource Manager Reports, including Special Concerns Report, 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)**
- **Clarification of projections of forest types and stand structural conditions on Washington DNR State Trust Lands, USFWS; October 27, 2021**
- **Spotted Owl Habitat GIS Layer**
- **Marbled Murrelet Habitat GIS Layer**
- **WAU Rain-On-Snow GIS Layer**
- **Biological Opinion on the HCP, USFWS; January 27, 1997**
- **Biological Opinion on the HCP, NMFS; January 29, 1997**
- **Biological Opinion on the HCP Marbled Murrelet Long-term Conservation Strategy Amendment, USFWS; November 7, 2019**
- **Reinitiated Biological Opinion on the Incidental Take Permit (PRT-812521), USFWS; March 21, 2024**

• Forest Practices Regulations and Compliance
- **Forest Practices Rules (Title 222 WAC)**
- **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)**
- **Lidar Data and Derivatives**
- **Draft Landform Remote Identification Model (LRIM) screening tool**
- **Published Landslide Inventories**
- **Historic Aerial Photographs**
- **Published Geologic Mapping**

• Supporting Data for Cultural Resources Review
- **Historical Aerial Photographs**
- **USGS and GLO maps**
- **Department of Archaeology and Historical 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**
- **Stand Origin Assessment form for Rockit Launch SWT Timber Sale**
- **Stand Development Stage Assessment form for Rockit Launch SWT Timber Sale**

- **Forest Stewardship Council and Sustainable Forestry Initiative certification standards and audit reports**
- **Reviews by and communications with State Lands Geologist, State Lands Archaeologist, and Region Biologist**
- **Forest Practices Informal Conference Note #3885012, dated 07/17/2024**

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 #* **2424161** ☒ *FPHP* ☒ *Board of Natural Resources Approval*
☒ *Burning permit* ☐ *Shoreline permit* ☐ *Existing HPA*
☒ *Other:* **Pierce County General Right-of-Way Permit #080624-A**

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*:
Rockit Launch SWT Timber Sale proposal is a nine-unit small wood thinning (SWT) and one road right-of-way (ROW) unit, consisting of approximately 290 gross acres and 281 net acres within the Elbe Hills and Tahoma State Forests. This proposal is located within the Elbe Hills and Tahoma Spotted Owl Management Units in the DNR's South Puget HCP Planning Unit.

The original proposal area considered for harvest was over 380 acres and reduced to 281 net acres of harvest area after incorporating 90 acres or 24% of the proposal in conservation area for streams, wetlands, wildlife habitat, and potentially unstable slopes protections. Additionally, 277 acres of the timber sale includes thinning to develop higher quality NSO dispersal habitat. Approximately 1,806 MBF will be removed.

Each unit net acreage is as follows:
Unit 1 (SWT) - 28 acres
Unit 2 (SWT) - 23 acres
Unit 3 (SWT) - 30 acres
Unit 4 (SWT) - 26 acres
Unit 5 (SWT) - 28 acres
Unit 6 (SWT) - 52 acres
Unit 7 (SWT) - 8 acres
Unit 8 (SWT) - 61 acres
Unit 9 (SWT) – 21 acres
Unit 10 (ROW)- 3.6 acres

Roadwork associated with this timber sale consists of forest road construction, reconstruction, maintenance, and abandonment of forest roads. Maintenance will consist of cleaning culverts and catch basins, reconstructing ditches, applying rock, installing

drain structures, grading, and other tasks outlined in the road plan for the Rockit Launch SWT Timber Sale.

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 predominantly of planted Douglas-fir with a lesser component of western hemlock, grand fir, red alder and black cottonwood in the main canopy. The understory vegetation is dominated by sword fern and Oregon grape with some areas of vine maple. There is relatively minimal presence of shade tolerant species within the lower canopy. 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 and Maturation 1. 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	1985	Douglas-fir, western hemlock, red alder, black cottonwood	Small Wood Thinning
2	1978-1985	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
3	1982	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
4	1986	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
5	1993	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
6	1993	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
7	1980	Douglas-fir, hemlock	Small Wood Thinning
8	1980-1993	Douglas-fir, grand fir, hemlock, black cottonwood, red alder	Small Wood Thinning
9	1980-1988	Douglas-fir, black cottonwood, red alder	Small Wood Thinning
10	1980-1985	Douglas-fir, grand fir, black cottonwood, red alder	Right-of-Way

Origin dates were determined by using DNR's RS-FRIS GIS "Combined Origin Year" layer and planting records.

Proposal Objectives:

<u>Short-term objectives</u>

1) **Create revenue for State Forest Board Transfer and Common School beneficiaries through timber harvest of the existing stand.**
2) **Retain trees to maintain biological diversity, productivity of the site, and protect water quality, fish, and wildlife habitat.**
3) **Enhance NSO habitat according to DNR's HCP.**

4) **Maintain hydrologic maturity across DNR managed lands according to DNR's procedure.**
5) **Contribute to long-term forest cover through HCP required protections.**
6) **In Units 1, 3, 4 ,5 ,6, 7, 8, and 9, the thinning prescription was developed in concurrence with DNR's HCP Riparian Forest Restoration Strategy to accelerate the stand's trajectory to meet Riparian Desired Future Conditions and to maintain and enhance NSO dispersal habitat.**

Long-term objectives:

1) **Timber Stand Improvement: a series of silviculture activities with the primary objective of the treatment will be to stimulate wood production to generate trust revenue, create new canopy layers, and enhance important structural components to produce stand conditions associated with older stands.**
2) **Resource Protection: the protection of soil productivity and water quality will remain priorities. Each harvest prescription have been crafted to prevent soil erosion and limit soil compaction. Large coarse woody debris will be left to contribute to site productivity.**
3) **Maintain at least 50% of acreage within the SOMU as NSO habitat per DNR's HCP requirements.**
4) **Maintain hydrologic maturity across DNR managed lands according to DNR's procedure.**
5) **Meet objectives and projected outcomes outlined in DNRs programmatic framework through implementation of conservation measures outlined in DNR's 1997 Trust Lands Habitat Conservation Plan (HCP).**

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		1,641	0.6	0
Reconstruction		1,764		0
Maintenance		44,765		0
Abandonment		3,405	1.3	0
Bridge Install/Replace	0			0
Stream Culvert Install/Replace (fish)	0			0
Stream Culvert Install/Replace (no fish)	2			
Cross-Drain Install/Replace	10			

Routine maintenance will occur on all 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:*
Sections 3 and 4, in Township 14 North, Range 06 East, W.M. – Timber harvest
Sections 28, 29, 33, and 36 in Township 15 North, Range 06 East, W.M. – Timber harvest
Section 2, in Township 14 North, Range 06 East, W.M. – Rock pit

b. *Distance and direction from nearest town:*
Proposal area is located approximately 1.2 miles west and 3.3 miles southeast by road of Ashford, WA.
Units 1 and 2: From Ashford follow SR-706 west for 1 mile. Turn left onto 282nd Ave E and follow for 0.1 miles. Turn right onto County Road 390 and follow for 0.1 miles to reach Unit 2. Continue on County Road 390 for 0.5 miles to reach Unit 1.

Units 3 and 4: From Ashford follow SR-706 east for 2.1 miles. Turn right onto Kernahan Road E and follow for 1.1 miles. Turn right onto the 36T Road and follow for 0.1 miles to reach Unit 4. Continue on the 36T Road for 0.9 miles to reach Unit 3.

Units 5 and 6: From Ashford follow SR-706 west for 1 mile. Turn left onto the 1 Road and follow for 1.8 miles. Turn right onto the 11 Road and follow for 0.5 miles to reach Unit 5. Continue on the 11 Road for 0.2 miles to reach Unit 6.

Units 7, 8, 9, and 10: From the junction of the 1 and 11 roads, continue on the 1 Road for 0.8 miles to reach Unit 9. Continue on the 1 Road for 0.2 miles. Turn right on the 2 Road and follow for 0.3 miles to reach Unit 10. Continue on the 2 Road for 0.1 miles to reach Unit 8. Continue on the 2 Road for another 0.6 miles to reach Unit 7.

Zig Zag Pit: From the junction of the 1 and 2 roads, turn left to continue on the 1 Road for 0.4 miles. Turn right to continue on the 1 Road for another 0.9 miles. Turn left onto Zig Zag Pit Road and follow for 0.1 miles to reach Zig Zag Pit.

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).*
The Reese Creek and Goat Lake WAUs include potentially unstable slopes and northern spotted owl habitat.

Within the Reese Creek and Goat Lake WAUs, agriculture and home sites are located in the valleys near major streams. The uplands are mainly managed for timber production by large industrial forests, small private forests, and Department of Natural Resources (DNR) managed forests. Portions of the Goat Lake WAU are under federal ownership. Forested stands within the WAUs appear to be primarily second and third growth stands.

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

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

The legislature also found that the 2019 Intergovernmental Panel on Climate Change (IPCC) report "identifies several measures where sustainable forest management and forest products may be utilized to maintain and enhance carbon sequestration. These include increasing the carbon sequestration potential of forests and forest products by maintaining and expanding the forestland base, reducing emissions from land conversion to non-forest uses, increasing forest resiliency to reduce the risk of carbon releases from disturbances such as wildfire, pest infestation, and disease, and applying sustainable forest management techniques to maintain or enhance forest carbon stocks and forest carbon sinks, including through the transference of carbon to wood products" (2020 Washington Laws Ch. 120 §1(2)).

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

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

enhanced forest protection and conservation in other areas, thus contributing to climate change mitigation."

b. *Briefly describe existing plans and programs (i.e. the HCP, DNR landscape plans, retention tree plans) and current forest practice rules that provide/require mitigation to protect against potential impacts to environmental concerns listed in question A-13-a.*
The Department of Natural Resources has a multi-species 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, which requires the Department to manage landscapes to provide and sustain long-term habitat in exchange for an Incidental Take Permit. This agreement substantially helps the Department to mitigate for cumulative effects related to management activities. The Department follows Forest Practices Rules as applicable to roads and potentially unstable slopes. The Department follows Forest Protections related to fire hazard mitigation.

The General Silviculture Strategy (policy) in the Policy for Sustainable Forests (PSF) 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 from the adoption of the PSF.

In September 2024, the DNR revised a document titled '*Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington, May 2024*' (landscape assessment). 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 stands, and additional suitable stands, 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 permanently deferred from regeneration harvest.

Some of these conservation areas are based on specific HCP strategies that are spatially fixed and conserved on the landscape, such as marbled murrelet occupied sites or spotted owl nest patches. However, other conservation areas are modeled and must be field verified based on HCP strategies, such as riparian areas or unstable slopes. There is naturally some adjustment to the location, absence, or presence of conservation areas upon field verification. This timber sale has been field verified for compliance with all conservation objectives and the planned harvest units are determined not to be regeneration harvest deferred and are available for harvest. These harvest areas also do not count towards the

attainment of older-forests over time and have been excluded from the calculations and tables included in the landscape assessment. Conversely, when field verification identifies specific areas required for conservation, they will be protected from harvest and included in future conservation area modeling.

The landscape assessment demonstrates that while the South Puget HCP Planning Unit does not currently contain 10 to 15 percent older-forest conditions, the structurally complex and other suitable stands designated to be managed for older-forest targets are projected to develop into older-forest structure that meets or exceeds this threshold by 2090 (S. PUGET in Table A) through implementation of the HCP and other policies and laws. Stands identified to be managed toward older-forest targets, including currently older-forests and stands projected to develop older-forest structure in the future, are depicted in associated maps within the landscape assessment document for each western Washington HCP planning unit.

Table A. Percent area western Washington HCP planning units with older-forest stands in conservation areas by decade through 2120. With plot discounts and disturbance factor. Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington, May 2024 (Revised September 2024).

ADJUSTED QUERY OUTPUT (WITH PLOT DISCOUNT & DISTURBANCE FACTOR)											
HCP Planning Unit	**Year**										
	2021	**2030**	**2040**	**2050**	**2060**	**2070**	**2080**	**2090**	**2100**	**2110**	**2120**
COLUMBIA	1.0%	1.2%	1.4%	1.7%	2.4%	3.9%	6.2%	9.4%	**13.3%**	**16.5%**	**18.2%**
N. PUGET	3.2%	3.9%	4.9%	6.2%	7.9%	**10.2%**	**13.2%**	**16.7%**	**20.5%**	**23.9%**	**25.0%**
OESF	**10.2%**	**10.7%**	**11.0%**	**11.7%**	**12.6%**	**13.9%**	**15.9%**	**20.0%**	**24.9%**	**28.3%**	**29.5%**
S. COAST	0.2%	0.3%	0.6%	1.2%	2.1%	3.6%	5.9%	8.8%	**12.2%**	**15.9%**	**18.6%**
S. PUGET	1.7%	2.2%	2.7%	3.6%	4.6%	6.1%	8.4%	**11.3%**	**14.4%**	**17.1%**	**18.7%**
STRAITS	1.9%	2.6%	3.2%	4.3%	5.6%	7.4%	9.9%	**12.6%**	**15.1%**	**18.0%**	**19.5%**

DNR has designated forest stand acreage within regeneration harvest deferred areas in each HCP planning unit to meet or exceed the policy's 10% older-forest target. This identified acreage is designated in DNR's GIS database as the Westside Forest Cover (Conservation Areas) and Older-Forest in Conservation Areas layers.

The Rockit Launch SWT Timber Sale is not identified as one of those stands designated to meet older-forest targets 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 harvest units.

c. *Briefly describe any specific mitigation measures proposed, in addition to the mitigation provided by plans and programs listed under question A-13-b.*
Rule identified landforms according to the Forest Practices Board Manual have been identified and protected. Potentially unstable slopes were excluded from this proposal. See documents listed under A-8.

d. Based on the answers in questions A-13-a through A-13-c, is it likely potential impacts from this proposal could contribute to any environmental concerns listed in question A-13-a?
It is not anticipated that this proposal will contribute to any environmental concerns.

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

WAU Name	Total WAU Acres	DNR-managed WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven-aged harvest in the future	Acres of proposed harvest on non-DNR-managed lands currently under active FP permits
GOAT LAKE	10180	272	0	83	34
REESE CREEK	19011	11958	468	527	342

Data as of 8/26/2024 obtained from the agency's Land Resource Manager system.

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

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:	GOAT LAKE
WAU Acres:	10180
Elevation Range:	1712 - 6047 ft.
Mean Elevation:	3229 ft.
Average Precipitation:	78 in./year
Primary Forest Vegetation Zone:	Western Hemlock

WAU:	REESE CREEK
WAU Acres:	19011
Elevation Range:	1200 - 4338 ft.
Mean Elevation:	2003 ft.
Average Precipitation:	72 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)?
75%

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
5241	CINDERY SANDY LOAM
9136	GRAVELLY LOAM
2523	LOAMY SAND
2522	LOAMY SAND
0484	V.CINDERY LOAMY SAND

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.*
The unstable slopes review included published landslide inventories as a screening tool. Landslide inventories come from many different projects including published geologic mapping, watershed analyses, landscape planning, landslide hazard zonation, and other case studies and mapping efforts. Other than the Washington Geology Survey landslide inventory, most of these landslide data sources predate lidar availability. A large majority of remotely identified landslides have not been verified in the field and were mapped with various levels of certainty. Dormant and relict deep-seated landslides are included in many databases. Landslide inventories are used as screening tools. 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. These datasets are not intended as substitutes for a detailed investigation of potential slope instability by qualified practitioners. Site-specific analysis by a qualified practitioner may result in conclusions that are different from the information available in the screening tools.

Available landslide inventories and other remote screening tools were reviewed for this

proposal by slope stability trained foresters and state lands geologists. Potentially unstable, rule identified landforms (RILs) around the harvest were identified by slope stability trained foresters and a licensed engineering geologist (LEG) through office and field review in accordance with the Washington State Forest Practices rules. Adjacent to the proposed units there is a Channel Migration Zone (CMZ) along the Nisqually River, alluvial fans, and inner gorges which have been excluded from harvest and are outside the timber sale.

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

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

2) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
   - **Rule-identified landforms with potential to deliver sediment to a public resource are excluded from the proposed harvest area.**
   - **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 the stable forest floor.**
   - **Remote and field reviews were conducted by a licensed State Lands Geologist and professional foresters to ensure that all other identified potentially unstable slopes that were interpreted as having potential to adversely impact public resources or public safety were excluded from the harvest areas. See associated Geologic Field Summary for the Rockit Launch SWT Timber Harvest, Lewis County, Pierce County, Washington, dated 8/1/2024.**

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: **1.3**
Approx. acreage new landings: **5**
Fill Source: **On site material and Zig Zag Pit.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Yes. Some erosion could occur as a result of building new roads, installing culverts, and hauling timber.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*
Approximately 0% 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.)
The timber sale contract, including a detailed Road Plan, ensure the following:
- **50-foot equipment exclusion zones along Type 1, 3, 4 streams, and wetlands >0.25 acres.**

- **Non self-leveling ground-based harvesting may only be utilized on slopes measuring 45 percent and less. Ground based equipment will be suspended when potential for excessive soil disturbance exists.**
- **Road work was designed to protect streams and wetlands from sediment delivery.**
- **Roads will be crowned, ditched and cross-drained, and existing cross-drains will be maintained.**
- **Road construction and harvesting operations are restricted during saturated soil conditions to avoid excessive rutting.**
- **Drainage control devices such as rolling drain dips, stream crossing and cross drain culverts (including energy dissipaters), and water bars may be utilized to allow for proper drainage.**
- **Skid trails may be water barred post-harvest activities, if necessary, to avoid concentrating surface water runoff.**
- **There will be periodic maintenance and inspection of the road system to ensure proper drainage.**
- **A detailed plan of operations will be developed by the Purchaser and approved by the Contract Administrator prior to commencing operations.**
- **The lead end of logs will be suspended during yarding operations.**

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.
None known.

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.

Units # 1-9 will remain a fully stocked stand, and as a result from the thinning, continue to sequester carbon 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: **Nisqually River, Alder Lake**

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)
Nisqually River (shoreline of the state)	**1**	**1**	**162-managed***
Stream	**3**	**7**	**180-managed**
Stream	**4**	**6**	**100-managed**
Wetland	**>1 Acre**	**4**	**180-managed**
Wetland	**<1 Acre**	**1**	**100-managed**

*The channel migration zone (CMZ) of the Nisqually River was delineated by a licensed engineering geologist and qualified expert. The RMZ distance of 162 feet on the Nisqually River was measured starting at the outer edge of the CMZ for Units 3 and 4.

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers.
Streams adjacent to this proposal were identified during field reconnaissance. The stream types were determined using physical stream characteristics according to DNR's Trust Forestland Habitat Conservation Plan (HCP) water typing system. Refer to the associated timber sale map for stream type and locations.

Road-related protection measures for this proposal include preventing silt-bearing runoff from entering any streams and prohibiting organic debris or waste material from being placed within 100 feet of a live stream.

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 in the table above, with the exception of the managed (thinned) Type 1, 3, and 4 stream RMZs in Units 1, 3, 4, 5, 6, 7, 8, and 9.

The RMZs on Type 1, 3, and 4 streams associated with Units 1, 3, 4, 5, 6, 7, 8, and 9 will be managed according to DNR's Riparian Forest Restoration Strategy (RFRS) beyond a no-cut 25-foot zone. An additional 25 feet equipment exclusion zone from the inside of the managed RMZ is implemented. The harvest activities within the RMZ will be small wood thinning to a residual relative density (RD) of 35 in Units 1, 3, 4, 6, and 8 and RD 37 in Units 2, 5, 7, and 9. In addition, five trees per acre on average in the managed buffer will be felled towards the streams (some may fall within the no-cut 25 foot zone) for down woody debris (DWD) recruitment, for a total of 269 DWD as part of the RFRS.

Harvest will occur within 200 feet of wetlands but beyond the buffer distances listed in the table above, with the exception of the managed WMZs in Units 1, 2, 8, and 9. Wetlands >0.25 acres will be protected with a 50-foot equipment exclusion zone inside of the managed WMZ.

If equipment crossings are needed during work in Type 5 streams, they will be approved by the Contract Administrator prior to beginning work. Type 5 streams have 30-foot equipment limitation zones (ELZs), except crossing locations approved by the Contract Administrator to help protect stream integrity.

Timber associated with the construction of the temporary 2-1 Road will be removed in ROW Unit 10 across a Type 4 stream. A Type 4 stream's 100-year-floodplain diverges above the temporary 2-1 Road and a temporary culvert will be installed at each crossing of the road. These culverts will be removed with abandonment of the spur road upon completion of the harvest.

Refer to the associated timber sale map for stream types and locations.

Bridge maintenance cleaning will occur prior to, during, and after timber haul.

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:*
Streams will be temporarily diverted around road crossing locations during culvert installations if water is present.

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

☒ *No* ☐ *Yes, describe activity and location:*

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:*
Bridge cleaning will occur with measures in place to prevent sediment from entering streams. 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)?*
GOAT LAKE = 3.2 (mi./sq. mi.), REESE CREEK = 4.9 (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 WAUs 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 WAUs. 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 WAUs; this indicates those channels historically experience higher water levels and peak flows

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

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

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

☐ *No* ☒ *Yes, describe the water resource(s):*
Nisqually River is immediately downstream of Units 3 and 4, and approximately 1,100 feet downstream of Units 1 and 2. Based on protection measures outlined in B.1.d.5., and B.3.a.16., no measurable impacts are anticipated.

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

☒ *No* ☐ *Yes, describe possible impacts:*

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.*
Cross drain culverts have been designed and will be installed to direct ditch water onto the forest floor prior to entering surface water. Road maintenance and abandonment will reduce the risk of potential negative effects on water quality and flow. Type 5 streams are protected by Equipment Limitation Zones. Designated crossings may be allowed on Type 5 streams. Bank and channel protection and cleanout is required. Based on the protection measures outlined in B.1.d.2 and B.1.h, no measurable impacts are anticipated.

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. See B.1.h.

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:*
Alder Lake is approximately 12 miles downstream.

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, and B-3-c-2.

4. Plants

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

☒ Deciduous tree:

☒ Red Alder ☐ Aspen ☐ *Birch* ☒ *Black Cottonwood* ☒ Bigleaf Maple ☐ *Western Larch*

☒ Other: **vine maple**

☒ 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:* ***Creeping barberry, ocean spray***

☒ *Ferns:*

☒ *Western bracken* ☒ *Oak* ☒ *Lady* ☒ *Licorice* ☒*Sword* ☒ *Deer*

☒ *Other:* ***Maidenhair***

☒ Grass

☐ Pasture

☐ Crop or Grain

☐ *Orchards* ☐ *Vineyard* ☐ *Other Permanent Crops*

☒ Wet Soil Plants:

☐ Bullrush ☐ Buttercup ☐ Cattail ☒ *Devil's Club* ☒ Skunk Cabbage

☒ Other: ***horse tail, pacific water parsley, slough sedge***

☐ Water plants:

☐ Eelgrass ☐ Milfoil ☐ Water Lily

☐ Other:

☒ Other types of vegetation: ***boxwood, vanilla leaf, trillium***

☐ *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).*

Approximately 1,806 MBF of primarily Douglas-fir and western hemlock will be removed as part of the Rockit Launch SWT Timber Sale. The age of the timber is approximately 44 years old. Understory vegetation within the harvest units may be disturbed or damaged during the felling and yarding process. Units 1, 3, 4, 6, and 8 will be harvested following a thinning prescription with a target residual relative density of 35, with a diameter cap of 18 inches at breast height. Units 2, 5, 7, and 9 will be harvested following a thinning prescription with a target residual relative density of 37, with a diameter cap of 20 inches at breast height. Within Units 1, 3, 4, 5, 6, 7, 8, and 9, 269 trees are designated for structure creation as part of the RMZ thinning prescription following DNR's HCP RFRS. These 269 trees will be felled into, or towards streams and wetlands for Down Woody Debris recruitment. No timber will be removed or understory vegetation disturbed in the conservation areas.

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:

Northern boundary- Douglas fir stand with 1910-1920's origin
Eastern boundary- Private property
Southern boundary- WMZ and hardwood stand with 1980's origin
Western boundary- RMZ with heavy hardwood component

Unit 2:

Northern boundary- Private
Eastern boundary- Douglas-fir and hardwoods with 1980's origin
Southern boundary- Douglas-fir and hardwoods with 1970-1980's origin
Western boundary- Private property

Unit 3:

Northern boundary- Channel migration zone of Nisqually River
Eastern boundary- Douglas-fir stand with 1894 origin
Southern boundary- Douglas-fir stand with 1970-1980's origin
Western boundary- Douglas-fir stand with 1980-1990's origin

Unit 4:

Northern boundary- Channel migration zone of Nisqually River
Eastern boundary- Kernahan Road
Southern boundary- Douglas-fir stand with 1890 origin
Western boundary- Douglas-fir stand with 1890 origin

Unit 5:

Northern boundary- Douglas-fir stand with late 1990's-2002 origin
Eastern boundary- Douglas-fir stand with late 1990's-2002 origin
Southern boundary- RMZ with Douglas-fir and hardwood stand with 1970's origin
Western boundary- RMZ with Douglas-fir and hardwood stand with 1970's origin

Unit 6:

Northern boundary- RMZ with Douglas-fir and hardwood stand with 1970's origin
Eastern boundary- Hardwood stand with Douglas-fir with 1970's origin
Southern boundary- Hardwood stand with Douglas-fir with 1970's origin, and mature Douglas-fir stand with 1890's origin
Western boundary- Douglas-fir stand with 1880's origin

Unit 7:

Northern boundary- RMZ made up of hardwood stand
Eastern boundary- RMZ with Douglas-fir stand with 1970-1980's origin
Southern boundary- 2 Road, then Incline Timber Sale Douglas-fir planted 2012
Western boundary- RMZ with hardwood, and Douglas-fir with 1880's origin

Unit 8:

Northern boundary- RMZ with hardwood and Douglas-fir with 1960-1970's

origin
Eastern boundary- Forested wetland/hardwood
Southern boundary- 2 Road, then Incline Timber Sale planted 2012
Western boundary- RMZ with Douglas-fir stand with 1970-1980's origin

Unit 9:
Northern boundary- Forested wetland/hardwood
Eastern boundary- Non-forested wetland, and Ducky Timber Sale planted 1991
Southern boundary- 2 Road, then recently harvested Ham Hock Timber Sale Unit 1.
Western boundary- Douglas-fir stand with 1970's origin

Unit 10 (ROW):
Surrounded by Units 8 and 9.

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:
Units 1, 3, 4, 6, and 8 will be harvested following a thinning prescription with a target residual relative density of 35. Units 2, 5, 7, and 9 will be harvested following a thinning prescription with a target residual relative density of 37. Trees will be selected for harvest throughout the diameter range of the stand, however no trees over 18 inches DBH will be harvested in Units 1, 3, 4, 6, 8 and no trees over 20 inches DBH in Units 2, 5, 7, and 9. This thinning prescription also includes structure creation which will be accomplished by falling 269 trees for Down Woody Debris recruitment and converting 14 trees to snags.

e. List all noxious weeds and invasive species known to be on or near the site.
There is woodland groundsel, oxeye daisy, Scotch broom, and false dandelion on or near the site.

5. Animals

a. List any birds and other animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site. Examples include:
birds:
☒ eagle ☒ hawk ☒ heron ☒ *owls* ☒ songbirds
☒ other: **sapsucker, pileated woodpecker, Stellars jay, pacific wren, ruffed grouse, barred owl, western flycatcher, dark eyed junco, red breasted nuthatch, black capped chickadee**
mammals:
☒ bear ☒beaver ☒ *coyote* ☒ *cougar* ☒ deer ☒ elk
☒ other: **Northern flying-squirrel, Douglas-squirrel, deer mouse, bobcat**, **mountain beaver**
fish:
☐ bass ☐ herring ☐ salmon ☐ shellfish ☒ trout
☐ other:
*amphibians/reptiles***:**

☒ *frog* ☒ *lizard* ☒ *salamander* ☒ *snake* ☐ *turtle*
☐ *other*:
unique habitats:
☐ *balds* ☐ *caves* ☐ *cliffs* ☐ *mineral springs* ☐ *oak woodlands* ☐ *talus slopes*
☐ other:

b. List any threatened and endangered species known to be on or near the site (*include federal- and state-listed species)*.
This proposal is within the Elbe Hills and Tahoma Spotted Owl Management Units (SOMU) and is managed for northern spotted habitat. No northern spotted owls are known to be or have been observed on or near this site.

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: **Riparian and Wetland**
Protection Measures: **HCP RMZ and WMZ buffers that contribute towards the conservation areas. This timber sale proposal conforms to commitments under the 1997 DNR Habitat Conservation Plan (HCP). Specific to this proposal is the riparian forest restoration strategy to conserve and protect habitat for species that are dependent on aquatic and riparian habitat and preserve long-term site productivity through the maintenance of forest processes. There are 59 acres of riparian thinning associated with this proposal and 269 trees will be felled to contribute to down woody debris to improve habitat. See associated Rockit Launch SWT Timber Sale Wildlife and Riparian Forest Habitat Assessment Memo, dated 8/1/2024.**

Species /Habitat: **Upland**
Protection Measures: **Small wood thinning Units 1, 3, 4, 6, and 8 will be harvested following a thinning prescription with a target residual relative density of 35 with an upper diameter limit of 18 inches DBH has been set to retain the dominant conifer while a lower diameter limit of 7" has been set to retain the established shade tolerant understory. Units 2, 5, 7, and 9 will be harvested following a thinning prescription with a target residual relative density of 37 with an upper diameter limit of 18 inches DBH has been set to retain the dominant conifer while a lower diameter limit of 7" has been set to retain the established shade tolerant understory. The habitat enhancement treatment is designed to provide an assortment of light regimes intended to stimulate understory/midstory development and influence overstory canopy architecture (growth from the top down). The increased light in the stand will stimulate the growth of large**

ungulates' forage including huckleberry, vine maple, big-leaf maple, salmonberry, western redcedar, forbs and grasses.

Species /Habitat: **Northern Spotted Owl**
Protection Measures: **The Rockit Launch SWT timber sale proposal is located within the Elbe Hills and Tahoma Spotted Owl Management Units (SOMU), which is within a designated Dispersal Management Area within the South Puget HCP planning unit. The proposal objective is to accelerate the stands' trajectory towards higher quality NSO habitat and enhance habitat components such as structure creation. The Elbe Hills SOMU is at 56.9 percent total NSO habitat and this proposal will remove 12.9 acres of NSO habitat. The Elbe Hills SOMU will be at 56.9 percent total NSO habitat post-harvest as of 7/29/2024. The Tahoma SOMU is at 52.7 percent total NSO habitat and this proposal will remove 127.3 acres of NSO habitat. The Tahoma SOMU will be at 52.3 percent total NSO habitat post-harvest as of 7/29/2024. This proposed harvest includes non-habitat and movement plus habitat and will accelerate all areas to become higher quality NSO. Following harvest, flying squirrel nest boxes will be installed to increase population of the NSO's primary food source.**

e. List any invasive animal species known to be on or near the site.
Barred owl (Strix varia)

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Petroleum fuel (diesel or gasoline) will be used for heavy equipment during active road building, timber harvest operations, and for transportation. No energy sources will be needed following project completion.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None.

7. Environmental health

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

1) Describe any known or possible contamination at the site from present or past uses.
None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
None known.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
Petroleum-based fuel and lubricants may be used and stored on site during the operating life of this project.

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

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

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

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
There will be short term, low level and high level noise created by the use of harvesting equipment and hauling operations within the proposal area. This type of noise has been historically present in this geographical area.

3) Proposed measures to reduce or control noise impacts, if any:
None.

8. Land and shoreline use

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

Forest Land. Private residential properties are located adjacent to this proposal. 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 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?
Forest Resources Zone.

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

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?
The proposal may be visible from some nearby forest roads.

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:*
State Route 706 and Kernahan Road

2) *How will this proposal affect any views described above?*
The stand will remain fully stocked in Units 1-9, but the canopy will have somewhat larger openings as a result of the thinning harvest prescription.

c. Proposed measures to reduce or control aesthetic impacts, if any:
None.

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?
There are no recreation facilities or designated trails within the proposal area. Hunting, hiking, horseback riding, mountain biking, mushroom and berry picking and other dispersed outdoor recreation activities may occur within the proposal area.

b. Would the proposed project displace any existing recreational uses? If so, describe.
There may be some disruptions to recreational use during periods of harvesting and hauling.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
"Caution" and "Active Timber Harvest" signs will be posted on roads in the vicinity during active operations. No work will occur on weekends or State recognized holidays without prior Contract Administrator approval.

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.
Yes, there are sites within and adjacent to the proposal. One site within the proposal is not eligible for listing in state or national registers. Another which has not been evaluated is outside the proposal area.

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.
See B.13.a.

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.
The site was remotely assessed by a DNR Cultural Resource Technician, reviewing GLO and Historic maps, and existing recorded historical sites that have been recorded by DAHP. A DNR Archaeologist and Cultural Resource Technician conducted a field review of the sale area.

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

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
The haul route will utilize DNR forest roads and County Road 390, accessed from Kernahan Road and State Route 706.

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 27 miles away.

c. 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.

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

e. 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.

f. 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.

g. 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**

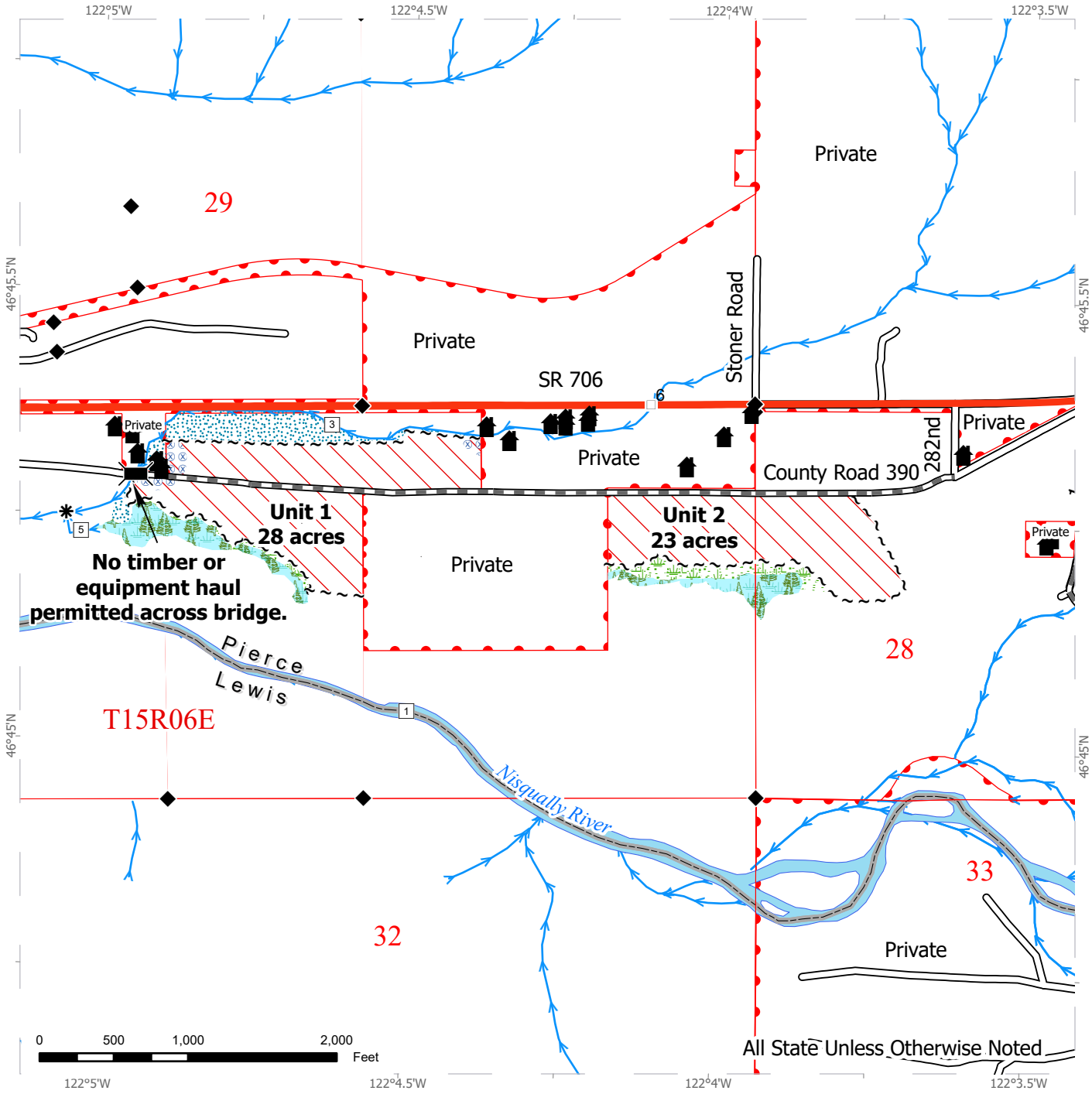
Date Submitted: 11/1/2024

A M 11/1/2024

TIMBER SALE MAP

SALE NAME: ROCKIT LAUNCH SWT
AGREEMENT#: 30-106713
TOWNSHIP(S): T14R6E, T15R6E
TRUST(S): Common School and Indemnity (3), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Lewis, Pierce
ELEVATION RGE: 1600-2080



- Sale Area
- Timber Sale Boundary Tags
- Property Line
- Highway
- Existing Roads
- Required Pre-Haul Maintenance
- Streams
- Forested Wetland
- Wetland Mgt Zone
- Riparian Mgt Zone
- Hazard Abatement Area
- County Boundaries
- Survey Monument
- Stream Type
- Stream Break
- Bridge
- Structure

Prepared By: kfry490

Modification Date: kfry490 10/28/2024

TIMBER SALE MAP

SALE NAME: ROCKIT LAUNCH SWT
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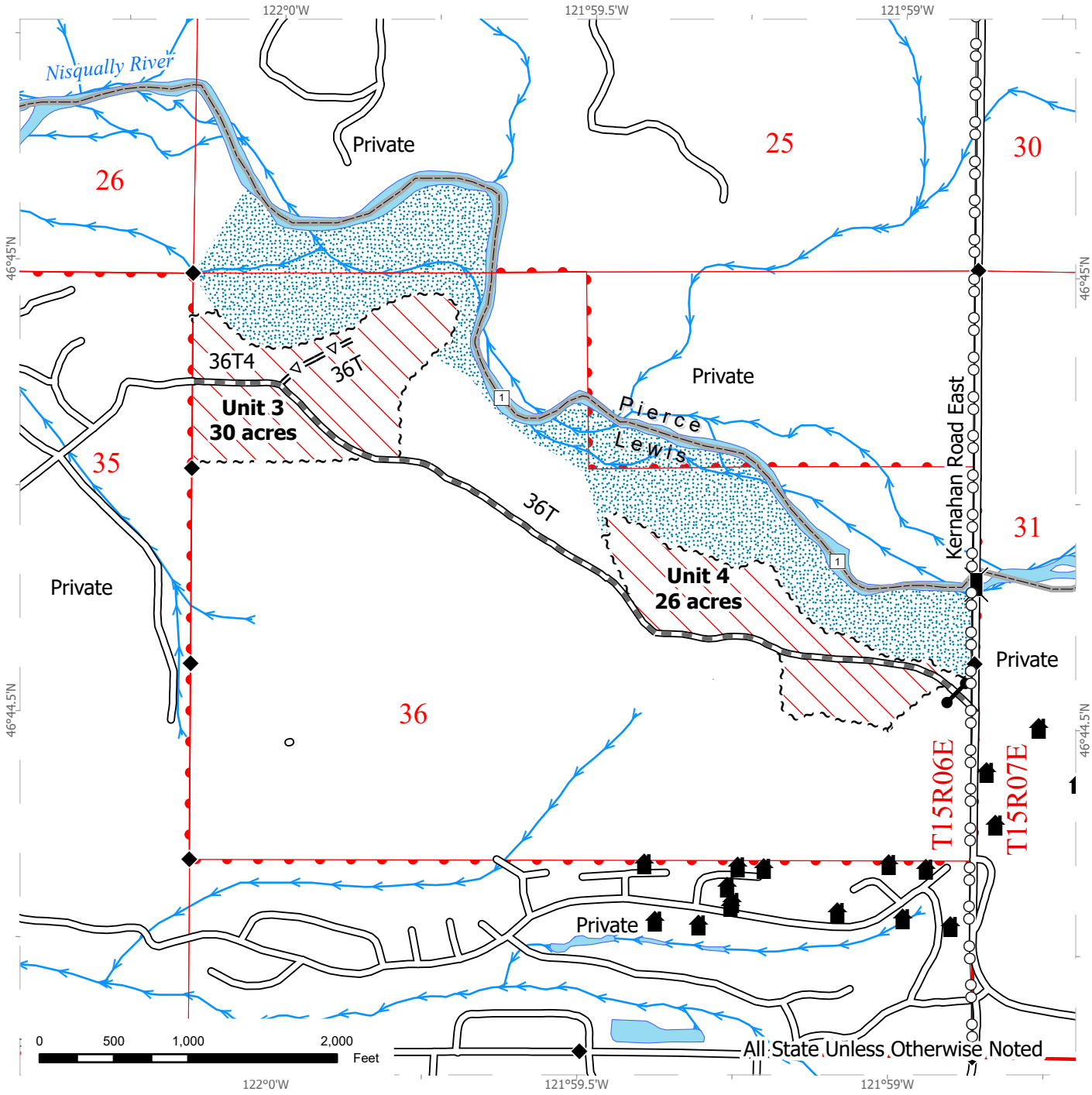

Sale Area
Timber Sale Boundary Tags
Property Line
Existing Roads
Required Pre-Haul Maintenance
Optional Pre-Haul Maintenance
Streams
Riparian Mgt Zone
County Boundaries
Survey Monument
Stream Type
Power Lines
Bridge
Gate
Structure
N

Prepared By: kfry490

Modification Date: kfry490 10/28/2024

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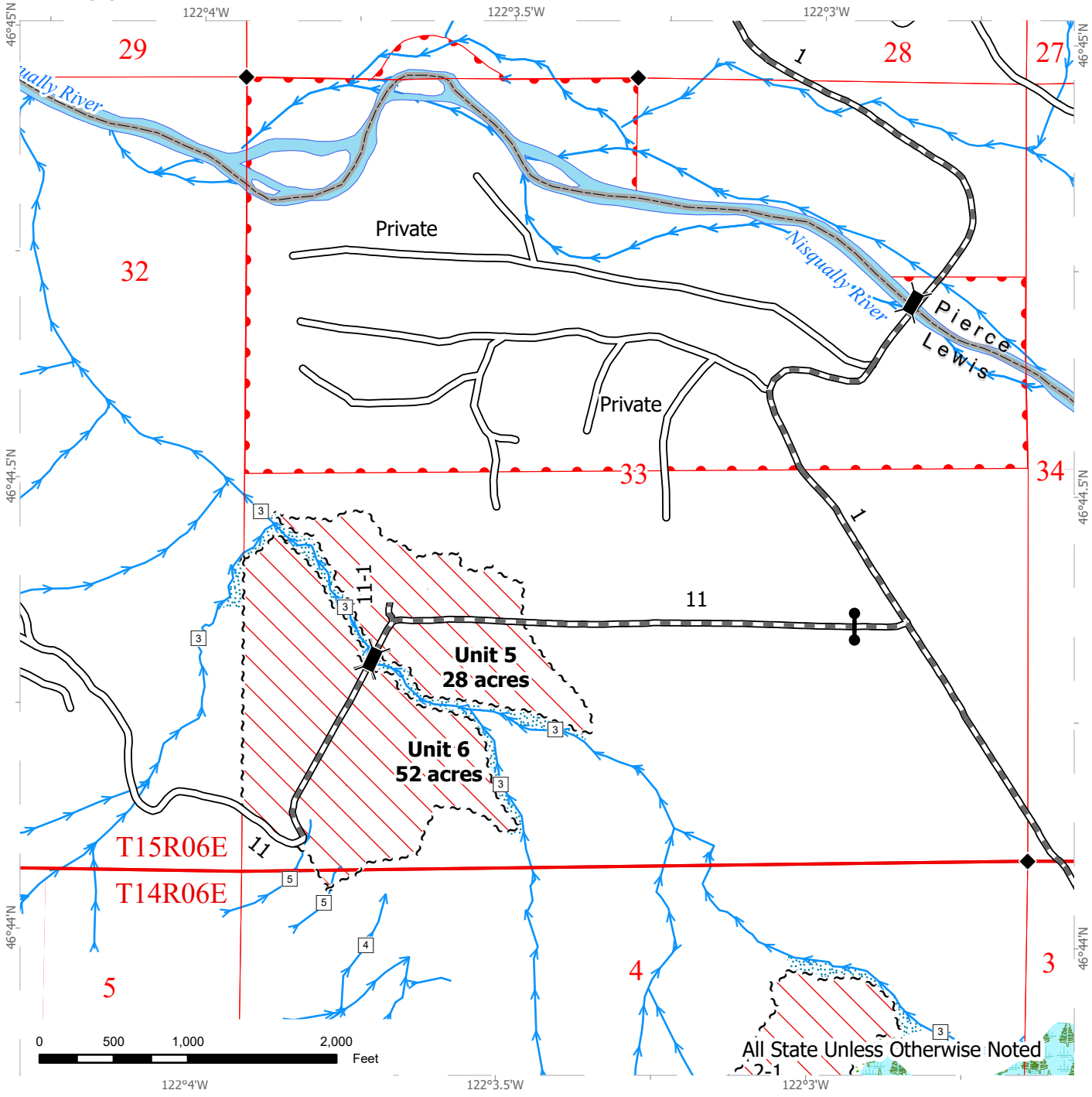

Sale Area
Timber Sale Boundary Tags
Right of Way Tags
Existing Roads
Required Pre-Haul Maintenance
Optional Construction
Streams
Forested Wetland
Wetland Mgt Zone
Riparian Mgt Zone
County Boundaries
Survey Monument
Stream Type
Bridge
Gate
N

Prepared By: kfry490
Modification Date: kfry490 10/28/2024

TIMBER SALE MAP

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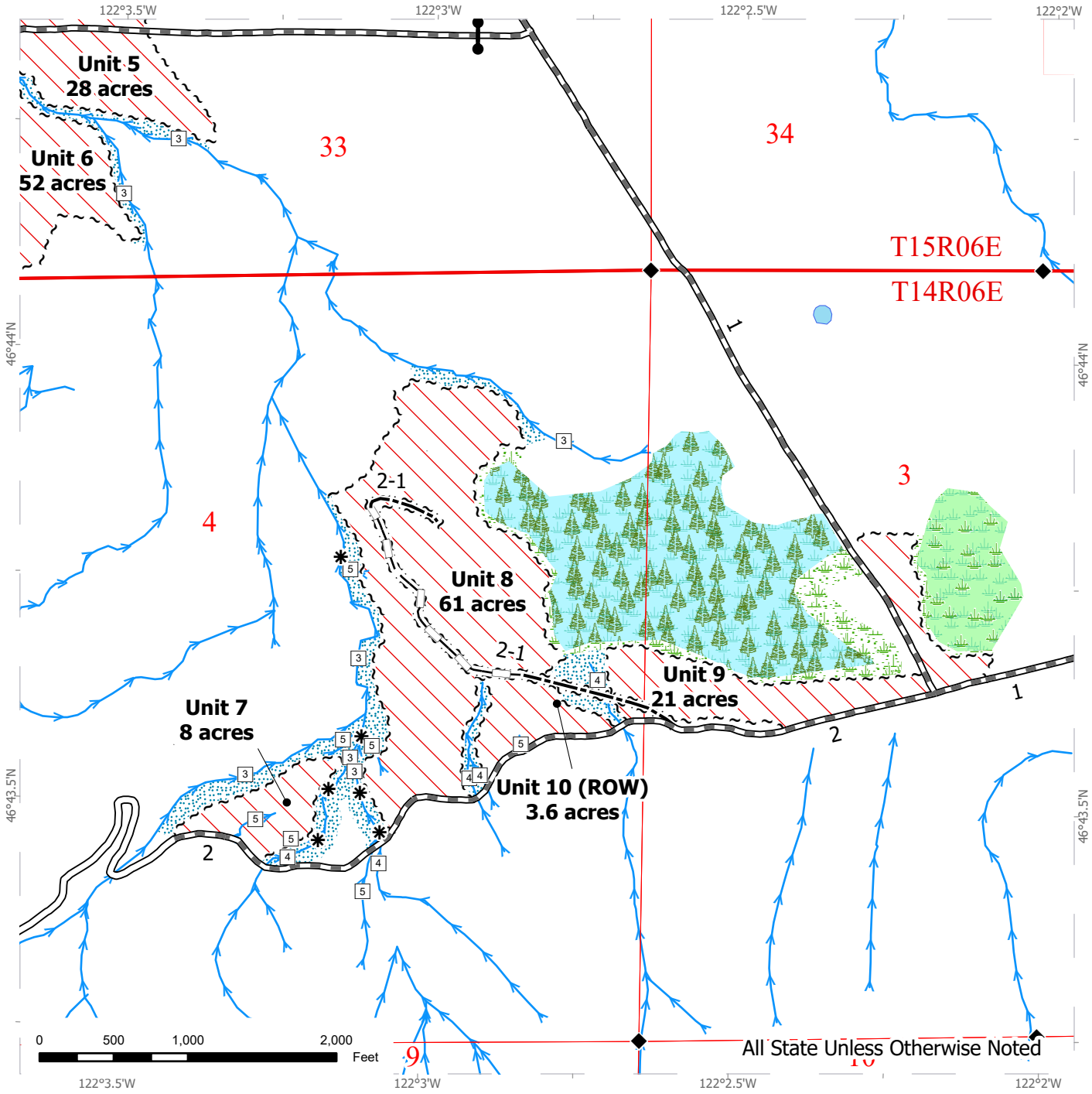


- Sale Area
- Timber Sale Boundary Tags
- Right of Way Tags
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Optional Reconstruction
- Streams
- Wetlands - Non-forested
- Forested Wetland
- Wetland Mgt Zone
- Riparian Mgt Zone
- County Boundaries
- Survey Monument
- Stream Type
- Stream Break
- Gate

N

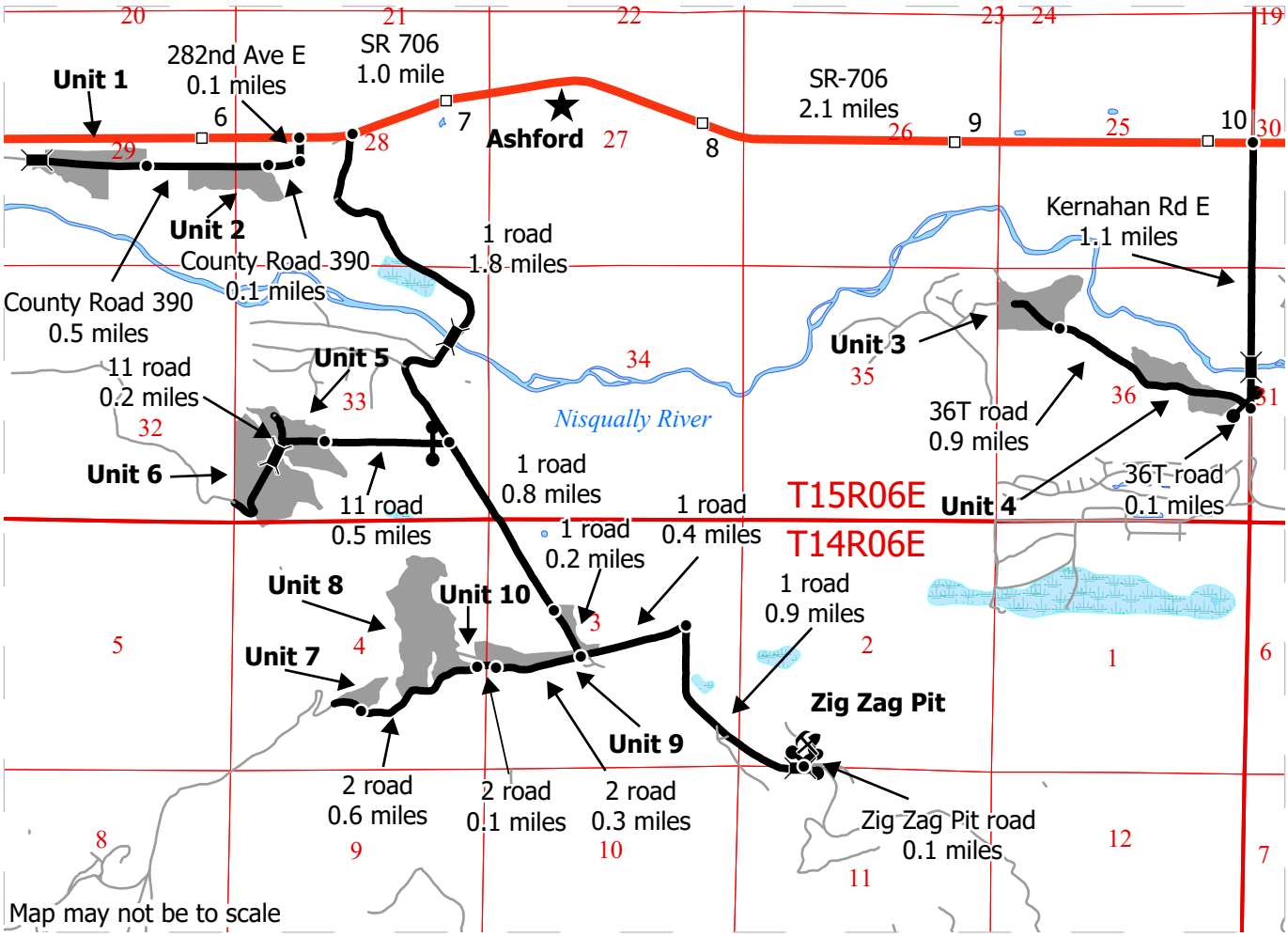
Prepared By: kfry490

Modification Date: kfry490 10/28/2024

DRIVING MAP

SALE NAME: ROCKIT LAUNCH SWT
AGREEMENT#: 30-106713
TOWNSHIP(S): T14R6E, T15R6E
TRUST(S): Common School and Indemnity (3), State Forest Transfer (1)

REGION: South Puget Sound Region
COUNTY(S): Lewis, Pierce
ELEVATION RGE: 1600-2080



- Sale Area
- Highway
- Haul Route
- Other Route
- Milepost Marker
- Distance Indicator
- Bridge
- Gate (383)
- Rock Pit
- Town
- Public Land Survey Townships
- Public Land Survey Sections

DRIVING DIRECTIONS:

Units 1 and 2:
From Ashford follow SR-706 west for 1 mile. Turn left onto 282nd Ave E and follow for 0.1 miles. Turn right onto County Road 390 and follow for 0.1 miles to reach Unit 2. Continue on County Road 390 for 0.5 miles to reach Unit 1.

Units 3 and 4:
From Ashford follow SR-706 east for 2.1 miles. Turn right onto Kernahan Rd E and follow for 1.1 miles. Turn right onto the 36T road and follow for 0.1 miles to reach Unit 4. Continue on the 36T road for 0.9 miles to reach Unit 3.

Units 5 and 6:
From Ashford follow SR-706 west for 1 mile. Turn left onto the 1 road and follow for 1.8 miles. Turn right onto the 11 road and follow for 0.5 miles to reach Unit 5. Continue on the 11 road for 0.2 miles to reach Unit 6.

Units 7, 8, 9, and 10:
From the junction of the 1 and 11 roads, continue on the 1 road for 0.8 miles to reach Unit 9. Continue on the 1 road for 0.2 miles. Turn right on the 2 road and follow for 0.3 miles to reach Unit 10. Continue on the 2 road for 0.1 miles to reach Unit 8. Continue on the 2 road for another 0.6 miles to reach Unit 7.

Zig Zag Pit:
From the junction of the 1 and 2 roads, turn left to continue on the 1 road for 0.4 miles. Turn right to continue on the 1 road for another 0.9 miles. Turn left onto Zig Zag Pit road and follow for 0.1 miles to reach Zig Zag Pit.

N

Prepared By: kfry490

Modification Date: kfry490 10/28/2024