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: **MALADJUSTED**
Agreement # **30-106773**

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

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

Mark Benner
Department of Natural Resources
411 Tillicum Lane
Forks, WA 98331
(360) 374-2800

4. Date checklist prepared: **07/15/2024**

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

6. Proposed timing or schedule (including phasing, if applicable):
a. *Auction Date:*
12/18/2024

b. *Planned contract end date (but may be extended):*
10/31/2026

c. Phasing:
None

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
☐ *No, go to question 8.* ☒ *Yes, identify any plans under A-7-a through A-7-d:*

a. Site Preparation:
For units 1-5: Assessment for treatment will occur after completion of harvest. Site preparation including a chemical herbicide application, may be used to ensure that planting is successful at acceptable levels to meet or exceed Forest Practice standards.

b. Regeneration Method:
Units 1-5 will be hand planted with native species seedlings following harvest.

b. Vegetation Management:
A continued assessment of units to determine future vegetation management strategy will be required. Treatments will be based on vegetative competition and will ensure a free-to-grow status that complies with Forest Practice standards.

d. Other:
Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, grading as necessary, and rock pit development. Piled material within the harvest unit may be sold for firewood, bio-fuel, or burned after completion of harvest.

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*: **Leland Creek, Big Quilcene River**

☒ *temp*

☐ *sediment*

☐ *completed TMDL (total maximum daily load)*

☐ *Landscape plan:*

☒ *Watershed analysis:* **Big Quilcene**

☐ *Interdisciplinary team (ID Team) report:*

☒ *Road design plan:* **Dated 7/12/2024**

☐ *Wildlife report:*

☐ *Geotechnical report:*

☒ *Other specialist report(s):* **Washington Natural Heritage Program Site Survey, State Pathologist Site Visit Memo, West Side Stand Development Stage Form**

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

☐ *Rock pit plan:*

☒ *Other:* **Special Concerns Reports, NSO Map, Alternative Leave Tree Plan Maladjusted Unit 4, Protocol Survey OL-17-11-0173, Protocol Survey OL-17-12-0147, Road Use Permit with Rayonier**

The following analyses, policies, procedures, documents, and data layers directly pertain to or were reviewed as part of this proposal and are incorporated by reference:

- **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 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 GIS Layer**
    - **Marbled Murrelet Habitat GIS Layer**
    - **WAU Rain-On-Snow GIS Layer and Reports**
    - **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 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 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**
    - **Stand Development Stage Assessment form**

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 #* _____ ☐ *FPHP* ☒ *Board of Natural Resources Approval*
☐ *Burning permit* ☐ *Shoreline permit* ☐ *Existing HPA*
☐ *Other:*

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

a. Complete proposal description:

The Maladjusted timber sale includes 5 variable retention harvest (VRH) units and one right-of-way (ROW) totaling 122 net harvest acres. The cruised volume is 3097 MBF. The sale area can be harvested using ground equipment, shovel, feller buncher, and forwarder. All units are shovel only with forwarders allowed on designated skid trail and seasonally restricted in harvest timing. The initial proposal area evaluated for harvest encompassed 181.5 acres. The 58.9 acres excluded from harvest include 34.6 acres of Riparian Management Zones (RMZ) and Unstable Slope Protections, 15 acres of Wetland Management Zones (WMZs), 0.9 acres of other (poor access ground & monument protection), 1 acre of existing roads, and 7.7 acres of leave tree areas. The proposal also includes 19,855 feet of required pre-haul maintenance, 1,805 feet of optional pre-haul maintenance, 385 feet of required construction, 780 feet of optional construction of forest roads. Road maintenance work will include roadside brushing, rocking, grading, ditch maintenance, and replacement of cross drains, as needed.

Unit	Gross Proposal (Acres)	Riparian Management Zones/Unstable Slope Protection (Acres)	Wetland Management Zones (Acres)	Other (Acres)	Existing Roads (Acres)	Leave Tree Area (Acres)	Net Harvest (Acres)
1	106.2	14.2	15		0.7	4.8	71.5
2	9	6.3				0.3	2.4
3	8.5			0.2		0.8	7.5
4	29	4			0.3	0.7	24
5	28	9.8		0.7		1.1	16.4
6 R/W	0.5						0.5
Totals	**181.2**	**34.6**	**15**	**0.9**	**1.0**	**7.7**	**122.3**

Unit 3, Other: Acres excluded due to monument protections and lack of merch timber.
Unit 5, Other: Acres excluded due to poor access.

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:

In the Maladjusted Timber Sale 122 net acres are being harvested, while 61 acres (34% of the proposal area) are being conserved from the overall proposal area that was evaluated for harvest. These conservation areas may include potentially unstable slopes, riparian and wetland management zones and other conservation areas. Many of these conservation areas are regeneration harvest deferred and will contribute to older-forests over time. The stage of stand development for the harvest areas within this proposal on the stand level scoring using the Van Pelt guide (Van Pelt 2007) includes areas of Biomass accumulation/Stem Exclusion and Maturation I, with a small area (<3 acres) of Maturation II.

Unit	Origin Date	Major Timber Species	MBF/acre	Slope (%)	Elevation Range (ft)
1	1959	Douglas fir (DF), western red cedar (RC), western hemlock (WH), grand fir (GF), red alder (RA), big leaf maple (BM)	31	15	320-520
2	1959	DF, RC, GF, RA	31	20	280-320
3	1961	DF, RC, GF, WH, BM, RA	15	25	560-640
4	1978	DF, RC, WH	16	30	640-840
5	1978	DF, RC, WH	17	30	640-800
6 R/W	1990	DF, RC, WH, RA	11	15	400-520

Type of Harvest:

Unit	Harvest Type (VDT/VRH/etc)	Volume to be Harvested (mbf)	Volume to be Harvested (%)	Individual Leave Trees	Clumped Leave Trees	Total Leave Trees
1	**VRH**	**2255**	**95**	**226**	**398**	**624**
2	**VRH**	**73**	**95**	**1**	**28**	**29**
3	**VRH**	**112**	**95**	**8**	**61**	**69**
4	**VRH**	**378**	**95**	**29**	**96**	**125***
5	**VRH**	**273**	**95**	**15**	**131**	**146**
6 R/W	**ROW**	**5**	**100**	**0**	**0**	**0**

***67 safe snags are to be manufactured in Unit 4 to supplement the leave tree total. See B.4.d**

Overall Unit Objectives:

The overall objectives for this sale include the production of saw logs, high value logs, poles, and pulp material to generate revenue for trusts while expediting the development of a more diverse multi-storied canopy layer in the future stand. This will be accomplished through the leave tree retention strategy and riparian management zones. These stands will be managed to protect site productivity and maintain the integrity and water quality of adjacent streams.

Ecological- Promote diverse forest structure across the landscape while preserving ecological integrity and function.

Economic- Generate revenue for the State trust beneficiaries.

Statute- Comply with the DNR's HCP, the Policy for Sustainable Forests, and Forest Practice Rules and Regulations.

Social- Accommodate dispersed informal recreational activities on DNR managed lands and identify and protect historical and archaeological sites consistent with state/federal law.

Additional objectives- Early rotation of Units 4 and 5 to address and manage presence of excessive root disease and grow/maintain a healthy productive forest while reducing continued financial loss to the Trust.

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		**1165**	**0.5**	**0**
Reconstruction		**0**		**0**
Maintenance		**21660**		**0**
Abandonment		**0**	**0**	**0**
Bridge Install/Replace	**0**			**0**
Stream Culvert Install/Replace (fish)	**0**			**0**
Stream Culvert Install/Replace (no fish)	**0**			
Cross-Drain Install/Replace	**6**			

*** Construction acreage based on 15-foot subgrade.**

Rock Pits: **Penny Pit**

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:* **T27-0N R2-0W S15, T28-0N R2-0W S25, T27-0N R2-0W S22, T28-0N R1-0W S30, T28-0N R2-0W S36**

b. *Distance and direction from nearest town:*

Units 1, 3 & 6 of the sale are located about 5 miles north of Quilcene.

From Quilcene head north on Center Valley Rd for 5.3 miles.
Turn left on Tarboo Lake Rd.
Continue up Tarboo Lake Rd for 0.5 mi to PT-L-1000 Rd and gate.
Continue through gate for 1.1 mi.

Unit 6 (R/W) is on the right and leads to Unit 3.
For Unit 1 continue 0.25 mi on PT-L-1000. Unit starts on right, and road goes into Unit.

Unit 2 of the sale is located about 5 miles north of Quilcene on Hwy 101.

For Unit 2: Head north on Hwy 101 from Quilcene for 5.2 mi to Rayonier S-1900.
Turn left on Rayonier S-1900 through gate.
Travel 0.3 mi to Spur, turn right on spur.
Unit is accessed via forwarding trail from end of spur.

Units 4 and 5 are located about 2 miles southwest of Quilcene.

For Units 4 & 5: From Quilcene head southwest on Hwy 104 for 1.2 mi to Penny Creek Rd.
Turn right on Penny Creek Rd.
Continue for 1.1 mi. Turn right on PT-Q-2000.
Continue for 1 mi. Unit 4 is on the left.
Continue 0.3 mi on left on PT-Q-2400 for Unit 5. Unit is on the left.

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).

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 "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."

This proposal is located within the Little Quil and Big Quil WAUs. Ownership across the WAUs includes large industrial forests, private land owners, federal lands, and Department of Natural Resources managed forests. Forested stands within the WAUs appear to be primarily second and third growth stands with some old growth stands. The number of forest practice activities shown on the WAU maps, along with observations within the WAUs indicate that the WAUs are intensively managed for timber production. Land uses within the WAU are trending toward conversion from forest and agriculture use to residential use. This trend is expected to continue on private lands. Lands that remain under DNR stewardship will continue to be managed as forestland.

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. plans) and current forest practice rules that provide/require mitigation to protect against potential impacts to environmental concerns listed in question A-13-a.

This proposal and all future management activities on DNR lands will be conducted in accordance with the DNR's Habitat Conservation Plan (HCP, 1997), the Policy for Sustainable Forests (2006), and Forest Practice Rules. The HCP is an agreement with the federal government that requires the DNR to manage the landscapes with the intent to preserve and enhance habitat. In accordance with its terms, the following applicable strategies are found to provide a conservation benefit for multiple species:

- **Deferring harvest from unstable slopes**
- **Establishing Riparian Management Zones (RMZs) along Type 3 & 4 streams.**
- **These RMZs also provide protection for stream temperature by retaining canopy cover which provides shade.**
- **Protecting Type 5 streams with leave trees.**
- **Establishing Wetland Management Zones (WMZs) around wetlands greater than 0.25 acres.**
- **Protecting uncommon habitats under the multispecies conservation strategy.**
- **Implementing strategies designed to protect the marbled murrelet and northern spotted owl.**
- **Retaining a minimum of eight leave trees per acre dispersed and aggregated throughout the harvest units and identifying and protecting dominant, large-diameter, and structurally unique trees as part of the leave tree strategy.**
- **Designing, constructing, and maintaining a road system in a manner that will minimize potential adverse effects on the environment.**

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 Straits 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 (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 Maladjusted 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.

All mitigation measures are clearly outlined in the HCP. No additional mitigation measures have been developed for this proposal.

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.

It is not likely potential impacts from this proposal will contribute to the environmental concerns listed in question A-13-a. DNR's HCP, the Policy for Sustainable Forests, and the Forest Practice rules substantially helps the Department to mitigate for cumulative effects related to management activities. These strategies have been incorporated in this proposal.

A Watershed Analysis has been completed for the Big Quilcene. The prescriptions have been screened and do not apply to this proposal.

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
LITTLE QUIL	27662	2487	253	177	881
BIG QUIL	57304	5087	353	217	50

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:	LITTLE QUIL
WAU Acres:	27662
Elevation Range:	0 - 6265 ft.
Mean Elevation:	1255 ft.
Average Precipitation:	45 in./year
Primary Forest Vegetation Zone:	Western Hemlock

WAU:	BIG QUIL
WAU Acres:	57304
Elevation Range:	0 - 7717 ft.
Mean Elevation:	2525 ft.
Average Precipitation:	56 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)?
39%

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
0048	GRAVELLY LOAM
2979	V.GRAVELLY SANDY LOAM
0972	GRAVELLY SILT LOAM
0052	GRAVELLY LOAM
2981	GRAVELLY LOAM/V.GRAVELLY SANDY 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.*

Relict glacial deep-seated landslides were identified by qualified experts for the approved Penny Alderwood FPA east of Units 4 & 5. Topography in the units drains away from the landslides. The Maladjusted proposal excludes the delineated groundwater recharge areas from the Penny Alderwood sale.

The proposal was remotely reviewed by a licensed engineering geologist and qualified expert.

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.*

A trained forester performed a field review of the site. All inner gorge areas are completely contained in the RMZ of various streams and are outside of the proposal area. No equipment will operate near these rule-identified landforms.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Approx. acreage new roads: **0.5 (based on a 15 ft subgrade width.)**
Approx. acreage new landings: **2.5 (based on 100 ft x 100 ft impacted area)**
Fill Source: **Native on-site material will be excavated during road and landing construction. This material will be used for fill as needed. Approximately 1820 yds^3 of 6" Minus Jaw Run, 3850 yds^3 of 3" Minus Crushed Rock, and 270 yds3 of 1 1/4" Crushed Rock will be used from Penny 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 0.01% of the site will remain as gravel roads. (based on 15-foot-wide subgrade).

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

Harvesting and road construction will be restricted during periods of heavy rainfall when rutting and surface erosion may occur. Roads will be constructed with properly located ditches, ditch-outs, and cross-drains to divert water onto stable forest floors and/or into stable natural drainages. Best management practices will be utilized as necessary in proximity to live waters. Ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins.

The sale will be restricted to shovel only and summer only timing. Lead end suspension will be required for all yarding activities.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Harvest operations and the removal of timber will result in minor amounts of CO2 emissions from the direct proposal site. See A.13.a. for details regarding completed analyses of carbon emissions and sequestration on DNR-managed lands in western Washington. 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.

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).

None known.

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

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

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.

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: **Quilcene Bay, Puget Sound**

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)
Wetland (>1.0 acre)	**Forested**	**2**	**150**
Wetland (0.25 acre < 1.0 acre)	**Forested**	**1**	**100**
Streams	**3**	**1**	**150**
Streams	**4**	**3**	**100**
Streams	**5**	**10**	**N/A**
Seep	**Seep**	**2**	**50**

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

There are 2 forested wetlands greater than 1 acre associated with Unit 1, which is protected by a 150-foot no-harvest buffer based on 100-year Douglas fir soil site index.

There is 1 forested wetland greater than 0.25 acres, but less than 1 acre associated with Unit 1, which is protected by a 100-foot no-harvest buffer.

There is one type 3 streams associated with this project. All type 3 streams have a 150-foot no-harvest buffer based on 100-year Douglas fir soil site index.

There are three type 4 streams associated with this project. They are protected with a 100-foot no-harvest buffer.

.

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):

Timber felling, bucking, and yarding will occur within 200 feet of all the described waters above. Road maintenance will occur within 200 feet of four type 5 and one type 4 streams. Road construction will occur within 200 feet of two type 5 streams. All activities will be done in accordance with the DNR's HCP and Forest Practice rules. Timber harvest will occur within 200' of typed waters, but no closer than described above in questions B.3.a.1.b and B.3.a.1.c. Culvert work listed in A.11.C will occur within 200 feet of the described waters above.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*

☒ *No* ☐ *Yes, description:*

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

☒ *No* ☐ *Yes, describe 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)?*

LITTLE QUIL = 3.9 (mi./sq. mi.), BIG QUIL = 2.5 (mi./sq. mi.)

9) *Are there forest roads or ditches within the associated WAU(s) that deliver surface water to streams, rather than back to the forest floor?*

☐ *No* ☒ *Yes, describe:*

It is likely some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road work standards will be applied that address this issue by installing cross-drains to deliver ditch water to stable forest floors.

10) Is there evidence of changes to channels associated with peak flows in the proposal area (accelerated aggradations, surface erosion, mass wasting, decrease in large organic debris (LOD), change in channel dimensions)?

☒ *No* ☐ *Yes, describe observations:*

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

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

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

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

☐ *No* ☒ *Yes, describe the water resource(s):*

There are inner gorges associated with downslope waters on Units 1, 2, 4, & 5. All inner gorge and areas of slope instability have been excluded from the proposal area either via RMZs or Unit boundaries.

The Quilcene National Fish Hatchery, at the confluence of Penny Creek and the Big Quilcene River, is located approximately 1 mile (~5,400 feet) downstream of the proposal area. DNR Forest Practices DOH Water Supply Intakes spatial dataset shows no surface water intakes or spring water systems downstream of the proposed activity. Surface water may be diverted for the hatchery when the Big Quilcene River becomes too turbid. According to this dataset, one groundwater well is located approximately 1.4 mi downstream of the proposal, along the Big Quilcene River.

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.*

Restricting timber harvest and road maintenance activities during peak rain events will allow for increased resource protection. Road development and maintenance standards will minimize impacts by using cross-drains and ditch-outs to release ditch water onto stable forest floors where flow energy can dissipate prior to reach stream channels. Best management practices, including installation of sediment traps and silt fencing and seeding/mulching of exposed soils, also will help mitigate potential negative effects on water quality. Maintaining RMZs and leave tree areas on streams will aid bank stability, hydrologic functions, and provide recruitment of LWD. Further peak flow mitigation is accomplished by harvest planning design at the landscape level by limiting harvest unit size, distributing units across the landscape, and by adhering to sustainable harvest rates. See B.1.d.2, B.1.h, and B.3.a.1 for additional details on protections measures within this proposal.

All type 5 streams contained within the proposal have 30 ft equipment limitation zones applied.

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, <u>downstream or downslope</u> of the proposed activity?

☐ *No* ☒ *Yes, describe:*

See the answer to Question B-3-a-12.

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:

See the answers to Questions B-3-a-12 and B-3-a-13.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

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

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

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

Note protection measures, if any:

No additional protection measures will be necessary to protect these resources beyond those described in B-1-d-2, B-1-h, B-3-a-2, and B-3-a-13.

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

No changes to drainage patterns are expected.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:
See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a- 13, B-3-b-3, and B-3-c-2.

4. Plants

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

☒ Deciduous tree:

☒ Alder ☐ Aspen ☐ *Birch* ☒ *Cottonwood* ☒ Maple ☐ *Western Larch*

☒ Other: **Cascara**

☒ Evergreen tree:

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

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

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

☐ Other:

☒ Shrubs:

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

☒ *Other:* **Ocean spray, Oregon grape, snowberry, blackberry, wild rose,**

☒ *Ferns*

☒ Grass

☐ Pasture

☐ Crop or Grain

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

☒ Wet Soil Plants:

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

☒ Other: **Nettle, sedge, equisetum**

☐ Water plants:

☐ Eelgrass ☐ Milfoil ☐ Water Lily

☐ Other:

☐ Other types of vegetation:

☐ *Plant communities of concern:*

A survey was conducted by an ecologist who found no element occurrences of plant community in the proposal.

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 3097 MBF of 34-90 year-old timber will be harvested with 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.)*

The removal area is part of a managed forestland landscape. All adjacent timber stands are Western Hemlock Zone forests largely composed of Douglas-fir, western hemlock, and western red cedar. The stand descriptions below are derived in part from DNR's Forest Resource Inventory System (FRIS) Age Class spatial dataset.

Unit 1 is bordered by private reprod and a WMZ to the North, State timber age 27& 11 years and private timber to the East. An RMZ and WMZ's to the South & Southwest, and an RMZ of approximately 83 years and private reprod to the West.

Unit 2 is bordered by private reprod to the North, an RMZ of State timber approximately 83 years around the rest of the unit.

Unit 3 is bordered by State timber age 34 years to the North & East, age 48+ years to the South, and private reprod to the West.

Unit 4 is bordered by entirely by State timber or reprod, age 19 & 44 years to the North, age 44 years to the East, 9 year old reprod to the south and an RMZ 44 years to the West.

Unit 5 is bordered entirely by State timber. 44 year old timber to the North, an RMZ of 44 year old timber to the East, South, & Southwest, and 80 year old timber to the West.

Unit 6 is a right-of-way and is bordered by State timber age 34 on either side.

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:

Retaining existing stand structure within areas excluded from harvest and within leave tree areas. Following harvest, native conifer species will be replanted in the VRH units. Other native conifer and deciduous species may regenerate naturally.

Leave trees provide a dominant cohort for the next stand as well as a source for future snags and down dead wood. They also serve as a native seed source, representing the diversity of species within the current stand. Leave trees were selected to exceed the required minimum density of at least eight trees per sale acre.

At least two leave trees per acre were selected from the largest diameter or dominant crown class, and all structurally complex and large diameter old growth remnants were preserved except in Unit 4 due to an alternative leave tree plan for that Unit.

An alternative Leave Tree Plan has been developed for Unit 4 to address the presence of root disease in that unit. Included in this plan is the manufacturing of 67 safe snags to account for the lack of sound uninfected trees.

The proposal area was gridded in the field for the presence of both individual old growth trees and old growth stands exceeding 5 acres, per DNR policy. The units and adjacent stands were also vetted remotely using ArcGIS spatial datasets to identify areas with a moderate or high probability of old growth occurrence (RS-FRIS Combined Origin Year raster layer. No polygons were found.

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

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: **Turkey vulture**
mammals:
☒ bear ☐beaver ☒ *coyote* ☐ *cougar* ☒ deer ☐ elk
☐ other:
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
MALADJUSTED U5	Marbled murrelet	Threatened	Endangered

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: **Marbled Murrelet (MM)** Protection Measures:

The proposal does not occur within a marbled murrelet special habitat area, occupied site, or buffer, and does not contain murrelet habitat (P-stage) that has been designated for metering. Planned activities are beyond threshold distances for disturbance, and no timing restrictions are required. Some long term forest cover will be preserved through establishment of Riparian and Wetland management zones.

Six WDFW MM monitoring stations occur along the western edge of Unit 5. One "presence" detection occurred in the Northwest corner on the boundary of Unit 5. This was a flyover at > canopy height.

Species /Habitat: **Riparian and Wetland** Protection Measures:
Buffers have been applied to all Type 3 and 4 waters, and the wetland, as described in B.3.a.1.b. Buffers are designed to protect the stream banks, protect waters and wetlands from siltation, and decrease water temperatures by providing shade and cover. Furthermore, these buffers will provide long term forest cover that, in combination with the owl and murrelet strategies, will help support old-forest dependent wildlife.

Species /Habitat: **Upland** Protection Measures:
Wind-firm, dominant, and structurally unique trees were targeted for retention. A minimum of eight trees per acre were retained individually and in clumps to provide habitat structures for wildlife species within VRH units. Timber removal will temporarily create open environments that provide valuable foraging and potential habitat for a variety of wildlife species associated with early-stage forest environments.

Species /Habitat: **Northern Spotted Owl** Protection Measures:
Units 4 and 5 are overlapped by non-habitat status 1 owl circles Big Quilcene River and Townsend Creek and by non-habitat status 2 owl circle Mt Walker. No best 70 is located in or near the units.

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

6. Enery 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:
Harvest activities will not be allowed on weekends, State-recognized holidays, or during late night and early morning hours.

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: Commercial Forestry

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?
Commercial Forest.

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

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.
Yes. A portion of Units 1 and 2 have been designated as moderate landslide hazard. Units 4 & 5 and other parts of Unit 1 have been designated as slight landslide hazard. No Units have been classified as critical.

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:*

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

c. Proposed measures to reduce or control aesthetic impacts, if any:
The VRH portions of the timber sale will be replanted with native species following harvest. Leave trees and leave tree areas will provide visual breaks and distribution of harvest units within the landscape will reduce the aesthetic impact of the view shed.

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?

Dispersed informal recreation in the form of hiking, hunting, fishing, berry picking, and sightseeing. Logging road are also used for ATV/motorcycles, mountain bike riding, and horseback riding.

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:

Signs will be posted near the proposal area to notify recreationists of active logging and increased traffic.

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

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.

No

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

A State Lands Forester/Cultural Resources Technician (CRT) performed a remote review of the proposal area to check for cultural and historic resources using spatial datasets documenting locations of DAHP Historic Properties, DAHP Archeology Sites, and other resources and was verified by CRT field visits.

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

If a presently-unknown cultural resource is discovered during project operations, DNR will comply with the March 2010 Cultural Resources Inadvertent Discovery Guidance.

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 proposed site is accessed via Highway 101, Center Valley Rd, Tarboo Lake Rd, PT-L-1000 Rd, PT-Q-2000 Rd, and Penny Creek Rd

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?
Jefferson County transit serves the general geographic area, but the proposal site is not served by public transit. Nearest transit spot is approximately 2 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:
Warning signs will be placed for truck traffic and CB channel information will be posted at main county road junctions. Existing gates will remain locked when roads are not in use.

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**:**

Utilities for a communication site run under the PT-Q-2000 Rd.
BPA overhead power lines cross the PT-L-1000 road.

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: Mark Benner

Name of signee Mark Benner

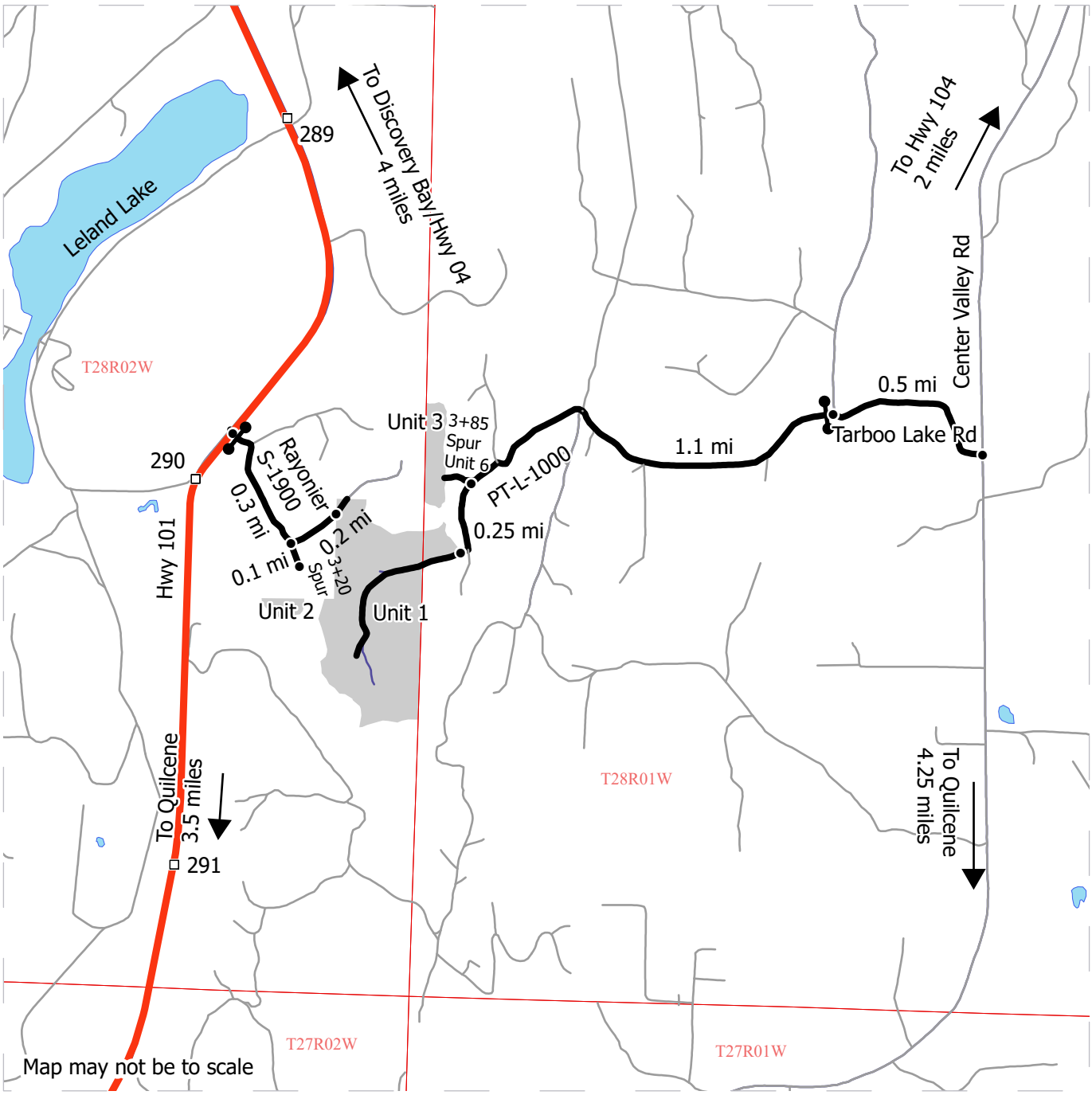
Position and Agency/Organization NRS 3/Olympic Region

Date Submitted: 10/28/2024

DRIVING MAP

SALE NAME: MALADJUSTED
AGREEMENT#: 30-106773
TOWNSHIP(S): T27R2W, T28R1W, T28R2W
TRUST(S): State Forest Transfer (1)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 280-840



- Harvest Unit
- Highway
- Haul Route
- Other Route
- Milepost Marker
- Distance Indicator
- Gate (AA1)

DRIVING DIRECTIONS:

For Units 1, 3 & 6: Head south from Hwy 104 on Center Valley Rd for 2.7 mi. Turn right on Tarboo Lake Rd. Go 0.5 mi to PT-L-1000 Rd and gate. Continue through gate for 1.1 mi. Unit 6 (R/W) is on the right and leads to Unit 3.
For Unit 1 continue 0.25 mi on PT-L-1000. Unit starts on right and road goes into Unit.
For Unit 2: Head south on Hwy 101 from Hwy 104 for 4.8 mi. Turn left on Rayonier S-1900 through gate. Travel 0.3 mi to 3+20 Spur, turn right on spur. Unit is accessed via forwarding trail from end of spur. Some walk-in is required.

N

Prepared By: bdis490

Modification Date: bdis490 7/18/2024

DRIVING MAP

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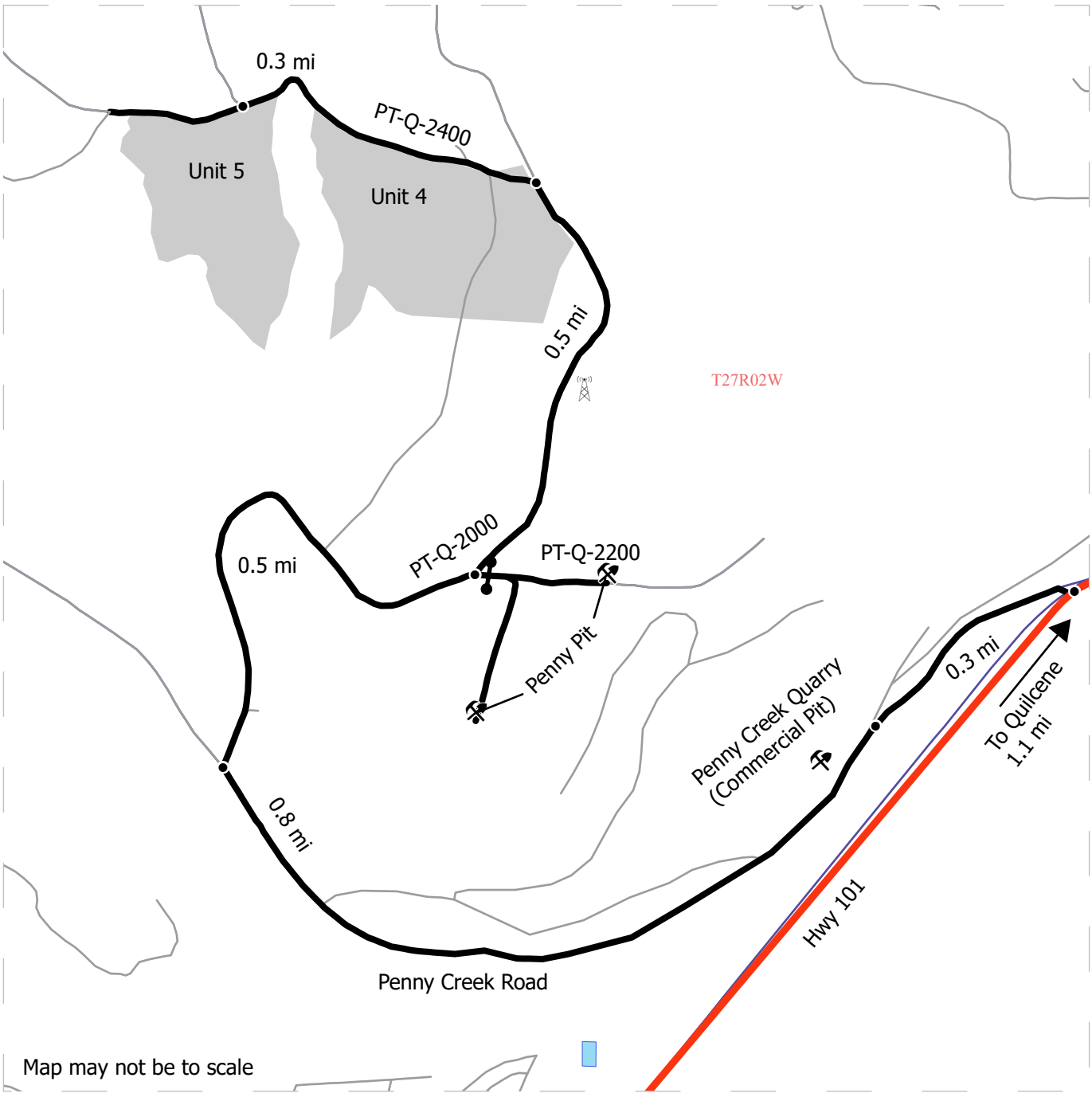

- Harvest Unit
- Highway
- Haul Route
- Other Route
- Distance Indicator
- Gate (AA1)
- Communication Tower
- Rock Pit

DRIVING DIRECTIONS:

For Units 4 & 5: From Quilcene head southwest on Hwy 101 for 1.1 mi. Turn right on Penny Creek Rd. Continue for 1.1 mi. Turn right on PT-Q-2000. Continue for 1 mi. Unit 4 is on the left. Continue 0.3 mi on left on PT-Q-2400 for Unit 5. Unit is on the left.
For Penny Pit: From Quilcene head southwest on Hwy 101 for 1.1 mi. Turn right on Penny Creek Rd. Continue for 1.1 mi. Turn right on PT-Q-2000. Continue for 0.5 mi. Turn right on PT-Q-2200. Pit is straight ahead and on the right up the PT-Q-2210.

N

Prepared By: bdis490

Modification Date: bdis490 7/18/2024

TIMBER SALE MAP

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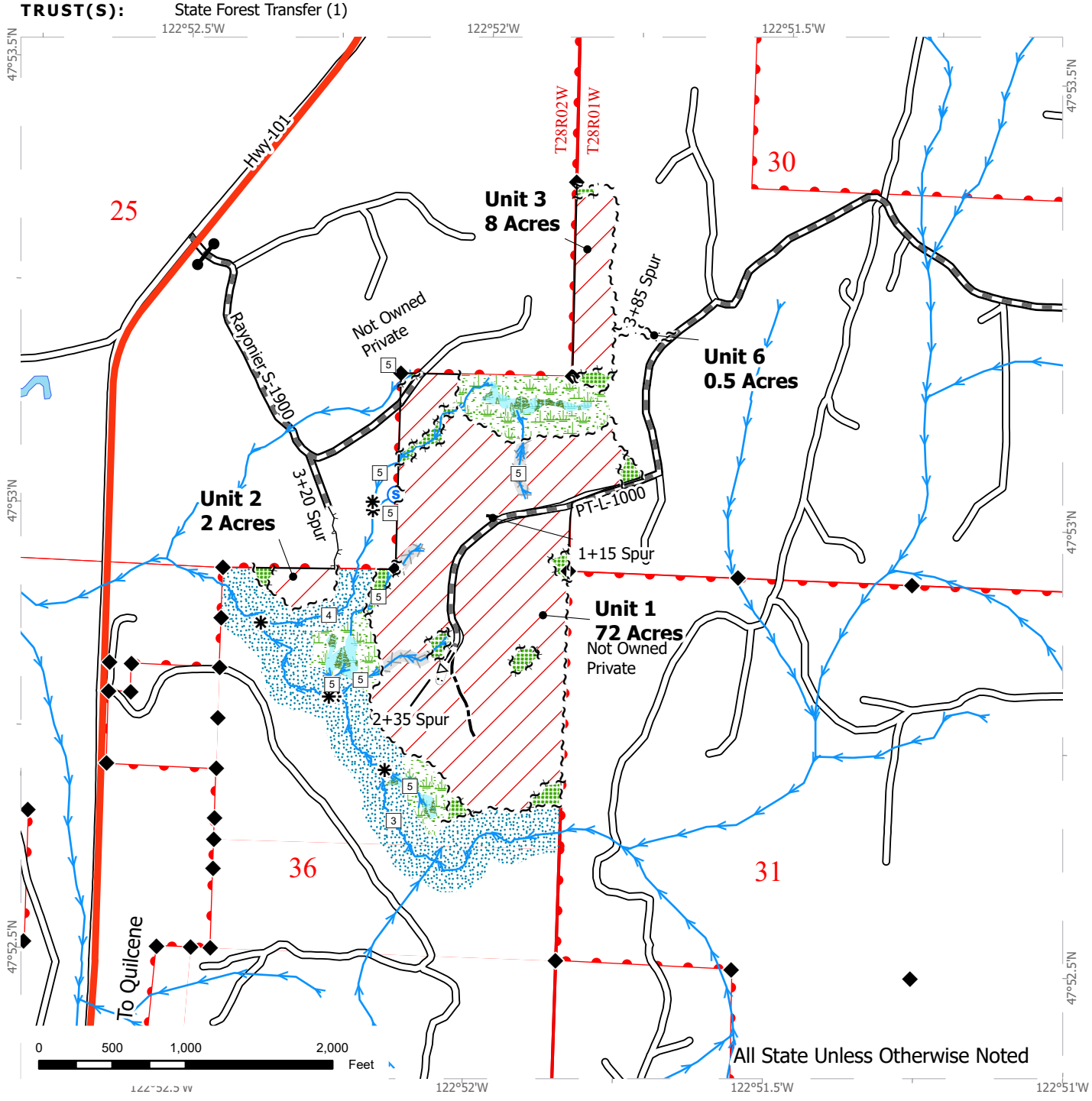

- Variable Retention Harvest
- Leave Tree Area
- Forested Wetland
- Wetland Mgt Zone
- Riparian Mgt Zone
- Sale Boundary Tags
- Leave Tree Tags
- Right of Way Tags
- Timber Type Change
- Equipment Limitation Zone
- Existing Roads
- Required Pre-Haul Maintenance
- Required Construction
- Optional Pre-Haul Maintenance
- Optional Construction
- Designated Skid Trail
- Streams
- Stream Type
- Stream Break
- Gate (AA1)
- Seep
- Survey Monument

N

Prepared By: bdis490

Modification Date: bdis490 8/7/2024

TIMBER SALE MAP

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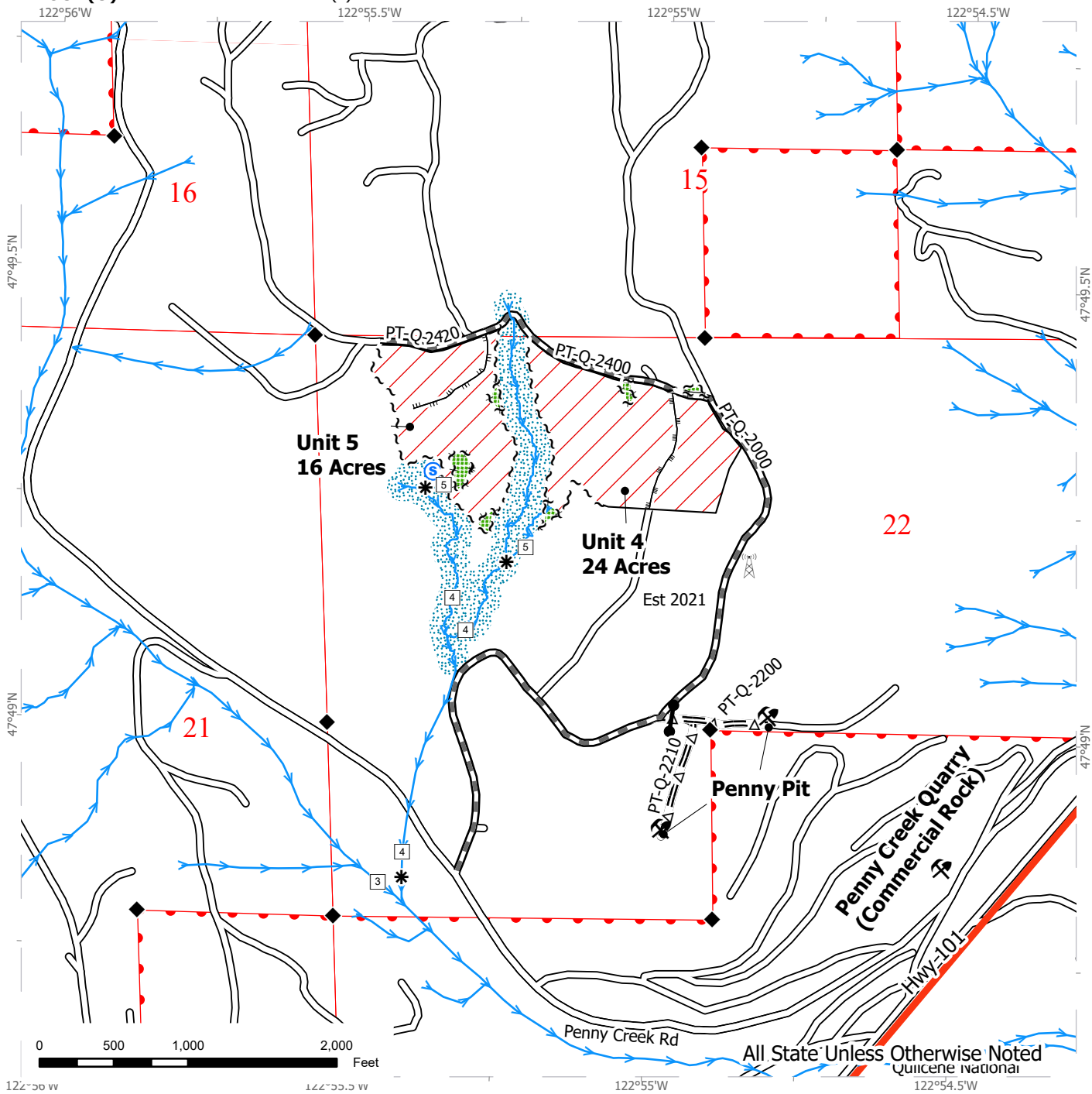

- Variable Retention Harvest
- Leave Tree Area
- Riparian Mgt Zone
- Sale Boundary Tags
- Leave Tree Tags
- Timber Type Change
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Pre-Haul Maintenance
- Designated Skid Trail
- Streams
- Stream Type
- Stream Break
- Communication Tower
- Rock Pit
- Gate (AA1)
- Seep
- Survey Monument

N

Prepared By: bdis490

Modification Date: bdis490 8/7/2024

LOGGING PLAN MAP

SALE NAME: MALADJUSTED
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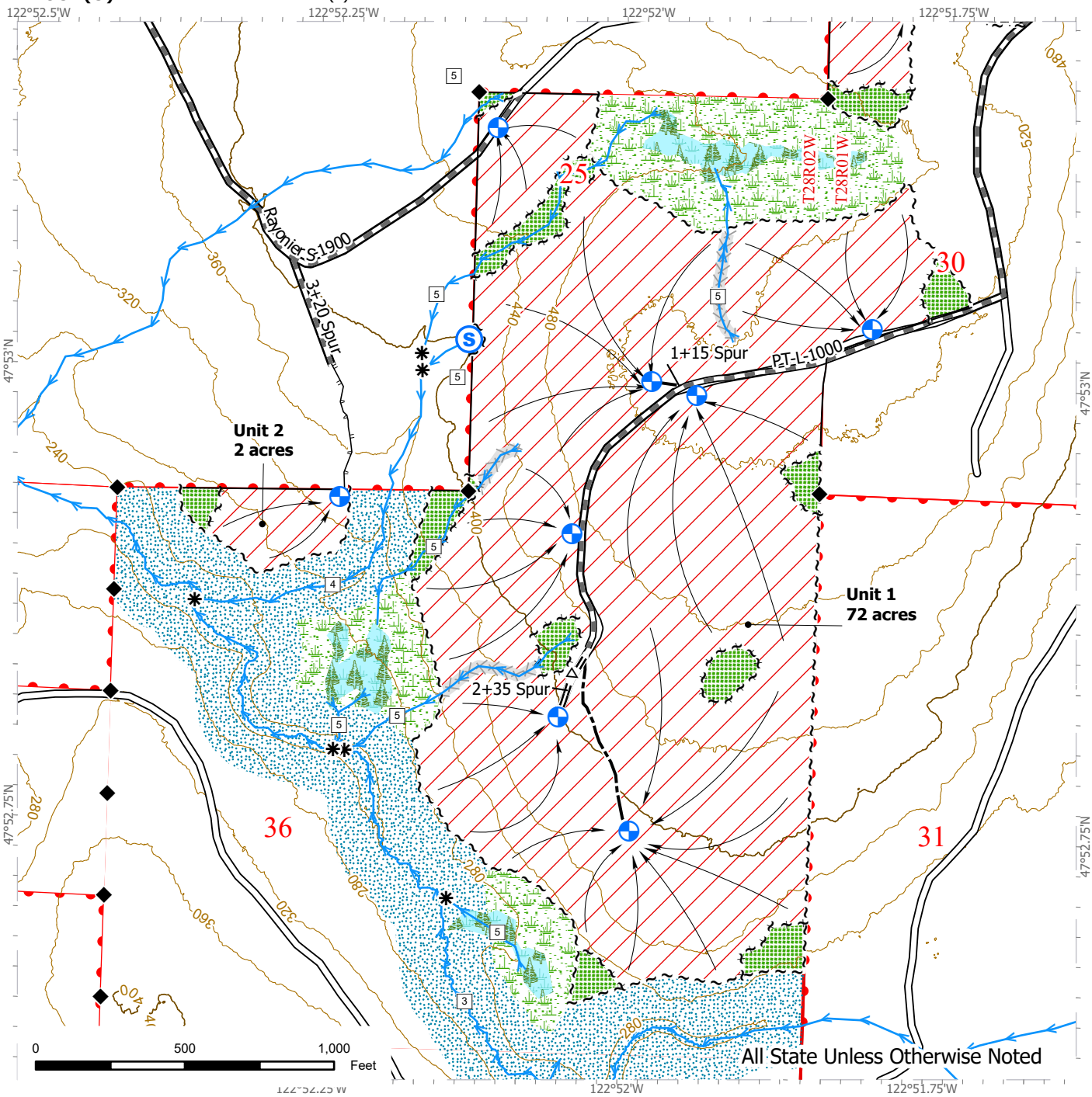

Ground	Right of Way Tags	Equipment Limitation Zone
Ground	Timber Type Change	Streams
Leave Tree Area	Existing Roads	Stream Type
Forested Wetland	Required Pre-Haul Maintenance	Stream Break
Wetland Mgt Zone	Required Construction	Landing - Proposed
Riparian Mgt Zone	Optional Pre-Haul Maintenance	Seep
Sale Boundary Tags	Optional Construction	Survey Monument
Leave Tree Tags	Designated Skid Trail	

N

Prepared By: bdis490

Modification Date: bdis490 8/7/2024

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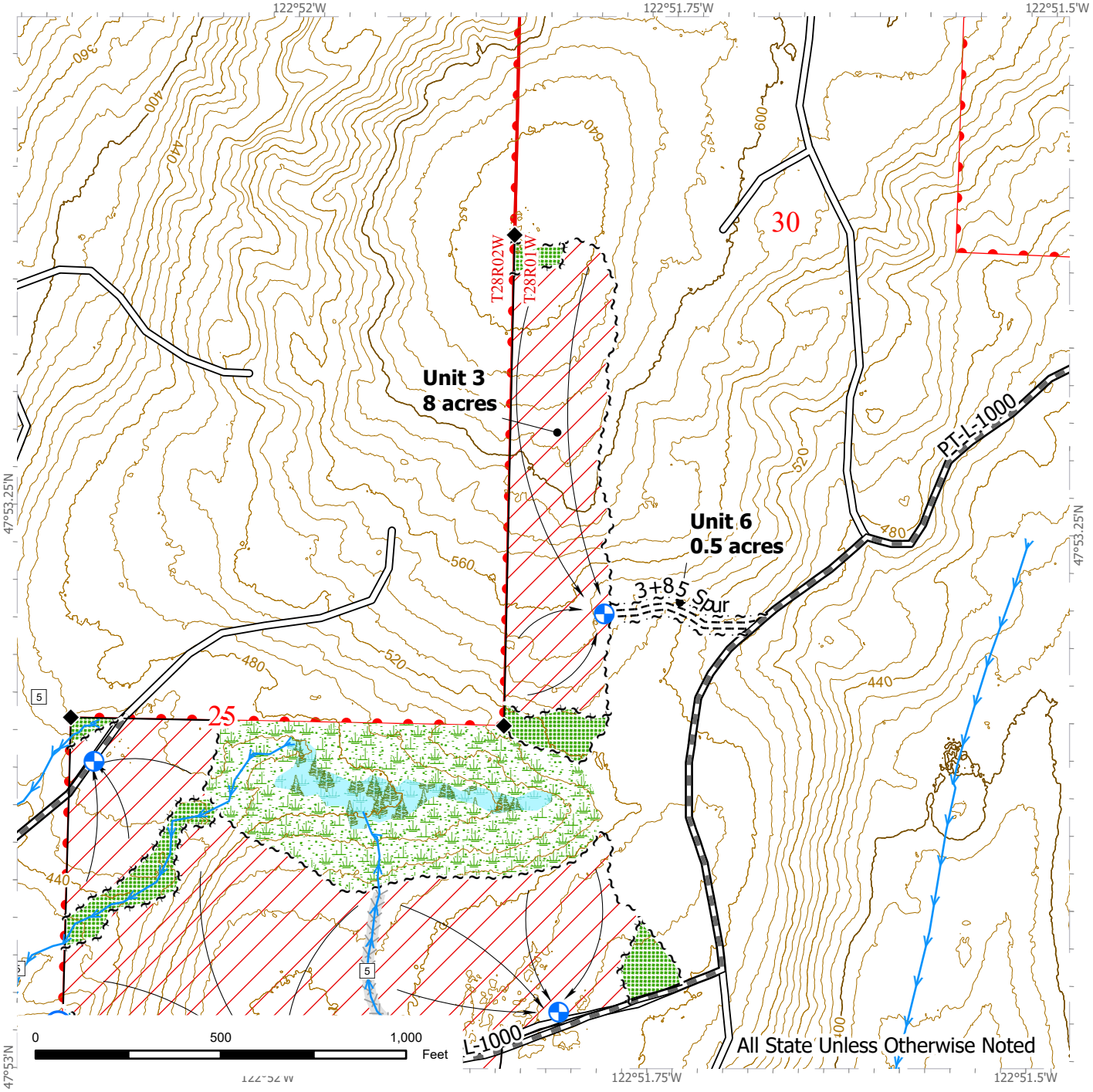

- Ground
- Ground
- Leave Tree Area
- Forested Wetland
- Wetland Mgt Zone
- Riparian Mgt Zone
- Sale Boundary Tags
- Leave Tree Tags
- Right of Way Tags
- Timber Type Change
- Existing Roads
- Required Pre-Haul Maintenance
- Required Construction
- Optional Construction
- Equipment Limitation Zone
- Streams
- Stream Type
- Stream Break
- Landing - Proposed
- Seep
- Survey Monument

N

Prepared By: bdis490

Modification Date: bdis490 8/7/2024

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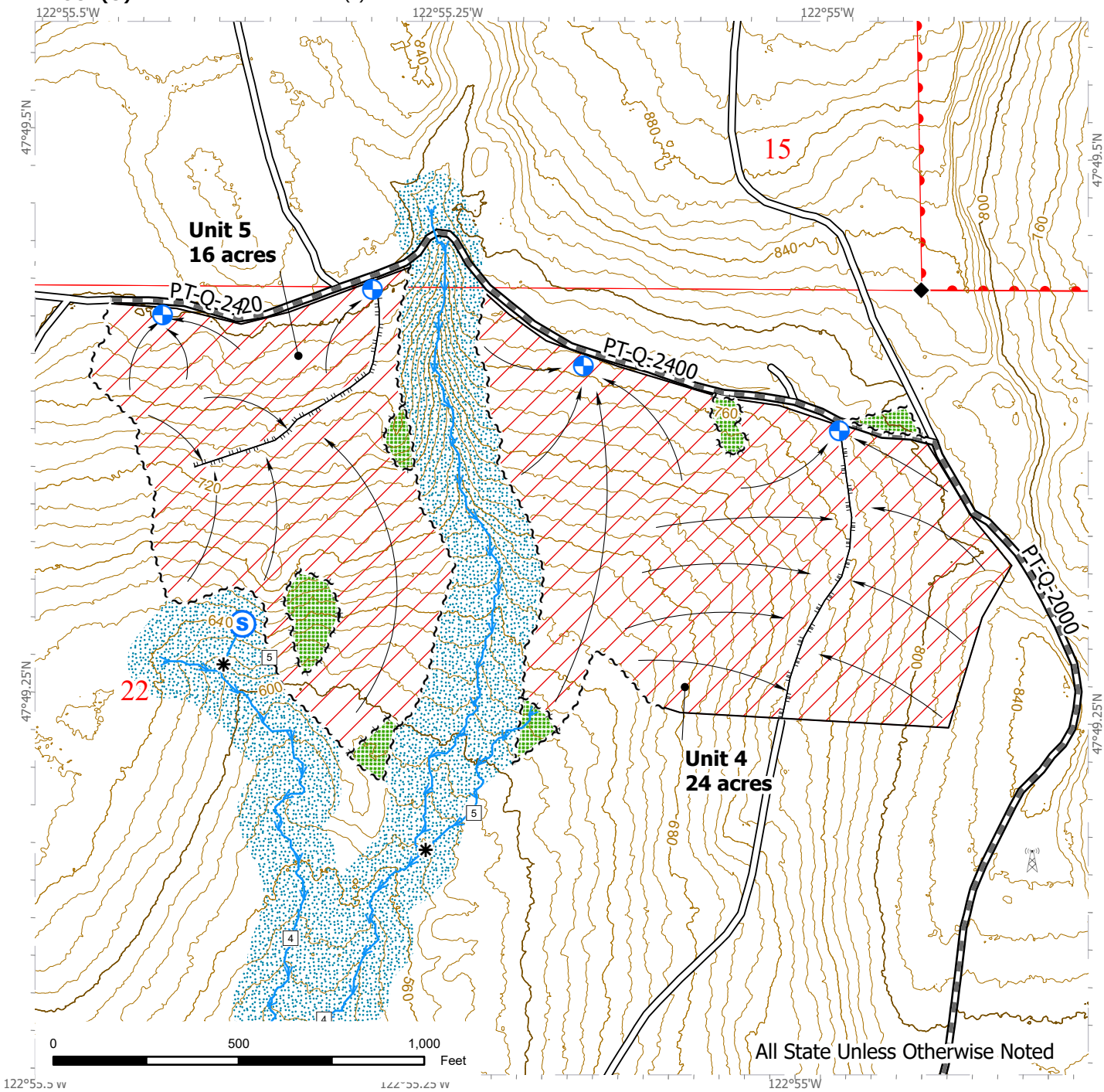

- Ground
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- Leave Tree Area
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N

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