

I have reviewed this SEPA Checklist. My comments are included in blue.

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Olympic Region DNR

26 18552

11/12/2024

KP

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: **FISH AND CHIPS**
Agreement # **30-104810** FPA 2618552

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

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

David Riley
Dept. of Natural Resources
411 Tillicum Lane
Forks, WA 98331
(360) 374-2800

4. Date checklist prepared: **09/18/2024**

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

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

a. Auction Date:
1/29/2025

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

c. Phasing:
None

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

- No, go to question 8.* *Yes, identify any plans under A-7-a through A-7-d:*

a. Site Preparation:

Assessment 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:

Sale will be hand planted with native conifer seedlings following harvest.

c. 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 and grading as necessary.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. *Note: All documents are available upon request at the DNR Region Office.*

- 303 (d) – listed water body in WAU: Lower Queets River, Matheny Creek**
 - temp*
 - sediment*
 - completed TMDL (total maximum daily load)*
- Landscape plan: OESF Forest Land Plan (2016)**
- Watershed analysis:*
- Interdisciplinary team (ID Team) report:*
- Road design plan: Fish and Chips Road Plan (September 2024)**
- Wildlife report:*
- Geotechnical report: Fish and Chips Engineering Geologic Risk Assessment (July 2024)**
- Other specialist report(s): Fish and Chips WOGHI memo (July 2024), Fish and Chips Stand Development Stage Assessment (July 2024)**
- Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
- Rock pit plan: Vinegar Pit Development Plan (July 2024), Phelan Pit Development Plan (July 2024)**
- Other: NSO Best 70 Map**

Geo report, slope stability forms, & slope stability maps are included with FPA 2618552 on FPARS.

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 # 2618552 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:

Description of proposal: **The Fish and Chips timber sale application #30-104810, and associated forest practice #TBD is a 5-unit timber sale with a cruised volume of 8,879mbf located in the Matheny Creek and Lower Queets River Watershed Administrative Units. The proposed harvest encompasses approximately 391 gross acres. It consists of 285 acres of VRH; 6 acres of VDT; 1 acre of ROW; 81 acres of Riparian Management Zones (RMZs), Wetland Management Zones (WMZs), and unstable slope protection; 14 acres of Leave Tree Areas (LTAs); and 4 acres of existing roads. This sale area will be harvested using predominately ground based harvesting with minor amounts of cable logging. Approximately 102,455 feet of pre-haul maintenance 6,115 feet of new construction, and 1,575 feet of decommissioning is planned to provide access to the sale area. Rock will be obtained from Phelan, Vinegar, and Kostly Creek pits.**

Unit	Proposal Acres (gross)	RMZ/WMZ Acres	Potentially Unstable Slope Acres	Existing Road Acres (within unit)	Leave Tree Clump Acres	Net Harvest Acres
1	134	29	5	2	3	95
2	115	7	7	1	7	93
3	121	19	0	1	4	97
4	20	14	0	0	0	6
5	1	0	0	0	0	1
Totals	391	69	12	4	14	292

2618552 also proposes 1F & 1Ns crossing and 0.80 acres of pit expansion.

Net harvest acres match FPA 2618552 Q19.

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 Fish and Chips Timber Sale 292 net acres are being harvested, while 95 acres (25% 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 stands in the stages of Biomass Accumulation/Stem Exclusion, Maturation I and Maturation II.

Slope % matches FPA 2618552 Q19.

Unit	Origin Date	Major Timber Species	MBF/acre	Slope (%)	Elevation Range (ft)
1	Post 1960	DF, WH	33.6	0-75%	460-790
2	Post 1965	DF, WH	27.3	0-10%	420-440
3	Post 1955	DF, WH	31.4	0-65%	370-920
4	Post 1970	DF, WH	29.1	0-10%	470-480
5	Post 1970	DF, WH	25.7	0-10%	510-520

Harvest Type:

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	3,193	95%	201	565	766
2	VRH	2,543	95%	125	619	744
3	VRH	3,047	95%	273	503	776
4	VDT	70	40%	177ft ² /acre	NA	NA
5	ROW	26	100%	0	0	0

Harvest Type and Volume match FPA 2618552 Q19.

Per FPA 2618552, % volume to be harvested for Units 1, 2, and 3 is 97%.

Overall Unit Objectives:

The overall objectives for this sale includes the production of saw logs 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 (RMZ). Approximately 95 acres (24%) have been set aside for unstable slopes, RMZs, WMZs and LTAs. 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 University (05) Trust.

Statute- Comply with Washington DNR’s HCP, OESF FLP, the Policy for Sustainable Forests, and Forest Practice Rules and Regulations.

Social- Accommodate dispersed informal recreational activities on DNR managed lands while also identifying and protecting historical and archaeological sites consistent with state/federal law.

Specific objectives are to provide riparian and wetland protection, protection of moderate or high risk of slope failure and delivery to a public resource, and protection of soils and habitat conservation for threatened and endangered species. Riparian protection measures were designed for all waters in and adjacent to this proposal in accordance with DNR’s OESF Riparian strategy.

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		6,115	2.6	0
Reconstruction		0		0
Maintenance		102,455		0
Abandonment		0	0	0
Bridge Install/Replace				0
Stream Culvert Install/Replace (fish)	0			0
Stream Culvert Install/Replace (no fish)	1			
Cross-Drain Install/Replace	54			

1 Ns culvert will be replaced and 1 F water bridge will have maintenance.

Road construction matches FPA 2618552 Q16.

Rock for this proposal will come from Kostly Creek pit, Vinegar pit, and Phelan 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:

T24N R11W S13

T24N R11W S14

T24N R11W S23

T24N R11W S24

T24N R11W S25

T24N R11W S26

T24N R11W S36 is also included in this proposal per FPA 2618552 Q7.

b. Distance and direction from nearest town:

The Fish and Chips timber sale proposal is located within Jefferson County, approximately 62 road miles SE of Forks, WA.

13. Cumulative Effects

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

This proposal is located within the Matheny Creek and Lower Queets River Watershed Administrative Units (WAUs). The uplands are mainly managed for timber production. Ownership includes large industrial forests, federal lands, and Washington 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 located on federal land. The numbers of forest practice activities shown on the WAU maps (referenced above in question #12) along with observations within the WAUs indicate that the WAUs are intensively managed for timber production, including variable retention harvest, thinning, and partial cuts.

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

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

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

DNR is legally required (RCW 79.10.320) to periodically calculate a sustainable harvest level and manages state trust lands sustainably. DNR has also maintained (statewide) a forest management certificate to the Sustainable Forestry Initiative standard since 2006. In managing state trust lands sustainably, DNR sequesters more carbon than it emits while conducting land management activities such as this proposal. The timber harvested from DNR-managed lands is used to produce climate-smart forest products. The climate impacts of DNR's land management are analyzed in multiple environmental impact statements that have informed the Board of Natural Resources' decisions and are consistent with the IPCC, which states that "[m]eeting society's needs for timber through intensive management of a smaller forest area creates opportunities for enhanced forest protection and conservation in other areas, thus contributing to climate change mitigation."

b. Briefly describe existing plans and programs (i.e. the HCP, DNR landscape plans, retention tree plans) and current forest practice rules that provide/require mitigation to protect against potential impacts to environmental concerns listed in question A-13-a.

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

- Deferring harvest on unstable slopes with medium or high probability of delivering to typed waters
- Retaining riparian management zones (RMZ's) on all typed waters, and wetland management zones (WMZs) on all wetlands greater than 0.25 acres. This includes a variable width interior core buffer on type 1, 3, 4, and unstable type 5 streams, a 2/3 site index buffer on wetlands smaller than 5 acres, and a full site index buffer on wetlands over 5 acres. Equipment limitation zones (ELZs) are required on all streams.
- Designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment.
- Implementing procedures pertaining to threatened and endangered species.

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 results from the landscape assessment, and included in the above referenced memorandum, show that the OESF HCP Planning Unit currently contains at least 10% older-forest conditions.

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 Fish and Chips 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?

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 practices rules and HCP substantially helps the Department to mitigate for cumulative effects related to management activities. These strategies have been incorporated in 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
LOWER QUEETS RIVER	48992	17850	953	911	202
MATHENY CREEK	24028	3325	853	40	0

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: LOWER QUEETS RIVER
WAU Acres: 48992
Elevation Range: 0 - 2611 ft.
Mean Elevation: 366 ft.
Average Precipitation: 110 in./year
Primary Forest Vegetation Zone: Sitka Spruce

WAU: MATHENY CREEK
WAU Acres: 24028
Elevation Range: 157 - 3250 ft.
Mean Elevation: 1495 ft.
Average Precipitation: 140 in./year
Primary Forest Vegetation Zone: Pacific Silver Fir

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%

Steepest slope matches
FPA 2618552 Q19.

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
5733	SILT LOAM
3970	V.GRAVELLY LOAM
2961	GRAVELLY SILT LOAM
2963	GRAVELLY SILT LOAM
4005	SLT.CLY.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.

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

No Yes, describe the proposed activities:

Timber harvest will occur over approximately 15% or less of a groundwater recharge area of an active glacial deep-seated landslide (GDSDL) and 12% or less of a dormant-indistinct GDSDL in Unit 2. See Fish and Chips Engineering Geologic Risk Assessment for more information.

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

Riparian buffers were extended to protect an inner gorge on Matheny Creek adjacent to Unit 1, and to protect a groundwater recharge area in Unit 2. All bedrock hollows, inner gorges, and landslides were excluded from harvest with timber sale boundary tags.

Slope stability form, slope stability map, and geo report are included with FPA 2618552 on FPARS.

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

Approx. acreage new roads: 2.6

Approx. acreage new landings: 1.2

Fill Source: Kostly Creek, Phelan, and Vinegar pits

- 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 1% of the site will remain as gravel roads.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.)
All harvest and hauling operations will be prohibited from October 15 to April 15 to minimize soil disturbance, road damage and sediment delivery. 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.

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.
- 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.

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: **Matheny Creek, Queets River, Pacific Ocean**

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	Forested	3	102
Wetland <5acres	Non-forested	2	102
Wetland >5acres	Non-forested	1	141
Matheny Creek	1	1	170-400
Stream	3	4	100
Stream	4	8	100
Stream	5	19	0

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

In accordance with the Habitat Conservation Plan, on typed waters, all floodplains and unstable slopes are protected with variable width interior core buffers based on site specific conditions. All floodplains and unstable slopes have been excluded from harvest. One forested wetland with associated WMZ thinning has a 25' interior core no harvest buffer. Leave trees are marked within the thinning to maintain and perpetuate a minimum basal area of 120 square feet per acre within the WMZ. Type 5 streams are protected with a 30' equipment limitation zone. Wind-throw probability modeling and field assessments were done on the sale area and determined that 1 segment of Type 1 stream buffer was at high risk of severe endemic wind-throw for the interior core buffers, so an additional 80' external wind buffer was applied.

The work detailed in the road plan has been designed to improve surfacing on the haul roads, and provide for better drainage by installing additional, and replacing inadequate culverts that will divert storm water onto stable forest floor. These actions will minimize the potential for delivery of sediment to streams.

- 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, yarding, and road maintenance and construction will occur within 200 feet of all the described waters above. All activities will be done in accordance with the DNR's HCP and Forest Practice rules. Timber harvest will occur within 200 feet of typed waters, but no closer than described above in questions B.3.a.1.b and B.3.b. Culvert work listed in A.11.b will occur within 200 feet of the described waters above. An existing bridge will also be repaired.

- 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)?*
LOWER QUEETS RIVER = 3.5 (mi./sq. mi.), MATHENY CREEK = 3.2 (mi./sq. mi.)

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

No Yes, describe:

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

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

No Yes, describe observations:

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

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

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

- No Yes, describe the water resource(s):

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

- No Yes, describe possible impacts:

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

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. Maintaining RMZ's on streams will aid bank stability, hydrologic functions, and provide recruitment of LWD. See B.1.d.2, B.1.h, and B.3.a.1 for additional details on protections measures within this proposal.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.

No water will be withdrawn or discharged.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

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

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

No *Yes, describe:*

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

No *Yes, describe possible impacts:*

Note protection measures, if any:

c. Water runoff (including stormwater):

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

Water runoff, including storm water, from road surfaces will be collected by roadside ditches and diverted onto the forest floor via 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:

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: **Western White Pine**

Shrubs:

Huckleberry Rhododendron Salmonberry Salal

Other:

Ferns

Grass

Pasture

Crop or Grain

Orchards Vineyard Other Permanent Crops

Wet Soil Plants:

Bullrush Buttercup Cattail Devil's Club Skunk Cabbage

Other:

Water plants:

Eelgrass Milfoil Water Lily

Other:

Other types of vegetation:

Plant communities of concern:

b. What kind and amount of vegetation will be removed or altered? (Also see answers to questions A-11-a, A-11-b and B-3-a-2).

Approximately 8,879 MBF of 34-52 year old timber will be harvested with this proposal.

Approximately 292 acres of timber will be harvested.

- 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 is bordered to the northwest by older forest in the Matheny Creek RMZ, and in all other directions by ~40 year old state timber.

Unit 2 is bordered to the west by a ~100 year-old Olympic National park western hemlock stand, and all other directions by ~40 year old state timber.

Unit 3 is bordered to the southeast by similar aged state-owned timber set aside to buffer a stand of Marbled Murrelet habitat, and to all other directions by 40-50 year old state timber.

Unit 4 is bordered to the north and east by unit 3 of this proposal, to the south by a non-forested wetland, and to the west by ~40 year old state timber.

Unit 5 is right-of-way unit border to the north and west by ~40 year old state timber, and to the south and east by Phelan pit.

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

None found in corporate database

FPRAM review indicates no conflict with T&E plant species.

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

Retaining existing stands within bounded out areas throughout the proposal, leave tree areas within harvest units, and replanting with native conifer species in the VRH units following harvest. Other native conifer and deciduous species may regenerate naturally onsite.

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

Scotch broom, Himalayan blackberry

5. Animals

- a. List any birds and other animals *or unique habitats* which have been observed on or near the site or are known to be on or near the site. Examples include:

birds:

eagle hawk heron owls songbirds

other:

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
FISH AND CHIPS U3	Northern Spotted Owl	Threatened	Endangered
FISH AND CHIPS U2	Fisher	Candidate	Endangered
FISH AND CHIPS U1	Marbled murrelet	Threatened	Endangered

c. Is the site part of a migration route? If so, explain.
 Pacific flyway Other migration route:
 Explain:

FPRAM review indicates proposal is in a SOSEA, not habitat, and within the Matheny Ridge West, Tacoma Creek East Fork, and North Fork Salmon Median Home Range owl circles.

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:

Per FPRAM review, proposal is located in a snag-rich area/priority habitat.

Proposal is within MM detection area, within the 1.5 mi occupied site buffer, and within 0.25 miles of an occupied MM site.

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

Species/Habitat: Spotted Owl – The DNR mitigates for the potential of significant adverse environmental impacts to northern spotted owls in the OESF by implementing the HCP strategy. This strategy established threshold percentages for spotted owl habitat on DNR-managed lands for Landscape Planning Units (LPU). Each LPU is managed to achieve and maintain at least 20% old forest habitat and at least 40% old and young forest (structural) taken together according to a schedule of habitat enhancement and harvest activities developed within the Forest Land Plan (FLP). The Queets SOMU is at 54.2% habitat and 20.5% old forest habitat. After harvest of approximately 247 acres of structural or young forest habitat included in this proposal, the unit will remain well above the 40% total habitat threshold. Unit 1 is within the Matheny Ridge West and North Fork Salmon NSO circles and is 2.0 miles from the best 70 acre cores. Unit 2 is within the Tacoma Creek East Fork NSO circle and is 2.2 miles from the best 70 acre core.

Species/Habitat: Marbled Murrelet-This proposal does not occur within a marbled murrelet special habitat area, occupied site or buffer, or contain murrelet habitat (P-stage) that has been designated for metering. Unit 3 is adjacent to an occupied site buffer. Previously modeled long term forest cover (LTFC) is being updated as a result of layout fieldwork.

Species/Habitat: Riparian– Interior core buffers have been applied to all Type 4 and unstable 5 waters as well as equipment limitation zones on all typed waters, as described in B.3.a.1)b). Buffers are designed to protect the unstable portions of the stream banks, protect waters from siltation, and decrease water temperatures by providing shade and cover. Buffers also allow the natural occurrence of woody debris that provides pools and

eddies for fish habitat along stream banks. Furthermore, these buffers will develop old-forest characteristics that, in combination with the owl and murrelet strategies, will help support old-forest dependent wildlife.

Species/Habitat: Upland – 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.

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

There are no known invasive animal species on or near the site.

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Petroleum fuel (diesel or gasoline) will be used for heavy equipment during active road building, timber harvest operations, and for transportation. No energy sources will be needed following project completion.
- b. Would your project affect the potential use of solar energy by adjacent properties?
If so, generally describe.
No.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None.

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
- 1) Describe any known or possible contamination at the site from present or past uses.
None known.
 - 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
None known.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
Petroleum-based fuel and lubricants may be used and stored on site during the operating life of this project.
- 4) Describe special emergency services that might be required.
The Department of Natural Resources, private, and fire protection district suppression crews may be needed in case of wildfire. In the event of personal injuries, emergency medical services may be required. Hazardous material spills may require Department of Ecology and/or county assistance.
- 5) Proposed measures to reduce or control environmental health hazards, if any:
No petroleum-based products will be disposed of on site. If a spill occurs, containment and cleanup will be required. Spill kits are required to be onsite during all heavy equipment operations. The cessation of operations may occur during periods of increased fire risk. Fire tools and equipment, including pump trucks and/or pump trailers, will be required on site during fire season.

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

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
None.
- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.
There will be short term, low level and high level noise created by the use of harvesting equipment and hauling operations within the proposal area. This type of noise has been historically present in this geographical area.
- 3) Proposed measures to reduce or control noise impacts, if any:
None.

8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. *(Site includes the complete proposal, e.g. rock pits and access roads.)*
Current use of site and adjacent land types: DNR (Timber harvest, fire protection, wildlife habitat, recreation) Forest Service, National Park Service

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 non-farm or non-forest 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 Land
- 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.
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?
Removal of overstory tree canopy, creating greater visibility, and altering view of closed canopy forest.
- 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?*
N/A
- c. Proposed measures to reduce or control aesthetic impacts, if any:
The sale area will be replanted with native species following harvest. Leave trees 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 roads 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:
None.

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.
- None FPRAM review indicates no conflict with historical sites or structures.
- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
- None FPRAM review indicates no potential conflict with cultural sites or resources.
- 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 check of the Department of Archaeology and Historical Preservation (DAHP) database, historic USGS map on available GIS layer, and Land Resource Manager (LRM) Special Concerns Report was used to identify cultural resources in the proposed project 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.
HWY 101, West Boundary Road
- 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 22 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.

26 1 8 5 5 2

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: David Riley

Name of signee David Riley

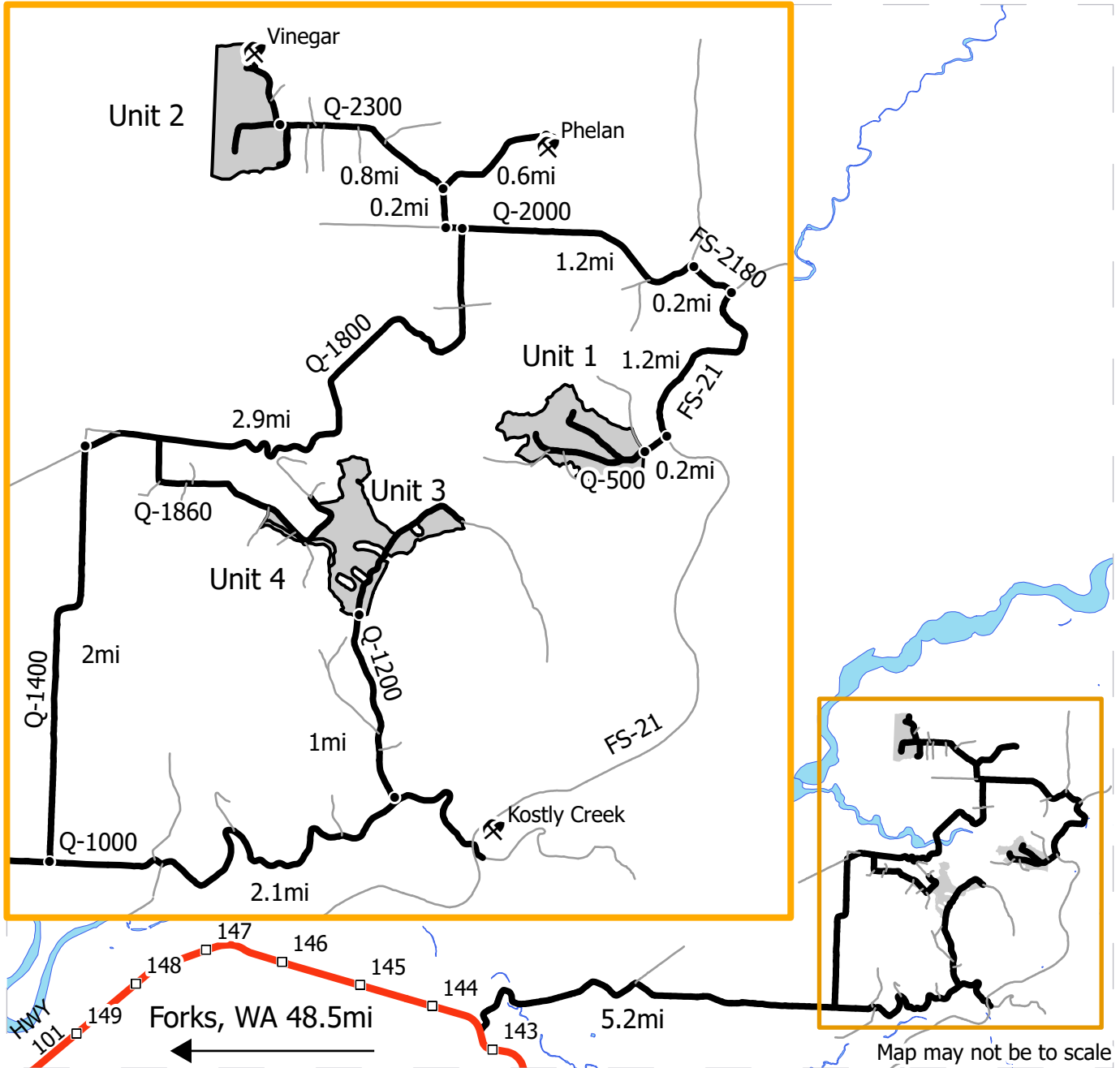
Position and Agency/Organization NRS3/DNR

Date Submitted: 11/01/2024

DRIVING MAP

SALE NAME: FISH AND CHIPS
AGREEMENT #: 30-104810
TOWNSHIP(S): T24R11W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 370-920



Map may not be to scale

DRIVING DIRECTIONS:

Unit 2: From Forks, drive south on US 101 for 48.5mi and turn left on the Q-1000. Drive 5.2mi and turn left on Q-1400. Drive 2mi and turn right on Q-1800. Drive for 2.9mi and turn left on Q-2000, then an immediate right on Q-2300. Drive 1mi and arrive.
 Vinegar pit: Located at north end of Unit 2.
 Phelan pit: From Unit 2, drive east on Q-2300 for 0.8mi. Turn left on Q-2310 and drive 0.6mi.
 Unit 5: Right-of-way unit adjacent to Phelan pit.
 Unit 1: From Jct. Q-2300 drive east on Q-2000 for 1.2 miles. Turn right on FS-2180 and continue for 0.2 miles. Turn right on FS-21 (West Boundary Road). Drive south for 1 mile and turn right on Q-500. Drive 0.2 miles and arrive.
 Unit 3: From Jct. Q-1400 drive east on Q-1000 for 2.1mi. Turn left on Q-1200 and drive 1mi.
 Kostly Creek pit: From Jct. Q-1200 drive east on Q-1000 for 0.6mi. Cross FS-21 and arrive.
 Unit 4: Located in Southwest corner of Unit 3. Access via Q-1860.

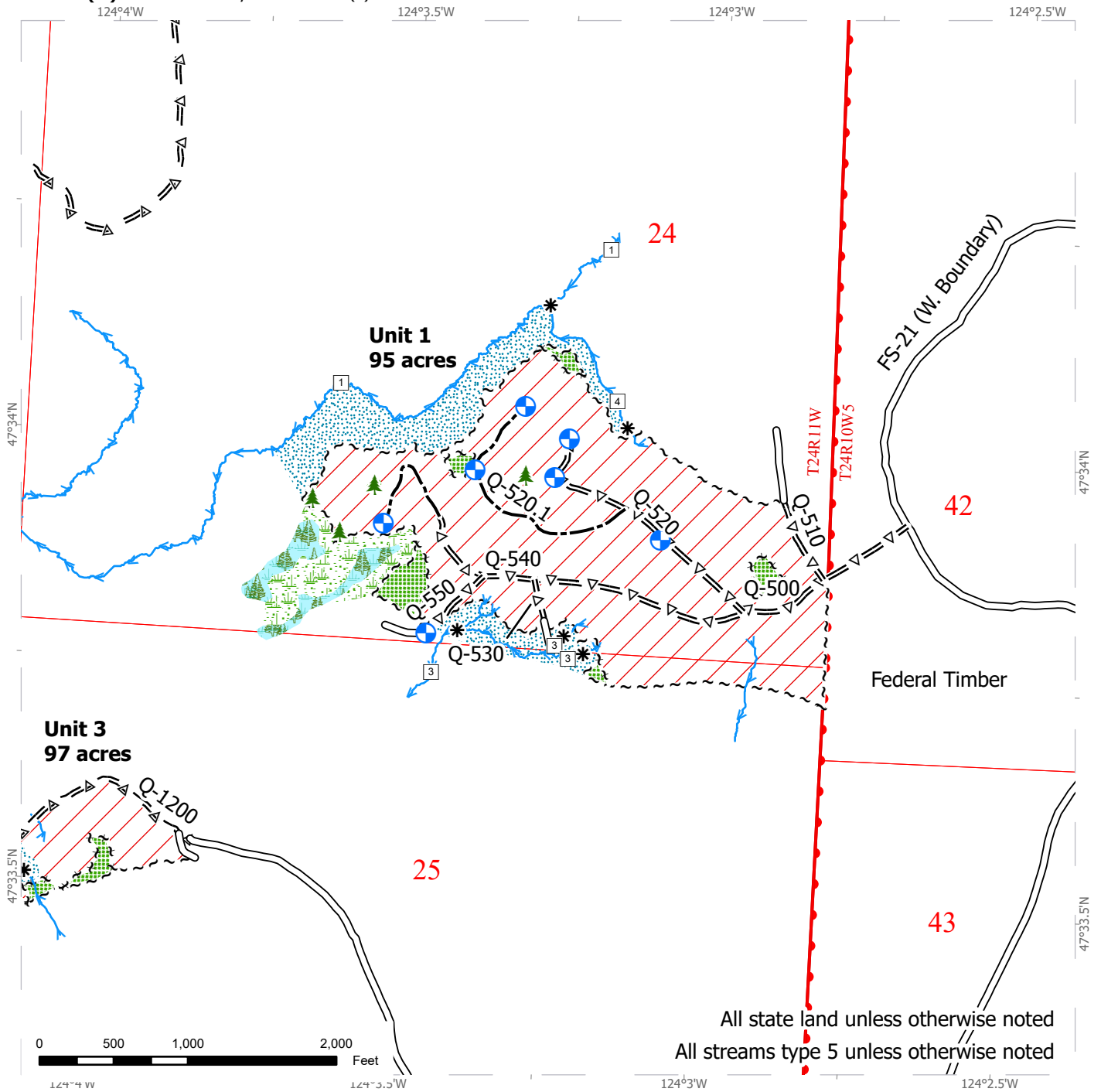
- Haul Route
- Other Route
- Harvest Units
- Highway
- Rock Pit



TIMBER SALE MAP

SALE NAME: FISH AND CHIPS
AGREEMENT #: 30-104810
TOWNSHIP(S): T24R11W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 370-920



All state land unless otherwise noted
 All streams type 5 unless otherwise noted

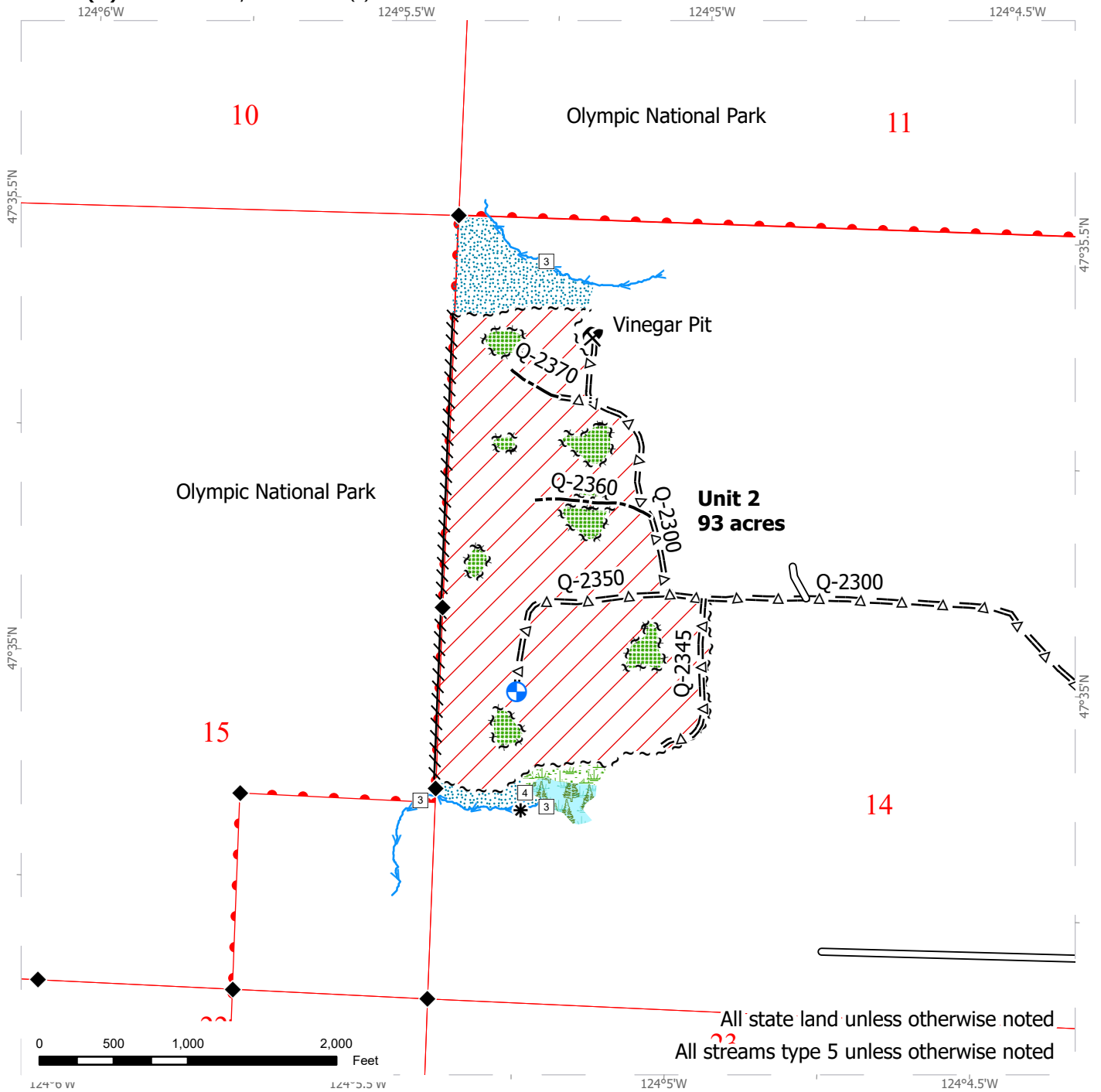
Variable Retention Harvest	Leave Tree Tags	Optional Construction
Leave Tree Area	Streams	Optional Pre-Haul Maint.
Forested Wetland	Stream Type	Landing
Wetland Mgt Zone	Stream Break	DNR Managed Lands
Riparian Mgt Zone	Leave Tree Area <1/4-acre	Public Land Survey Townships
Sale Boundary Tags	Existing Road	Public Land Survey Sections



TIMBER SALE MAP

SALE NAME: FISH AND CHIPS
AGREEMENT #: 30-104810
TOWNSHIP(S): T24R11W
TRUST(S): University - Transferred (5)

REGION: Olympic Region
COUNTY(S): Jefferson
ELEVATION RGE: 370-920



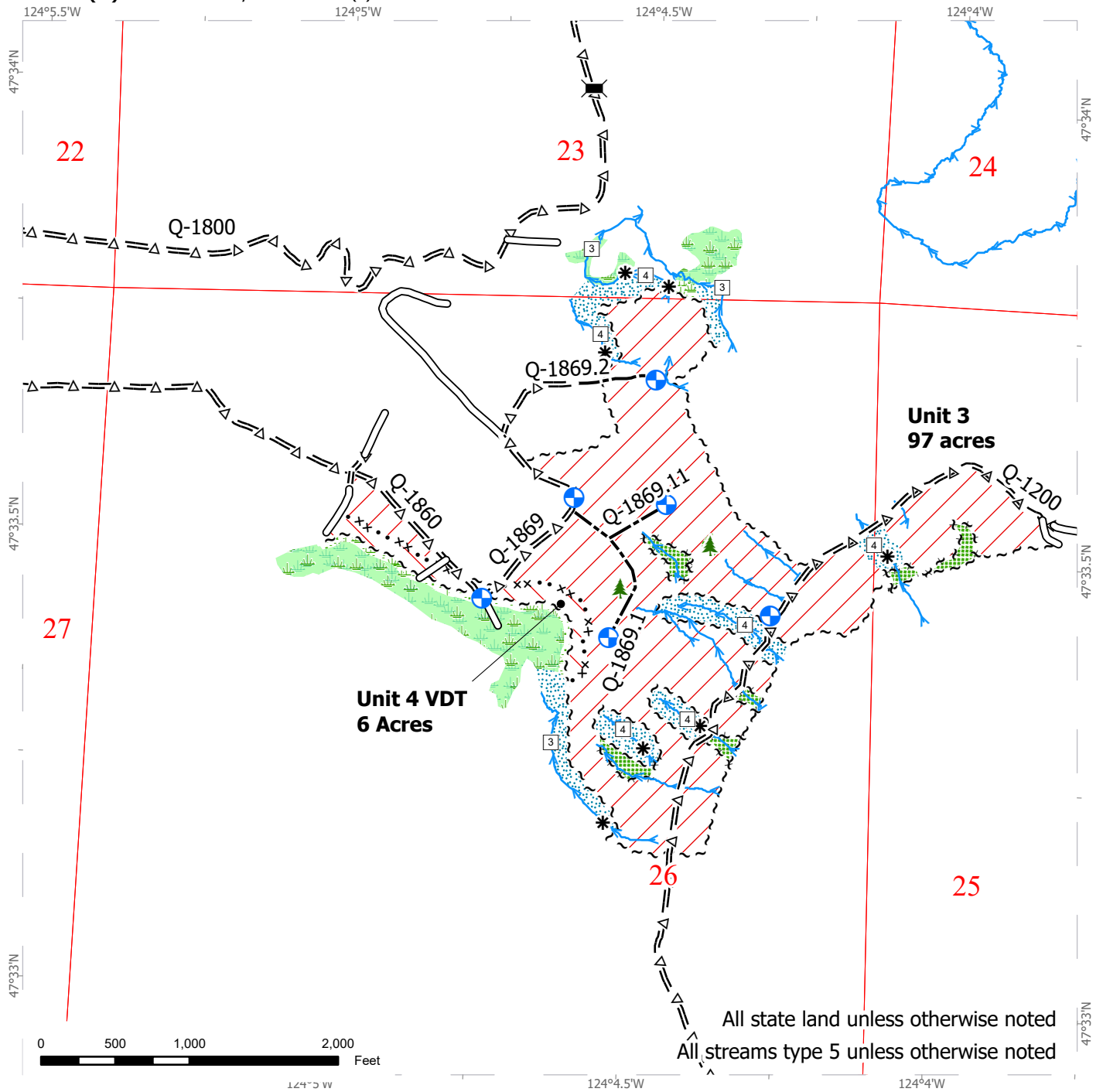
All state land unless otherwise noted
 All streams type 5 unless otherwise noted

Variable Retention Harvest	Flag Line	Optional Pre-Haul Maint.
Leave Tree Area	Streams	Landing
Forested Wetland	Stream Type	Rock Pit
Wetland Mgt Zone	Stream Break	DNR Managed Lands
Riparian Mgt Zone	Survey Monument	Public Land Survey Townships
Sale Boundary Tags	Existing Road	Public Land Survey Sections
Leave Tree Tags	Optional Construction	

TIMBER SALE MAP

SALE NAME: FISH AND CHIPS
AGREEMENT #: 30-104810
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All state land unless otherwise noted
 All streams type 5 unless otherwise noted

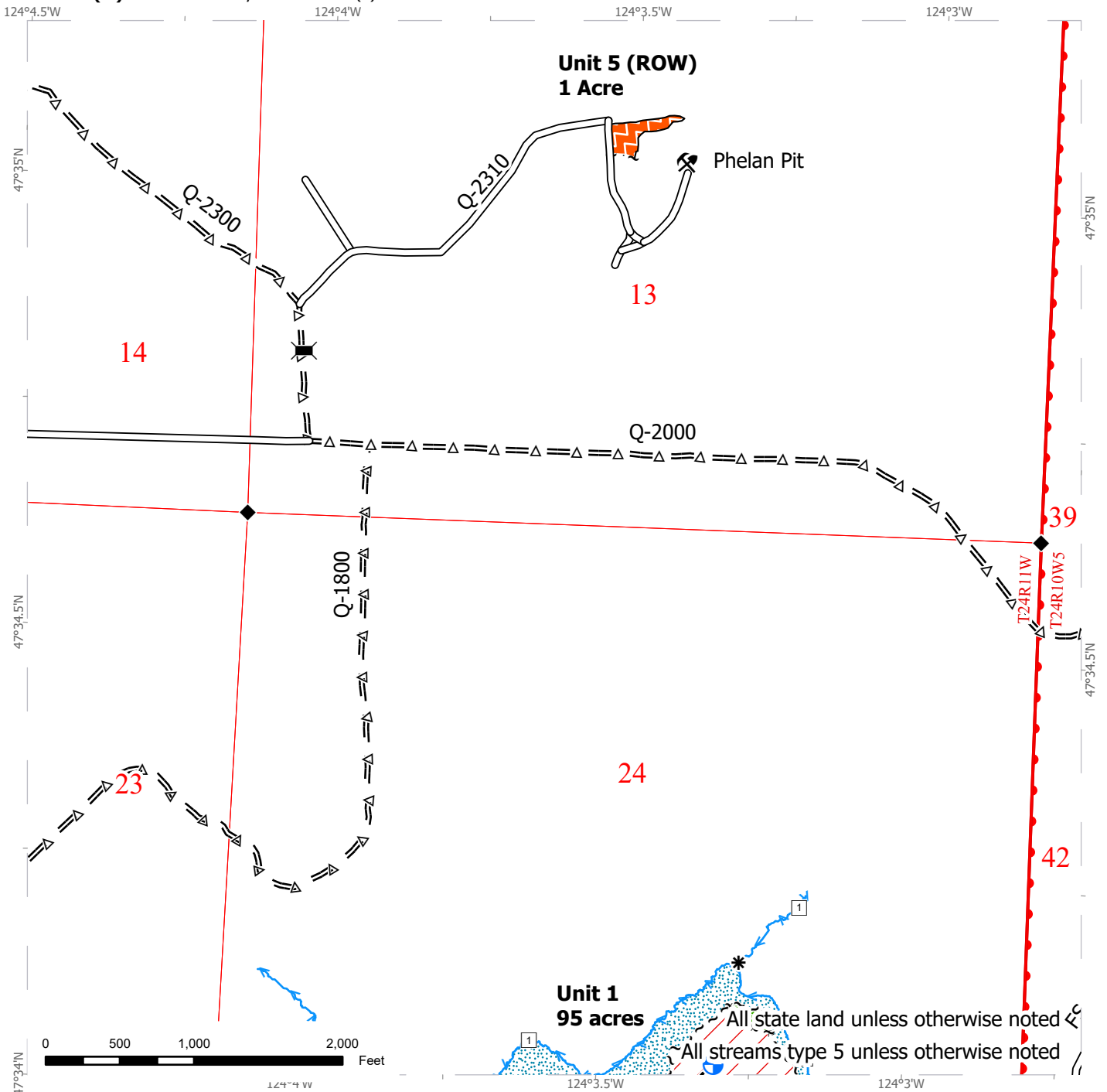
Variable Retention Harvest	Leave Tree Tags	Optional Construction
Variable Density Thinning	Special Mgmt Area	Optional Pre-Haul Maint.
Leave Tree Area	Streams	Bridge
Wetlands - Non-forested	Stream Type	Landing
Wetland Mgt Zone	Stream Break	DNR Managed Lands
Riparian Mgt Zone	Leave Tree Area <1/4-acre	Public Land Survey Townships
Sale Boundary Tags	Existing Road	Public Land Survey Sections



TIMBER SALE MAP

SALE NAME: FISH AND CHIPS
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COUNTY(S): Jefferson
ELEVATION RGE: 370-920

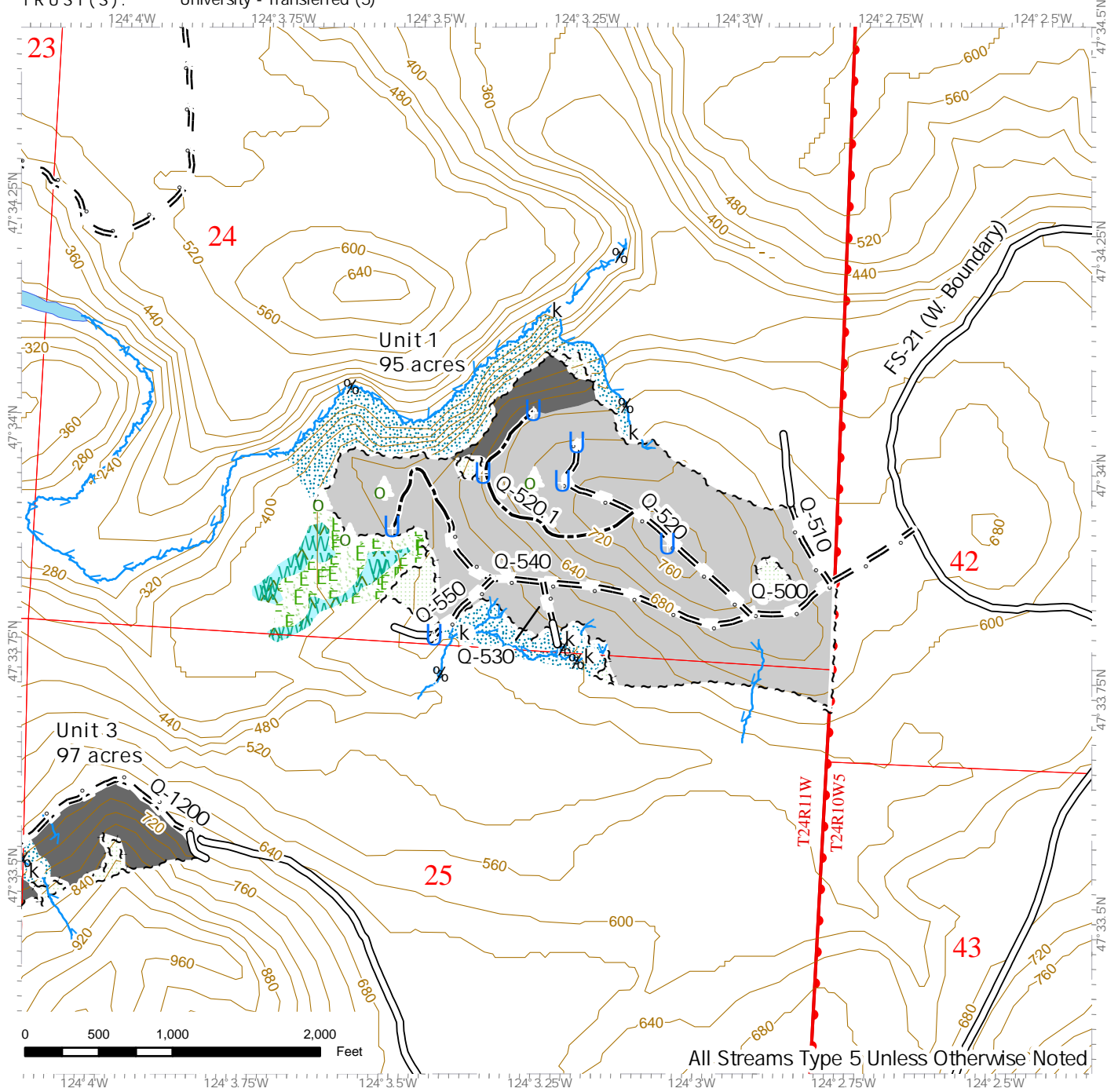


	Variable Retention Harvest		Timber Type Change		Optional Pre-Haul Maint.
	Right-of-Way Harvest		Streams		Bridge
	Leave Tree Area		Stream Type		Landing
	Riparian Mgt Zone		Stream Break		Rock Pit
	Sale Boundary Tags		Survey Monument		DNR Managed Lands
	Leave Tree Tags		Existing Road		Public Land Survey Townships
	Right of Way Tags		Optional Construction		Public Land Survey Sections

LOGGING PLAN MAP

SALE NAME: FISH AND CHIPS
 AGREEMENT #: 30-104810
 TOWNSHIP(S): T24R11W
 TRUST(S): University - Transferred (5)

REGION: Olympic Region
 COUNTY(S): Jefferson
 ELEVATION RGE: 370-920

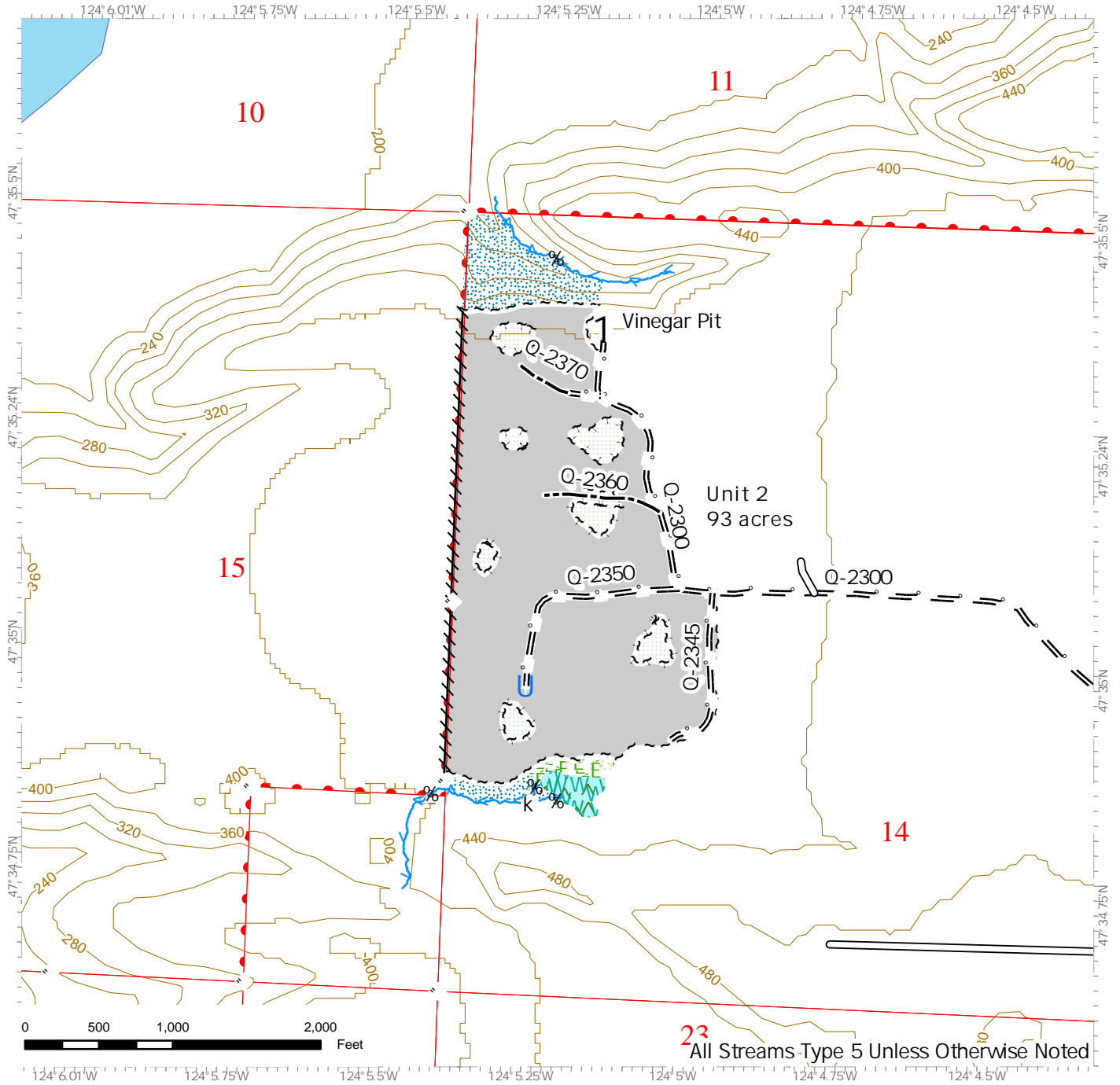


Cable	Sale Boundary Tags	Leave Tree Area < 1/4-acre
Ground	Leave Tree Tags	Landing
Leave Tree Area	Existing Road	Public Land Survey Townships
Forested Wetland	Optional Construction	Public Land Survey Sections
Wetland Mgt Zone	Optional Pre-Haul Maint	DNR Managed Lands
Riparian Mgt Zone	Contours 40 ft	
	Stream Type	
	Stream Break	

LOGGING PLAN MAP

SALE NAME: FISH AND CHIPS
 AGREEMENT #: 30-104810
 TOWNSHIP(S): T24R11W
 TRUST(S): University - Transferred (5)

REGION: Olympic Region
 COUNTY(S): Jefferson
 ELEVATION RGE: 370-920

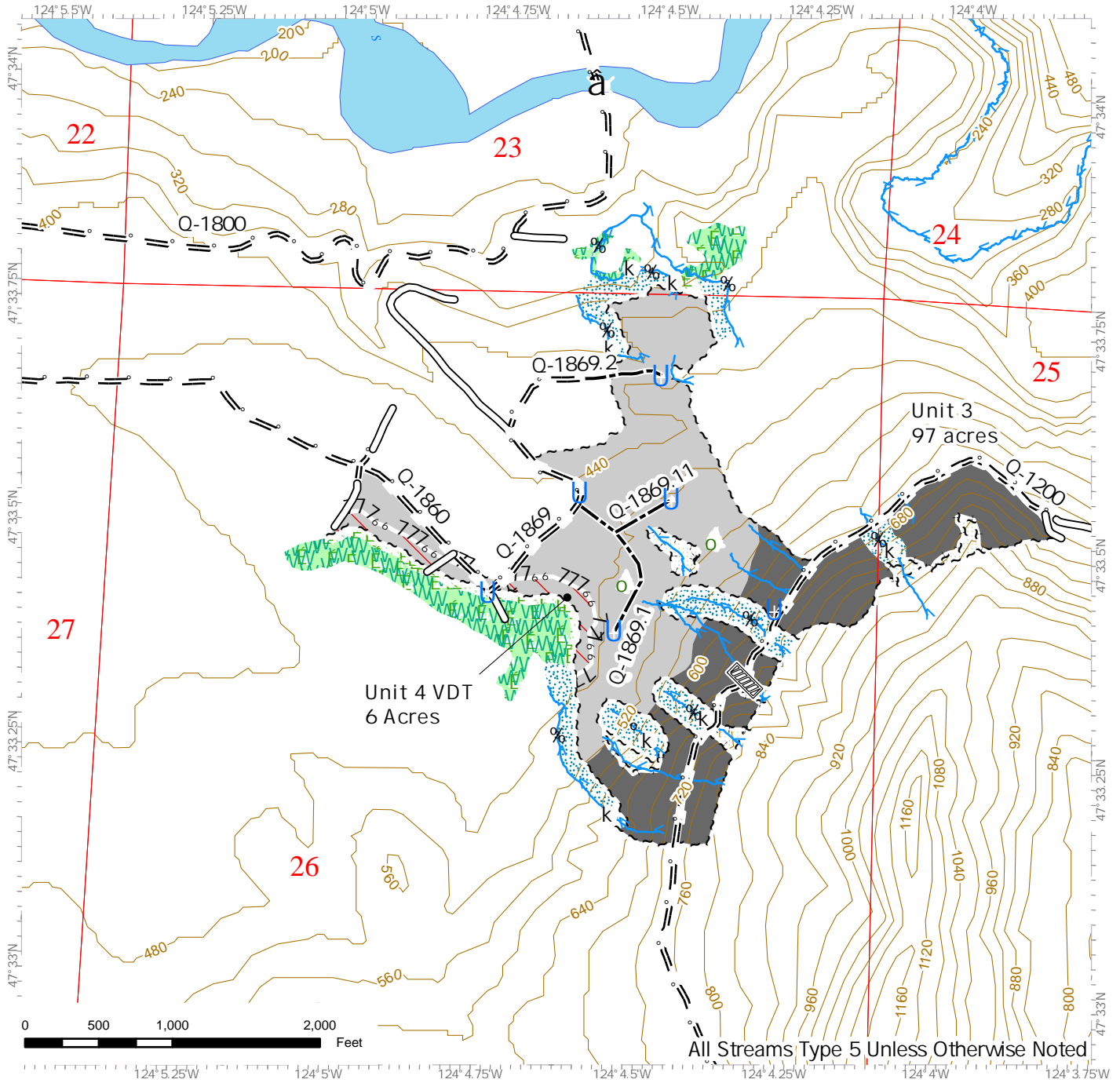


Ground	Sale Boundary Tags	Stream Break
Leave Tree Area	Leave Tree Tags	Survey Monument
Forested Wetland	Flag Line	Landing
Wetland Mgt Zone	Existing Road	Rock Pit
Riparian Mgt Zone	Optional Construction	Public Land Survey Townships
	Optional Pre-Haul Maint.	Public Land Survey Sections
	Contours 40 ft	DNR Managed Lands
	Stream Type	

LOGGING PLAN MAP

SALE NAME: FISH AND CHIPS
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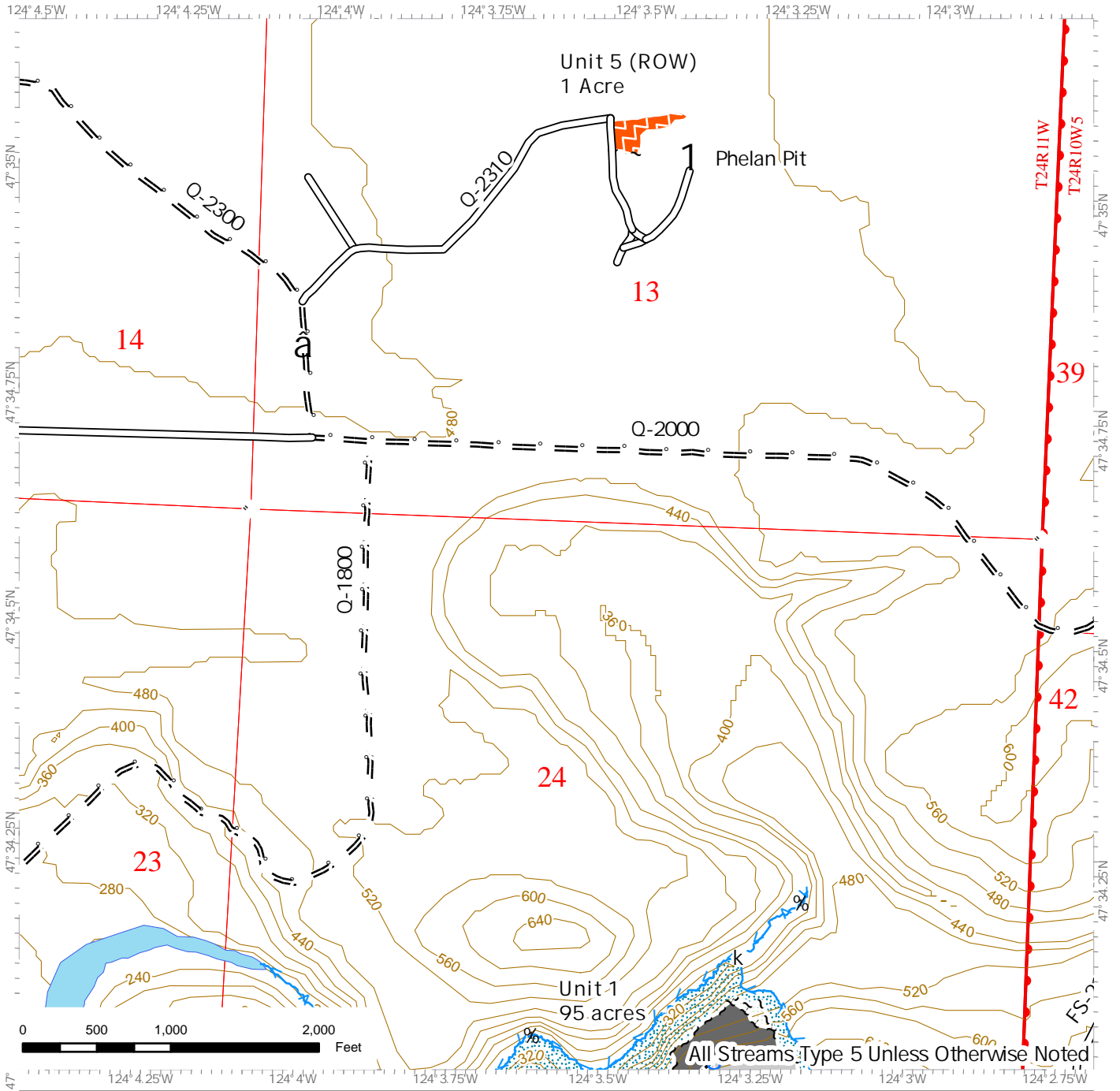


	Cable		Sale Boundary Tags		Stream Break
	Ground		Leave Tree Tags		Culvert
	Leave Tree Area		Special Mgmt Area		Leave Tree Area < 1/4-acre
	Forested Wetland		Existing Road		Bridge
	Wetlands - Non-forested		Optional Construction		Landing
	Wetland Mgt Zone		Optional Pre-Haul Maint		Public Land Survey Townships
	Riparian Mgt Zone		Contours 40 ft		Public Land Survey Sections
	Variable Density Thinning		Stream Type		DNR Managed Lands

LOGGING PLAN MAP

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	Cable		Sale Boundary Tags		Stream Break
	Ground		Leave Tree Tags		Survey Monument
	Leave Tree Area		Right of Way Tags		Bridge
	Riparian Mgt Zone		Existing Road		Landing
	Right-of-Way Harvest		Optional Construction		Rock Pit
			Optional Pre-Haul Maint.		Public Land Survey Townships
			Contours 40 ft		Public Land Survey Sections
			Stream Type		DNR Managed Lands