

*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:* **BRISKAET**  
*Agreement #* **30-100214**

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

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

**Pacific Cascade Region**  
**PO Box 280**  
**Castle Rock, Washington 98611-0280**  
**Phone: (360) 577-2025**  
**Contact Person: Marcus Johns**

4. Date checklist prepared: **07/24/2019**

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

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

*a. Auction Date:*  
**10/29/2020**

*b. Planned contract end date (but may be extended):*  
**10/31/2022**

*c. Phasing:*  
**None**

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

*No, go to question 8.*

*Yes, identify any plans under A-7-a through A-7-d:*

*a. Site Preparation:*

**Site Preparation, including a chemical herbicide application, may be used to ensure that planting can be achieved at acceptable stocking levels to meet or exceed Forest Practice standards following harvest. Slash piles on landings may be burned during the fall before planting.**

*b. Regeneration Method:*

**The units will be hand planted with conifer species following harvest.**

*c. Vegetation Management:*

Possible treatments, including a chemical herbicide application, could occur following harvest. Treatments will be based on vegetative competition, and will ensure a free-to-grow status that complies with Forest Practices standards.

d. Other:

Road maintenance assessments will be conducted and will include periodic ditch and culvert cleanout, and grading as necessary. Construction and pre-haul maintenance are associated with forest management activities.

P&E Extension Quarry will be used as rock sources for future road and associated forest management activities.

Piled slash may be burned following harvest activities. Firewood permits for the sale area may be issued to the public after timber harvest activities are completed.

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

303 (d) – listed water body in WAU:

temp

sediment

completed TMDL (total maximum daily load) Willapa River, Halfmoon Creek, Fern Creek and Fork Creek.

Landscape plan:

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: 02/13/2020

Wildlife report:

Geotechnical report:

Appendix D. slope stability informational form:

Other specialist report(s):

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

Rock pit plan: Included in Road Plan

Other: Forest Practices Board Manual; Forest Practices Activity Maps; Policy for Sustainable Forests (PSF 2006); State Soil Survey; Habitat Conservation Plan (HCP 1997); HCP Checklist; Riparian Forest Restoration Strategy (RFRS); Land Resource Manager Reports and associated maps; Road Maintenance and Abandonment Plan (RMAP): #2502155. DNR's State Trust Land Final Conservation Plan Amendment for the Marbled Murrelet Long-term Conservation Strategy (MM LTCS) (2019). The following information is provided by DNR's GIS database: Weighted Old Growth Habitat Index (WOGHI); WAU Rain-On-Snow Layer; Marbled Murrelet Habitat Layer; Spotted Owl Habitat Layer; USGS and GLO maps; State Lands Geologist Remote Review (SLGRR); and Statewide Landslide Inventory (LSI) screening tool.

Referenced documents may be obtained at the Pacific Cascade region office 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 # 2937901       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:

Briskaet is an eight unit sale in the Frances Block. This proposal will utilize both ground and cable harvesting methods. Approximately 6,211 MBF will be removed with this proposal and approximate acreage described below.

Unit	Proposal Acres (gross)	RMZ/WMZ Acres	Potentially Unstable Slope Acres	Existing Road Acres (within unit)	Sale Acres	Leave Tree Clump Acres	Net Harvest Acres
1	59	2*	0	0	57	3	54
2	8	4*	0	0	4	1	3
3	18	13*	0	0	5	1	4
4	122	43*	0	2	79	4	73
5	30	12*	0	1	18	1	16
6	9	7	0	0	2	1	1
7 (ROW)	2	1	0	0	1	0	1
8 (ROW)	2	1	0	0	1	0	1
Totals	250	83	0	3	167	11	153

\*Unstable Slopes by unit:

- Unit 1 – 1.2 acres in the RMZ
- Unit 2 – 0.4 acres in the RMZ
- Unit 3 – 1.3 acres in the RMZ
- Unit 4 – 5 acres in the RMZ
- Unit 5 – 0.5 acres in the RMZ

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:***

<b>Unit</b>	<b>Origin Date</b>	<b>Major Timber Species</b>	<b>Type of Harvest</b>
<b>1</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>2</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>3</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>4</b>	<b>1961-1963</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>5</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>6</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Variable Retention</b>
<b>7 (ROW)</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Right-of-Way</b>
<b>8 (ROW)</b>	<b>1961</b>	<b>Douglas-fir, western hemlock, western redcedar, red alder, bigleaf maple</b>	<b>Right-of-Way</b>

***Overall Unit Objectives:***

The objective of this proposal is:

- 1) Produce revenue for the Charitable/Education/Penal & Reformatory Institution Trust (06) and Scientific School Trust (10) through the production of saw logs, poles, and pulp material.
- 2) Provide for wildlife and riparian habitat by maintaining vertical stand structure and age class distribution in the future stand.

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		5,720	1.1	
Reconstruction		2,030		
Abandonment				
Bridge Install/Replace				
Stream Culvert Install/Replace (fish)				
Stream Culvert Install/Replace (no fish)	1			
Cross-Drain Install/Replace	12			

45,925 feet of pre-haul maintenance.

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:

Unit 1 is located in portions of Section 28 and 29 of Township 13 North, Range 06 West, W.M.

Units 2, 3, 4, 5, 6, 7 (ROW) and 8 (ROW) are located in Section 29 of Township 13 North, Range 06 West, W.M.

P&E Extension Quarry is located in Section 29 of Township 13 North, Range 06 West, W.M.

b. Distance and direction from nearest town (see the driving map listed on the DNR website for further information):

All units of this proposal are located approximately 12 miles, by road, southeast of Menlo, Washington. The route from Menlo is via State Route 6 to the HM Mainline. Unit 1 is located of the HM 2700. Units 2, 3, 4, 5, and 6 are located of the HM 2600.

13. Cumulative Effects

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

**This proposal may affect these known elements of the environment: earth, soils, air quality, surface water movement/quantity/quality, runoff/absorption, habitat for wildlife, unique species, noise, aesthetics, and recreation. 303(d) listed streams for temperature and total maximum daily load are the Willapa River, Halfmoon Creek, Fern Creek and Fork Creek. The Willapa River is approximately 5 miles from the proposal area. Halfmoon Creek is within the RMZ of the proposal area. Fern Creek is approximately one half mile from the proposal area. Fork Creek is approximately 7 miles from the proposal area.**

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

**The Department of Natural Resources has a multi-species Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concerning threatened and endangered species and their habitats, which requires the Department to manage landscapes to provide and sustain long-term habitat in exchange for an Incidental Take Permit. This agreement substantially helps the Department to mitigate for cumulative effects related to management activities. Forest Practice rules are used for roads and geology.**

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

**None.**

- d. *Based on the answers in questions A-13-a through A-13-c, is it likely potential impacts from this proposal could contribute to any environmental concerns listed in question A-13-a?*

**No.**

e. Complete the table below with the reasonably foreseeable future activities within the associated WAU(s) (add more lines as needed). Future is defined as occurring within the next 7 years.

WAU Name	Total WAU Acres	DNR-owned 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
WILLAPA HEADWATERS	62850	19941	3005	0	3434
MILL CREEK	15115	10601	1386	0	74

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:	WILLAPA HEADWATERS
WAU Acres:	62850
Elevation Range:	62 - 2843 ft.
Mean Elevation:	784 ft.
Average Precipitation:	82 in./year
Primary Forest Vegetation Zone:	Western Hemlock
WAU:	MILL CREEK
WAU Acres:	15115
Elevation Range:	10 - 2130 ft.
Mean Elevation:	555 ft.
Average Precipitation:	74 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)?

**70% within the harvest unit.**

- 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 entire 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.*

<b>State Soil Survey #</b>	<b>Soil Texture</b>
7619	GRAVELLY SILT LOAM
9804	SILT LOAM
3852	V.COBBLY LOAM
4242	SILT LOAM
4241	SILT LOAM

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No, go to question B-1-e.

Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.

A DNR State Lands geologist remotely reviewed all units of the sale utilizing the review of the historic aerial photographs, Forest Practices Statewide Landslide Inventory data, and Landslide Remote Identification Model (LRIM) tool. LRIM is a screening tool which identifies areas of potentially unstable landforms and is derived Light Detection and Ranging (LiDar) elevation data. The results of the geologist review, available in the State Lands Geologist Remote Review (SLGRR), were discussed by the geologist with the forester who completed the field reconnaissance. There was no field review completed by a DNR state lands geologist. The field forester that prepared this proposal is trained in unstable slope identification. Potentially unstable slopes were identified in Units 1, 2, 3, 4, and 5 and excluded from the sale area using “Timber Sale Boundary” tags and/or “Leave Tree Area” tags. The excluded area totaled approximately 8.4 acres.

There is evidence of small, shallow slope failures within the sub-basins. These are generally associated with slopes greater than 70% within convergent landforms such as bedrock hollows and inner gorges. These landforms, per local knowledge, typically occur within the RMZs, lower slopes of the main draws, and on headwalls at the top of steep draws. There is evidence of deep-seated landslides in the sub-basins. These commonly form on steep slopes and toe into stream valleys.

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

No  Yes, describe the proposed activities:

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

- Rule identified landforms in Units 1, 2, 3, 4, and 5 were excluded from the sale area with “Timber Sale Boundary” tags and/or with “Leave Tree Area” tags. The total acreage excluded from the harvest area was 8.4 acres.
- Cross-drains and ditchouts will be utilized to minimize the potential for mass wasting and slope failures associated with poor drainage.
- Some steeper Type 5 headwalls have leave tree clumps protecting them.
- Lead-end suspension will be required on all yarding activities.

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

*Approx. acreage new roads: 1.1*

*Approx. acreage new landings: 1*

*Purpose: N/A*

*Fill Source: N/A*

*Approx. cubic yards of fill: N/A*

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 2% of the site will remain as gravel roads and landings.**

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

**Erosion control and reduction measures are addressed in the sale layout and harvest system design.**

- The no-harvest RMZs and WMZs will function to protect streams from sediment delivery.
- Leave tree clumps were left around the headwalls of some Type 5 streams.
- Harvested areas will be replanted with conifer tree species to reestablish root bound soils.
- Roads will be constructed during dry weather conditions.
- The proposal will be harvested utilizing lead-end suspension to minimize soil disturbance.
- Roads were located on ridge-tops where possible.
- Areas of soil exposed through road construction will be re-vegetated.

**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:    **Halfmoon Creek and Willapa River**

b. Complete the following riparian & wetland management zone table:

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in feet (per side for streams)
Halfmoon Creek	3	1	192
Unnamed Stream	3	2	192
Unnamed Stream	4	14	100
Unnamed Wetland	4	1	100
Unnamed Stream	5	18	None

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

Leave trees were placed along some of the Type 5 streams. RMZs are no-harvest buffers. No wind buffers were applied with this proposal. There is a low potential for blowdown due to the topography, as evidenced by an absence of any significant riparian blowdown resulting from several major windstorms in recent years.

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):

Trees will be felled away from all streams. Trees may be cut in RMZs/WMZs for safety or operational needs, but will be left in place to provide large woody debris functions in the riparian area.

Tailhold cables may be strung through the Type 3 and Type 4 RMZs/WMZs, however, no timber will be yarded through them. Timber harvest may occur within approximately 192 feet (required average RMZ width) to the Type 3 streams adjacent to Units 2, 3, 4, 5 and 6. Timber harvest may occur as close as 100 feet (required minimum RMZ width) to all Type 4 streams in the proposal area.

Within the outer zone of two Type 4 RMZs in Unit 7(ROW), Right of way will be cut and road construction will occur to reach Unit 2. The right of way will be 60 feet wide and the road will have a running surface of 12 feet wide. Within the outer zone of two Type 4 RMZs in Unit 8(ROW), Right of way will be cut and a designated skid trail will occur to reach Unit 6. The Right of way will be 40 feet wide and the designated skid trail will be 12 feet wide. The wood cut in the outerzone of Unit 7(ROW) and Unit 8(ROW) will be removed with the sale. This will be accomplished with ground based equipment and the road in Unit 7(ROW) will not be abandoned.

**Type 5 streams may have tailhold cable strung over them and/or timber yarded across them. A temporary culvert will be installed on a Type 5 stream for a designated skid trail in Unit 5.**

- 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.

**No.**

- 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:*

**Within the sub-basin, soils and terrain susceptible to surface erosion and/or mass wasting 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.d.2. and B.1.h.**

- 8) *What are the approximate road miles per square mile in the associated WAU(s)?*

**The Willapa Headwaters WAU averages 5.8 miles per square mile. The Mill Creek WAU averages 4.9 miles per square mile. Road mileages in the subbasin are similar to WAU mileages. The higher than average road miles per square mile within the WAU are due to the amount of forest roads necessary to provide access across topography for safe logging operations.**

- 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 possible some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road construction, reconstruction, and/or maintenance 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:

**During the winters of 1996, 2007, and 2009, (suspected) 100-year return interval precipitation events occurred. The storms set rainfall and flood level records in Southwest Washington and Northwest Oregon. The events caused many shallow mass-wasting events, which caused stream channels to change location and/or dimension. The full extent and long-term impacts across the WAU from these storms is not known due to varying ownerships.**

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.*

**The current proposal may slightly change the timing, duration, and/or magnitude of peak flows due to decreased evapotranspiration, but significant impacts are not anticipated.**

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):  
**Private - Agriculture & Domestic**

**There are a few private surface water intakes downstream (approximately 1.9 miles) from the proposal, however significant changes in surface water are not anticipated with this proposal. There is one area of slope instability that lie within the headwalls of downstream Type 5 streams and 7 areas of instability that lie along Type 3 and 4 streams downstream.**

*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.

**None.**

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.

**None.**

- 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:

**There are a few private wells downstream (approximately 1.9 miles) from the proposal. Due to the distance from the proposal area, ground water amounts, timing and movements are not expected to be changed by this proposal. There are no known areas of slope instability down slope of the proposal area. There are areas of instability located downslope and downstream within the proposals no harvest RMZ, WMZs and leave trees area. These areas of slope instability have been removed from harvest as is outlined in B.1.d.2.**

*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.**

**Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged 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.**

*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: **Cherry, 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*: Oregon grape, vine maple, blackberry, elderberry
- 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*).

**All conifer and hardwood trees will be removed as part of this harvest proposal, except the wildlife leave trees, green recruitment trees and the vegetation within the RMZs. Understory vegetation will be disturbed and/or reduced within the proposed harvest area as a result of timber felling, bucking, yarding and site preparation activities. Most of the vegetation will re-establish within 2 – 3 years after forestry activities are complete.**

- 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: To the north is mature timber with an origin of 1934. To the east is a conifer plantation with an origin of 2017. To the south is mature timber with an origin of 1964. To the west is mature timber with an origin of 1964.**

**Unit 2: To the north is mature timber with an origin of 1963. To the south and east is a Type 3 RMZ with an origin of 1961. To the west is a Type 4 RMZ with an origin of 1961.**

**Unit 3: To the north is mature timber with an origin of 1963. To the east is a Type 4 RMZ with an origin of 1961. To the south is a Type 3 RMZ with an origin of 1961. To the west is a Type 3 RMZ with an origin of 1961.**

**Unit 4: To the north is mature timber with an origin of 1961. To the east is a Type 4 RMZ with an origin of 1961 and mature timber with an origin of 1963.**

To the south is a Type 3 RMZ with an origin of 1961. To the west is a Type 4 RMZ with an origin of 1961.

Unit 5: To the north is a conifer plantation with an origin of 2007. To the east is a Type 4 RMZ with an origin of 1961. To the south is a Type 3 RMZ with an origin of 1961. To the west is a Type 4 RMZ with an origin of 1962.

Unit 6: To the north is mature timber with an origin of 1961. To the east is a Type 4 RMZ with an origin of 1961. To the south is a Type 3 RMZ with an origin of 1961. To the west is a Type 4 RMZ with an origin of 1962.

Unit 7 (ROW): To the north is mature timber with an origin of 1963. To the east is a Type 4 RMZ with an origin of 1961. To the south is mature timber with an origin of 1961. To the west is a Type 4 RMZ with an origin of 1961.

Unit 8 (ROW): To the north is mature timber with an origin of 1961. To the east is a Type 4 RMZ with an origin of 1961. To the south is a Type 3 RMZ with an origin of 1961. To the west is a Type 3 RMZ with an origin of 1962.

The older stands (56 to 58 years old) and the mature RMZ stands adjacent to the units have multi-layered canopies with scattered small to large snags and a moderate component of large down woody debris. The adjacent (2 to 12 years old) have few snags and most of the down woody debris is scattered logs and slash from the previous harvest. Within the larger leaf tree clumps, there are some components of older large down woody debris within the undisturbed vegetation.

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

**None found in corporate database**

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

**Retention tree clumps are identified across the harvest area. Some clumps were selected for their species diversity of native flora. These clumps will provide a local seed source for native overstory and understory species. Some natural regeneration of native species will occur on site after harvest. Wildlife trees were left in areas to protect snags, large down logs, advanced regeneration, Type 5 streams, and potentially unstable slopes. Trees with defects such as split or broken tops, dominant crowns, large diameters and large limbs were favored as leave trees to enhance wildlife potential.**

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

**Noxious weeds and invasive species have not been observed on or near the site.**

## 5. Animals

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

birds:

eagle  hawk  heron  owls  songbirds

other:

mammals:

bear  beaver  coyote  cougar  deer  elk

other: **bobcat**

fish:

bass  herring  salmon  shellfish  trout

other:

amphibians/reptiles:

frog  lizard  salamander  snake  turtle

other:

unique habitats:

balds  caves  cliffs  mineral springs  oak woodlands  talus slopes

other:

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

TSU Number	Common Name	Federal Listing Status	State Listing Status
BRISKAET U3	Northern Spotted Owl	Threatened	Endangered
BRISKAET U4	Marbled murrelet	Threatened	Endangered

c. Is the site part of a migration route? If so, explain.

Pacific flyway  Other migration route:

Explain:

**This proposal is located in the Columbia River Flyway, which is part of the Pacific Flyway. Migratory waterfowl use the Columbia River Flyway; however, the area in which this proposal is contained is not generally the type of area used for resting or feeding by migratory waterfowl. While migrating through Pacific Northwest Forests, many Neotropical migratory birds are closely associated with riparian areas, cliffs, snags, and structurally unique trees. Riparian areas and special habitats are protected through implementation of the Department's Habitat Conservation Plan.**

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.*

**Riparian habitat**

- No-harvest RMZs on Type 3 and Type 4 streams.
- No-harvest WMZs on one 0.45 Acre forested wetland.

**Upland habitat**

- **A minimum of 8 leave trees per acre were left clumped and scattered  
Older large woody debris will be left on site.**

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

**Invasive species have not been observed on or near the site.**

**6. Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

**Petroleum fuel (diesel or gasoline) will be used for heavy equipment during 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.

**Minimal hazards incidental to operation of heavy machinery such as the risk of fire or small amounts of oil and other lubricants may be accidentally discharged as a result of heavy equipment use.**

1) Describe any known or possible contamination at the site from present or past uses.

**None known.**

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

**None known.**

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

**Petroleum-based fuel and lubricants may be used and stored on site during the operating life of this project.**

- 4) Describe special emergency services that might be required.

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

- 5) Proposed measures to reduce or control environmental health hazards, if any:

**No petroleum-based products will be disposed of on site. If a spill occurs, containment and cleanup will be required. Spill kits are required to be onsite during all heavy equipment operations. The cessation of operations may occur during periods of increased fire risk. Fire tools and equipment, including pump trucks and/or pump trailers, will be required on site during fire season.**

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

b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

**None.**

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

**There will be short term, low level and high level noise created by the use of harvesting equipment and hauling operations within the proposal area. This type of noise has been historically present in this geographical area.**

- 3) Proposed measures to reduce or control noise impacts, if any:

**None.**

**8. Land and shoreline use**

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

**Current use of site and adjacent land types: The land surrounding the units is managed for timber production by the DNR.**

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

- b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

**This proposal site has been used as working forest lands. This proposal will retain the site in working forest lands.**

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

**This proposal is consistent with current and standard forestland harvest activities; there are no anticipated effects on this or adjacent lands that would affect normal forest land business operations. Equipment access, application of pesticides and timber harvesting are normal activities that would be expected on forest lands.**

- 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?

**All units are zoned as Commercial Forest.**

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

**The comprehensive plan designation is resource lands, forest of long term significance.**

- 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 proposal is consistent with the Department's Habitat Conservation Plan and Policy for Sustainable Forests, as well as the county's comprehensive plan designation and zoning classification.**

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

**This proposal is consistent with the Department's Habitat Conservation Plan and Washington Forest Practices Rules.**

## 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?

**Views in the background will be temporarily altered by the removal of trees.**

- 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?*

**This proposal will not affect the views described above.**

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

**None.**

## **11. Light and glare**

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

**None.**

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

**No.**

- c. What existing off-site sources of light or glare may affect your proposal?

**None.**

- d. Proposed measures to reduce or control light and glare impacts, if any:

**None.**

## **12. Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?

**There is no designated recreation within the proposal area. However, hunting, hiking, horseback riding, mountain biking, mushroom and berry picking, and other informal outdoor recreation activities may occur within the proposal area.**

- b. Would the proposed project displace any existing recreational uses? If so, describe.

**Some types of informal recreation may be displaced during periods of active logging.**

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

**None at this time.**

### **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.

**The site was remotely assessed by a DNR Cultural Resource Technician, reviewing GLO and Historic maps, and recorded cultural resources.**

- 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.

**State Route 6 to Halfmoon Mainline provide access to the forest roads which access the harvest units.**

- 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. The nearest transit stop is in Chehalis, WA which is approximately 35 miles east of this proposal.**

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

**None.**

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

**Yes, see A-11-c.**

- 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area and any existing safety problem(s), if at all?*

**This proposal expands the network of Department of Natural Resources' forest roads in the area.**

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

**No.**

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

**Approximately 10 to 15 truck trips per day while the operation is active. Peak volumes would occur during the yarding and loading activities between 4:00 a.m. and 4:00 p.m. of the operating period. The completed project will generate less than one vehicular trip per day. Estimates are based on the observed harvest traffic of past projects.**

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

**No.**

h. Proposed measures to reduce or control transportation impacts, if any:

**None.**

**15. Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

**No.**

b. Proposed measures to reduce or control direct impacts on public services, if any.

**None.**

**16. Utilities**

a. Check utilities currently available at the site:

- electricity     natural gas     water     refuse service     telephone     sanitary sewer  
 septic system     other:

**None.**

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: Maureen J. Crabtree , MAUREEN J. CRABTREE  
FOR

Name of signee Tyler Kaech

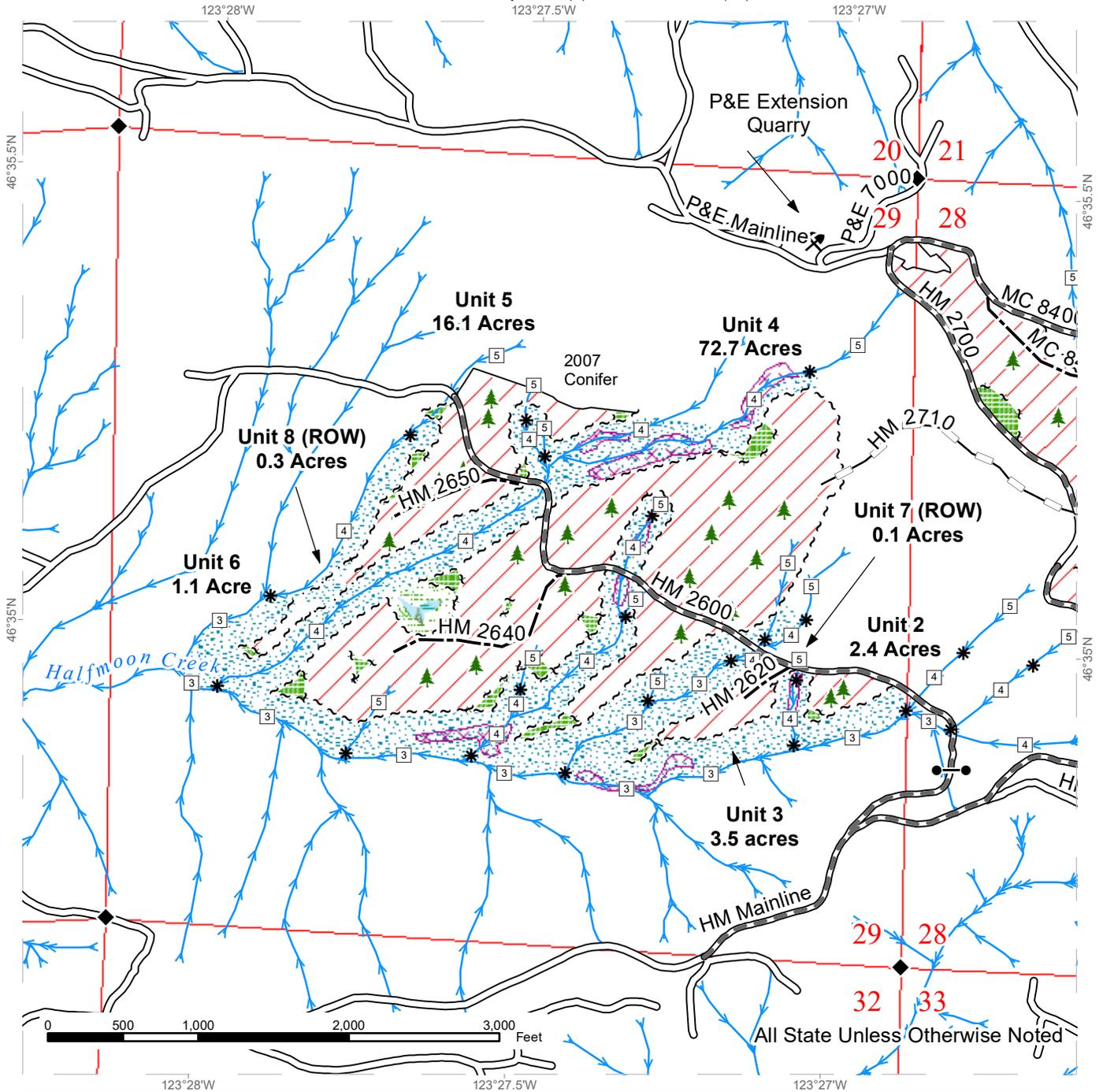
Position and Agency/Organization Forester 2/DNR NRS 3

Date Submitted: 2/19/2020 07/23/2020

# TIMBER SALE MAP

**SALE NAME:** BRISKAET  
**AGREEMENT #:** 30-100214  
**TOWNSHIP(S):** T13R6W  
**TRUST(S):** Charitable/Educational/Penal & Reformatory Instit. (6), Scientific School (10)

**REGION:** Pacific Cascade Region  
**COUNTY(S):** Pacific  
**ELEVATION RGE:** 840-2120



All State Unless Otherwise Noted

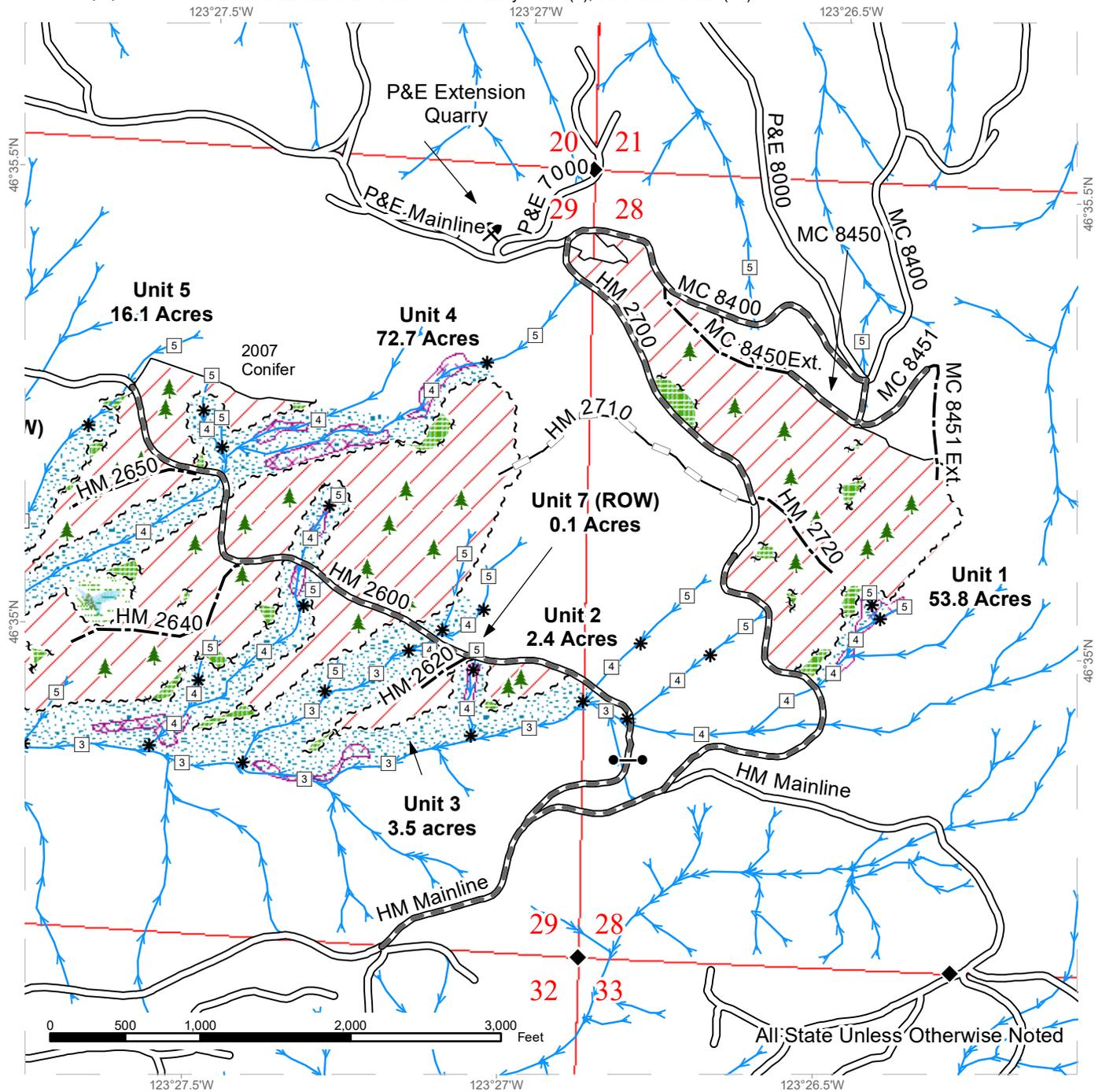
Variable Retention Harvest	Sale Boundary Tags	Streams
Leave Tree Area	Leave Tree Tags	Stream Type
Riparian Mgt Zone	Right of Way Tags	Stream Type Break
Forested Wetland	Timber Type Change	Survey Monument
Wetland Mgt Zone	Existing Roads	Gate (PCP1-1)
Potentially Unstable Slopes	Required Pre-Haul Maintenance	Leave Tree
	Optional Construction	Rock Pit
	Optional Reconstruction	



# TIMBER SALE MAP

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Variable Retention Harvest	Sale Boundary Tags	Streams
Leave Tree Area	Leave Tree Tags	Stream Type
Riparian Mgt Zone	Right of Way Tags	Stream Type Break
Forested Wetland	Timber Type Change	Survey Monument
Wetland Mgt Zone	Existing Roads	Gate (PCP1-1)
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