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 <u>http://www.dnr.wa.gov/sepa</u>. 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 <u>all parts of your proposal</u>, 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 <u>SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)</u>. 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: **BLUFFIN** *Agreement* # **30-104863**

2. Name of applicant: Washington Department of Natural Resources

- 3. Address and phone number of applicant and contact person: 950 Farman Ave N Enumclaw, WA 98022 Contact: Audrey Mainwaring Phone: (360) 825-1631
- 4. Date checklist prepared: 01/24/2024
- 5. Agency requesting checklist: Washington State Department of Natural Resources
- 6. Proposed timing or schedule (including phasing, if applicable):
 a. *Auction Date:* 02/25/2025

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

c. Phasing: None

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

 \Box No, go to question 8.

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

a. Site Preparation:

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

b. Regeneration Method:

Hand plant native species within three years of harvest in VRH units to a density that exceeds Forest Practice standards.

c. Vegetation Management:

Possible treatments, including an herbicide application to treat noxious weeds, may 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: Thinning: Needs will be assessed. Generally, pre-commercial thinning is considered at approximately 6-12 years following planting. Pre-commercial thinning, if needed, will be performed to retain a healthy, vigorous stand of native conifers in all VRH units.

Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and grading as necessary. Firewood collection may occur as well.

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: Riley Slough, Skykomish River

 \boxtimes temp

□ sediment

□ *completed TMDL (total maximum daily load)*

- \Box Landscape plan:
- □ Watershed analysis:
- □ Interdisciplinary team (ID Team) report:
- ⊠ Road design plan: Included in the Road Plan, dated 02/01/2024
- □ Wildlife report:
- Geotechnical report:

☑ Other specialist report(s): Geologic Field Summary, dated 01/30/2024 by Susie Wisehart,

Licensed Engineer Geologist

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

⊠ Rock pit plan: Included in the Road Plan, dated 02/01/2024

⊠ *Other:* The following analyses, policies, procedures, documents, and data layers directly pertain to or were reviewed as part of this proposal:

- DNR Policies and Implementation
 - Policy for Sustainable Forests (PSF; 2006a)
 - Final Environmental Impact Statement on the Policy for Sustainable Forests (2006b)
 - Identifying Stands to Meet Older Forest Targets in Western Washington (Estep and Buffo 2021)
 - Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington (May 2024)
 - Identifying Mature and Old Forests in western Washington by Robert Van Pelt (Van Pelt, R. 2007)
 - Silvicultural Rotational Prescriptions
 - Land Resource Manager Reports, including Special Concerns 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)
- Clarification of projections of forest types and stand structural conditions on Washington DNR State Trust Lands, USFWS; October 27, 2021
- Spotted Owl Habitat GIS Layer
- Marbled Murrelet Habitat GIS Layer
- o WAU Rain-On-Snow GIS Layer
- Biological Opinion on the HCP, USFWS; January 27, 1997
- Biological Opinion on the HCP, NMFS; January 29, 1997
- Biological Opinion on the HCP Marbled Murrelet Long-term Conservation Strategy Amendment, USFWS; November 7, 2019
- Reinitiated Biological Opinion on the Incidental Take Permit (PRT-812521), USFWS; March 21, 2024
- Forest Practices Regulations and Compliance
 - Forest Practices Rules (Title 222 WAC)
 - Forest Practices Board Manual
 - Forest Practices Activity Maps
 - Trust Lands HCP Addendum and Checklist
- Supporting Data for Unstable Slopes Review
 - o State Lands Geologist Remote Review (SLGRR)
 - o Lidar Data and Derivatives
 - \circ Draft Landform Remote Identification Model (LRIM) screening tool
 - o Published Landslide Inventories
 - Historic Aerial Photographs
 - Published Geologic Mapping
- Supporting Data for Cultural Resources Review
 - o Historical Aerial Photographs
 - o USGS and GLO maps
 - Department of Archaeology and Historical Preservation database for architectural and archaeological resources and reports (WISAARD)
- Additional Supporting Data for Policy Compliance
 - Weighted Old Growth Habitat Index (WOGHI)
 - State Soil Survey
 - DNR inventory layers, including RS_FRIS
 - Stand Origin Assessment form for Bluffin Timber Sale
 - Stand Development Stage form for Bluffin Timber Sale
- Sustainable Forestry Initiative certification standards and audit reports
- Informal Conference Note (ICN) #6624064
- Cliff information and evaluation for Bluffin email by biologist Alan Mainwaring, dated February 29, 2024
- Reviews by and communications with State Lands Geologist, State Lands Archaeologist, and Region Biologist

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 #2423940
 ☑ Burning permit
 ☑ Shoreline permit
 ☑ Existing HPA

 \Box Other:

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

a. Complete proposal description:

The Bluffin Timber Sale proposal encompasses approximately 300 acres of forested land within the Youngs Creek and Snoqualmie River/Cherry Creek Watershed Administrative Units (WAUs) on DNR managed trust land within the Mackworth State Forest. The harvest units and majority of the proposal is in Snohomish County with a minor component of road work and associated right of way tree falling in King County. The proposal includes lands with flat to steep topography, with timber sale area located in flat to gentle slopes ranging from approximately 480 to 920 feet in elevation.

The proposal area was evaluated by the unit forester, region biologist, archaeologist, geologist, and engineer. Areas where timber harvest is inconsistent with one or more of the agency's objectives have been excluded from planned harvest and contribute to conservation areas (e.g. potentially unstable slopes, riparian and wetland buffers, old growth stands, or habitat for state or federally listed species needed to meet DNR's Habitat Conservation Plan objectives and other conservation commitments, etc.).

Having identified areas to be reserved for conservation, the final proposal design includes 198 net acres of timber harvest and 95 acres (32% of the overall proposal area) designated for conservation and leave tree areas to protect streams, wetlands, potentially unstable slopes, unique ecological areas, leave trees for biodiversity and wildlife habitat, and will contribute to older-forests over time.

The Bluffin Timber Sale consists of four variable retention harvest (VRH) units and two right of way (ROW) unit harvesting approximately 5,499 MBF of merchantable timber.

Each unit net acreage is as follows: VRH Unit 1: 38 VRH Unit 2: 36 VRH Unit 3: 74 VRH Unit 4: 49 ROW Unit 5: 0.8 ROW Unit 6: No merchantable time unit, associated with the 5210 ext. reference

ROW Unit 6: No merchantable timber will be removed from this right-of-way unit. This unit, associated with the 5210 ext. road, intersects areas recently harvested and may include felling of some leave trees from the previous harvest units. These leave trees, if felled, will remain on-site.

Roadwork associated with this timber sale consists of forest road temporary construction, abandonment of forest roads, and existing forest road maintenance. Maintenance will consist of replacing stream culverts to improve natural flow capacity, cleaning culverts and catch basins, reconstructing ditches, application of rock, installing drain structures, grading, and other tasks outlined in the associated road plan. This proposal also includes replacing a current fish barrier culvert in a Type 3 stream to provide for fish-passage, restoring access to approximately 1,500 feet of upstream habitat.

b. Describe the stand of timber pre-harvest (include major timber species and origin date), type of harvest and overall unit objectives.

Pre-harvest Stand Description:

The stands within the harvest units are comprised predominantly of planted stands consisting of Douglas-fir with a lesser component of western hemlock, western red cedar, and some presence of red alder, black cottonwood and bigleaf maple in the main canopy. There is spotty presence of shade tolerant western hemlock within the lower or mid-canopy due to lack of light penetrating the main canopy. A minor component of the harvest area, along the edge of two units, is a different stand age and consists of naturally regenerated conifer. The understory vegetation is variable, consisting primarily of sword fern with some areas also containing salal, Oregon grape, vine maple, western hemlock and, areas in Unit 1 especially, that are dominated by salmonberry and black berry. Units 1 and 3 exhibit root rot (Phellinus weirii) throughout the stands. There is also minimal structure within stands with what is present consisting of smaller second-growth diameter competitive mortality trees, both standing and down. A few large old-growth stumps are present, but highly decomposed. The stage of stand development for the harvest areas within this proposal on the stand level scoring using the Van Pelt guide (2007) includes Biomass Accumulation/Stem Exclusion. The adjacent areas associated with this proposal are various stand ages.

Unit	Origin Date	Major Timber Species	Type of Harvest
VRH U1	1970s	Douglas-fir, western redcedar, western hemlock	Variable Retention Harvest
VRH U2	1970s & 1930s (2 ac)	Douglas-fir, western redcedar, western hemlock	Variable Retention Harvest
VRH U3	1970s	Douglas-fir, western redcedar, western hemlock	Variable Retention Harvest
VRH U4	1970s & post-1940s (< 2 ac)	Douglas-fir, western redcedar, western hemlock	Variable Retention Harvest
ROW U5	1995	Douglas-fir, western redcedar, western hemlock	Right-of-Way
ROW U6	1930s	Douglas-fir, western redcedar, western hemlock	Right-of-Way: fell and leave onsite only

Methods used to determine origin dates include DNR's RS FRIS Combined Origin Year RS-FRIS 3.0, LiDAR Vegetation Height, aerial photos, and field sampling.

Overall Proposal Objectives:

Short Term Objectives

- 1) Generate non-tax revenue for the beneficiaries of the underlying trusts through harvest of the existing stand as part of DNR's sustained yield trust obligations and fiduciary requirements as trust managers per RCW 79.10.300-340 and RCW 79.15.
- 2) Protect upland soil productivity and water quality and habitat within the riparian management zones.
- 3) Retain legacy trees within the timber sale for the future stand to maintain biological and structural diversity, preserve native seed source, shade and maintain the productivity of the site and future stand, and protect water quality and wildlife habitat.
- 4) Contribute to conservation areas identified as long-term forest cover through HCP and other regulatory protection and mitigation measures.
- 5) Supply sustainably grown timber to local mills and support jobs and economic activity for local economies.
- 6) Establish a new stand of site-appropriate, native conifers through hand planting (supplemented with natural regeneration) and maintain for productive long-term forest management, incorporating prescriptions to address existing forest health issues.

Long Term Objectives

- 1) Actively manage for long-term site productiveness for intergenerational benefit to the trust, primarily through revenue generation for trust beneficiaries through timber stand management. A series of silviculture activities will be scheduled as needed in the sale area as the new stands develops. The primary objective of each treatment is to ensure growth of a healthy, resilient stand of native tree species to create revenue for the trusts.
- 2) Maintain current and historical uses of the site, including preservation of water quantity and quality, active forest management, and public and tribal use.
- 3) Resource protection and conservation through implementation of the HCP and DNR's regulatory and management framework.
- 4) Balance trust income, environmental protection, and social and cultural benefits according to the DNR trust land management framework.

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	Length (feet)	Acres	Fish Barrier
	Many	(Estimated)	(Estimated)	Removals (#)
Construction		4,828	1.8	0
Reconstruction		0		0
Maintenance		57,733		0
Abandonment		4,828	1.8	0
Bridge Install/Replace	0			0
Stream Culvert Install/Replace	1			1
(fish)				
Stream Culvert Install/Replace (no	5			
fish)				
Cross-Drain Install/Replace	14			

Routine maintenance will occur on roads used throughout the life of this proposal.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist (*See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" as referenced on the DNR website: <u>http://www.dnr.wa.gov/sepa</u>. 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:

T26-0N R08-0E S6 – Rock pit T27-0N R07-0E S25 – Timber harvest, culvert replacement T27-0N R07-0E S36 – Timber harvest T27-0N R08-0E S19 – Culvert replacement T27-0N R08-0E S30 – Timber harvest, culvert replacement T27-0N R08-0E S31 – Timber harvest, culvert replacement/installation

b. Distance and direction from nearest town: The town of Monroe is approximately 13 miles southeast of the proposal area.

13. Cumulative Effects

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

The Youngs Creek and Snoqualmie River/Cherry Creek WAUs both include potentially unstable slopes, surface erosion, peak flow impacts, and cultural resources.

DNR analyzed carbon sequestration and carbon emissions from projected land management activities within its final environmental impact (FEIS) statement for

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

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

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

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

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

thus contributing to climate change mitigation."

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

The General Silviculture Strategy (policy) in the Policy for Sustainable Forests (PSF) emphasized that older-forest targets will be accomplished over time and that DNR intends to actively manage structurally complex forests to achieve older-forest structures (i.e. stands with older-forests identified by structural characteristics) across 10 to 15 percent of each western Washington HCP planning unit in 70 to 100 years from the adoption of the PSF.

In September 2024, the DNR revised a document titled 'Landscape Assessment to Identify and Manage Structurally Complex Stands to Meet Older-Forest Targets in Western Washington, May 2024' (landscape assessment). This document describes the background, historical analyses regarding attainment of older-forest conditions in western Washington, and updated data and modeling analyses showing when the various HCP planning units across western Washington are expected to attain a level of older-forest conditions through implementation of the HCP and other conservation objectives, and outlined as targets within the PSF.

This landscape assessment identifies the existing structurally complex stands, and additional suitable stands, to be managed for older-forest targets over time. The identified stands are located in conservation areas and deferred stands unavailable for regeneration harvest. These stands include areas identified as long-term forest cover under the marbled murrelet long-term conservation strategy, riparian areas, areas conserved under the multispecies conservation strategy, potentially unstable slopes, spotted owl nest patches, old growth, Natural Areas and Natural Resource Conservation Areas, and other conservation areas permanently deferred from regeneration harvest.

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

tables included in the landscape assessment. Conversely, when field verification identifies specific areas required for conservation, they will be protected from harvest and included in future conservation area modeling.

The landscape assessment demonstrates that while the North Puget HCP Planning Unit does not currently contain 10 to 15 percent older-forest conditions, the structurally complex and other suitable stands designated to be managed for older-forest targets are projected to develop into older-forest structure that meets or exceeds this threshold by 2070 (N. PUGET in Table A) through implementation of the HCP and other policies and laws. Stands identified to be managed toward older-forest targets, including currently older-forests and stands projected to develop older-forest structure in the future, are depicted in associated maps within the landscape assessment document for each western Washington HCP planning unit.

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

ADJUSTED QUERY OUTPUT (WITH PLOT DISCOUNT & DISTURBANCE FACTOR)											
НСР		Year									
Planning Unit	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 Bluffin Timber Sale is not identified as one of those stands designated to meet olderforest 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.

Units 1-3 were modified following the field identification of Category E RILs and cliff-like areas with Category E RILs and potential bedrock hollows. As a result of the State Lands Geologist field review, these areas are bounded out of the harvest unit or protected within non-tradeable leave tree groups. See Slope Stability Form (FPA Appendix D) and Map, and the Bluffin Field Geologic Summary Memo by the State Lands Geologist.

d. Based on the answers in questions A-13-a through A-13-c, is it likely potential impacts from this proposal could contribute to any environmental concerns listed in question A-13-a? **No.**

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

WAU Name	Total WAU Acres	DNR- managed WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven- aged harvest in the future	Acres of proposed harvest on non- DNR-managed lands currently under active FP permits
LOWER SNOQUALMIE RIVER/CHERRY CREEK	35816	6376	800	89	492
YOUNGS CREEK	26034	5448	474	18	550

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: Ranging from flat to steep, rocky bluffs
 - 1. General description of the associated WAU(s) or sub-basin(s) within the proposal (landforms, climate, elevations, and forest vegetation zone).

WAU:	LOWER SNOQUALMIE RIVER/CHERRY CREEK
WAU Acres:	35816
Elevation Range:	9 - 2765 ft.
Mean Elevation:	514 ft.
Average Precipitation:	49 in./year
Primary Forest Vegetation Zone:	Western Hemlock
WAU:	YOUNGS CREEK
WAU Acres:	26034
Elevation Range:	9 - 4369 ft.

Mean Elevation:	1044 ft.
Average Precipitation:	57 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)? The steepest slope in the project area is 180%, associated with the cliff-like features adjacent to the harvest unit. The steepest sustained slopes within harvested areas that will be driven on with ground-based harvesting equipment are 60%.
- 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.

The site consists of primarily gravelly loam and gravelly sandy loam 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
#	
8113	GRAVELLY LOAM
8105	GRAVELLY LOAM
5657	GRAVELLY LOAM
8106	GRAVELLY LOAM
0074	GRAVELLY SANDY LOAM

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

\Box No, go to question B-1-e.

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

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

Available landslide inventories and other remote screening tools were reviewed for this proposal by slope stability trained foresters and state lands geologists. Potentially unstable, rule identified landforms (RILs) around the harvest area were identified by slope stability trained foresters and a licensed engineering geologist (LEG) and qualified expert (QE) through office and field review in accordance with the Washington State Forest Practices rules.

Based on the State Lands LEG & QE and foresters' field reviews, there are potentially unstable landforms as defined by Forest Practices rule-identified landforms (RILs). Units 1-3 were modified following the field identification of Category E RILs (shallow landslides) and cliff-like areas with Category E RILs and potential bedrock hollows. See below for protection measures.

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

 \boxtimes No \square 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.
 As a result of the State Lands Geologist field review, these areas are bounded out of the harvest units or protected with non-tradeable leave tree groups. See Slope Stability Form (FPA Appendix D) and Map, and the Bluffin Field Geologic Summary Memo by the State Lands Geologist.
- 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: 1.8 Approx. acreage new landings: 0.7 Fill Source: 7500 Pit, 5210-5 Pit

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Yes. Some erosion could occur as a result of building new roads, installing culverts, and hauling timber.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*Approximately 3.2% of the site will remain as gravel roads which represent existing forest roads. Any new road construction will be abandoned following harvest.

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

Timber haul, road construction, and rock haul will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authority to do so is granted in writing by the Contract Administrator. If permission is granted to operate between November 1 and April 30, the Purchaser may be required to provide further protection of water, soil, roads, and other forest assets as described in the contract and road plan. Work on the culvert replacement associated with the 7500 Road Type 3 stream crossing will not be permitted from October 1 to June 30, unless authority to do so is granted in writing by the State. Falling, yarding, and timber haul will be suspended during periods of wet weather, if in the opinion of the Contract Administrator, the operation poses a threat to public resources. Ground-based equipment operating will be limited to track mounted machines or rubber-tired machines with over-tire tracks to reduce compaction. The proposal is located on stable ground and will have little or no effect on water quality due to seasonal restrictions and harvest equipment restrictions and limitations. No equipment will operate in RMZs or WMZs.

Regular road maintenance will also help limit erosion. Roads remaining active after the forest practice will be on a regular maintenance schedule including but not limited to reshaping and culvert and ditch maintenance to insure proper water flow and redistribution to the forest floor. When installing culvert at live stream location, water bypasses will be established when water is present that pump clean water at established catch basins around the work site and back into stream. Water containing sediment will be pumped away from site and onto forest floor. The residual leave trees and vegetation following harvest will prevent erosion related to runoff.

2. Air

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

Minor amounts of engine exhaust from logging and road construction equipment and dust from vehicle traffic on roads will be emitted during proposed activities. If landing debris is burned after harvest is completed; smoke will be generated. There will be no emissions once the proposal is complete.

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

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

Carbon dioxide emissions associated with harvested wood products are analyzed in Alternatives for the Establishment of a Sustainable Harvest Level Final Environmental Impact Statement (2019) and the Long-Term Conservation Strategy

for the Marbled Murrelet Final Environmental Impact Statement (2019).

c. Proposed measures to reduce or control emissions or other impacts to air, if any: If landing debris is burned, it will be in accordance with Washington State's Smoke Management Plan and burn permit conditions. A burn permit will be obtained before burning occurs.

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

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: <u>http://www.dnr.wa.gov/sepa</u>. 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.)

 \square No \boxtimes Yes, describe in 3-a-1-a through 3-a-1-c below

a. Downstream water bodies:

All streams associated with this timber sale flow into Youngs Creek, which flows into the Skykomish River in Sultan. The Skykomish and Snoqualmie rivers join together in Monroe to form the Snohomish River, which flows into Puget Sound.

Wetland, Stream, Lake, Pond, or	Water Type	Number (how	Avg RMZ/WMZ Width
Saltwater Name (if any)		many?)	in feet (per side for
			streams)
Stream	3	2	187' RMZ
Stream	4	3	100' RMZ
Wetland >0.25 ac.	Forested	3	100' WMZ
Wetland >1 ac.	Forested	2	187' WMZ
Wetland >1 ac.	Non-forested	1	187' WMZ

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

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers. Type 5 streams and wetlands less than 1/4 acre are protected with 30-foot Equipment Limitation Zones or have been excluded them from the harvest area with leave tree groups.

Right of way debris and organic matter waste areas are prohibited within 100 feet of

streams and wetlands.

New temporary roads were designed to avoid crossing streams or wetlands.

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.

\Box No

 \boxtimes Yes (See RMZ/WMZ table above and timber sale maps which are available on the DNR website: <u>http://www.dnr.wa.gov/sepa</u>. Timber sale maps are also available at the DNR region office.)

Description (include culverts):

Harvest will occur within 200 feet of streams, up to the buffer distances listed above. Although no buffers are required, Type 5 streams and wetlands less than 1/4 acre will be protected with 30-foot Equipment Limitation Zones, with the exception of temporary crossings for yarding approved by the Contract Administrator. Temporary Type 5 stream crossings require the use of puncheon to protect stream channel integrity.

There is one culvert replacement associated with a Type 3 stream, two culvert replacements associated with Type 4 streams, two culvert replacements and one installation associated with Type 5 streams, and fourteen cross drain installations/replacements not associated with typed waters.

- 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 other than fill material associated culvert replacements and installations.
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fishpassage culvert installation.)*

\Box No \boxtimes Yes, description:

For stream culvert replacement, when water is present, surface water diversion may be necessary to prevent sediment delivery.

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

\Box No \boxtimes Yes, describe activity and location:

There will be a culvert replacement at a Type 3 stream crossing on the 7500 Road at station 132+04 to provide fish passage and restore approximately 1,500 feet of upstream habitat.

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?

 \Box No \boxtimes 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)? YOUNGS CREEK = 5.1 (mi./sq. mi.) LOWER SNOQUALMIE RIVER/CHERRY CREEK = 4.7 (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?

 \Box No \boxtimes Yes, describe:

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

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

 \Box No \boxtimes Yes, describe observations:

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

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

□ No ⊠ Yes, describe the water resource(s):
 This site is within 10 stream miles downstream of the proposal, or it is within the same catchment basin as the proposal
 Intake location: Unnamed Stream
 System name: Thunderbird Terrace Water System
 System type: Community Water System

This site is within 10 stream miles downstream of the proposal, or it is within the same catchment basin as the proposal Intake location: Surface System name: Thunderbird Park System type: Transient non community water system

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?

 \boxtimes No \square 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.

Timber haul, road construction, and rock haul will not be permitted from November 1 to April 30, nor on weekends or State recognized holidays, unless authority to do so is granted, in writing, by the Contract Administrator.

Work associated with the Type 3 stream crossing culvert replacement on the 7500 Road will not be permitted from October 1 to June 30, unless authority to do so is granted, in writing, by the State.

At all stages of the proposal, precautions will be taken to prevent sediment delivery to typed water. The drainage and potential for sediment delivery points along the haul route associated with this proposal were assessed. Pre-haul maintenance will be completed with this proposal to ensure ditch water is deposited onto the forest floor and not allowed to flow directly into typed water.

b. Ground Water:

- Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.
 No water will be withdrawn or discharged.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following

chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

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

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

□ No ⊠ Yes, describe:
 This site is within 10 stream miles downstream of the proposal, or it is within the same catchment basin as the proposal
 Intake location: Unnamed Stream
 System name: Thunderbird Terrace Water System
 System type: Community Water System

This site is within 10 stream miles downstream of the proposal, or it is within the same catchment basin as the proposal Intake location: Surface System name: Thunderbird Park System type: Transient non community water system

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?

 \boxtimes No \square Yes, describe possible impacts:

Note protection measures, if any:

- c. Water runoff (including stormwater):
 - 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: \boxtimes Deciduous tree: \boxtimes Alder \square Aspen \square Birch \boxtimes Cottonwood \boxtimes Maple \square Western Larch □ Other: \boxtimes Evergreen tree: \boxtimes Douglas-Fir \Box Engelmann Spruce \Box Grand Fir \Box Lodgepole Pine \Box Mountain Hemlock \Box Noble Fir \Box Pacific Silver Fir \Box Ponderosa Pine Sitka Spruce \boxtimes Western Hemlock \boxtimes Western Redcedar \square Yellow Cedar □ Other: \boxtimes Shrubs: \boxtimes Huckleberry \square Rhododendron \boxtimes Salmonberry \boxtimes Salal ⊠ Other: Oregon Grape \boxtimes Ferns Grass □ Pasture \Box Crop or Grain \Box Orchards \Box Vineyard \Box Other Permanent Crops Wet Soil Plants: \Box Bullrush \Box Buttercup \Box Cattail \boxtimes Devil's Club \boxtimes Skunk Cabbage □ Other: □ Water plants: \Box Eelgrass \Box Milfoil \Box Water Lily \Box Other: \Box 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).
 - 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: <u>http://www.dnr.wa.gov/sepa</u>. 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.)

To the north of Units 1-3 are mixed conifer stands with stand origin years of 1995 and 1990.

To the east of Units 1-3 are mixed conifer stands with stand origin years of 2007 and 2011.

To the south of Units 1-3 are mixed conifer stands with a stand origin year of 1999.

To the west of Units 1-3 are mixed conifer stands with stand origin years of 1999, 1934 and 2011.

To the north of Unit 4 are mixed conifer stands with stand origin years of 1951 and 2000.

To the east of Unit 4 are mixed conifer stands with a stand origin year of 1942. To the south of Unit 4 are mixed conifer stands with stand origin years of 1999 and 2010.

To the west of Unit 4 are mixed conifer stands with a stand origin year of 2008.

c. List threatened and endangered *plant* species known to be on or near the site. None observed and none found in DNR's database and DNR's Special Concerns Report, which includes data from Washington Department of Ecology, Washington Fish and Wildlife and Washington Natural Heritage Program.

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

The HCP strategy for riparian conservation (in concert with other conservation areas throughout the HCP Planning Unit) will contribute to the retention and development of older forest, while the leave tree procedure will enhance the structural diversity of forests across the landscape over time. Leave trees were selected in accordance with HCP and agency directives concerning stand representation, wildlife potential, proximity, and distribution. Both the leave tree design and silvicultural prescriptions have been tailored to the unique circumstances of each site to capture microsite variation and ensure enduring species diversity.

Leave tree are identified across the harvest area. A minimum of 8 trees per acre will be retained after harvest arranged in both clumps and individual trees dispersed throughout the units. Leave tree clumps were selected to protect areas that hold unique ecological values and provide a representation of pre-harvest stand conditions. There are also individually marked trees retained throughout the proposal area. Leave trees were selected from the largest diameter class and dominant crown class as well as for wind firmness, good form, species diversity, wildlife value and protection of existing snags. All trees with a diameter at breast height (DBH) of 60" or greater were retained as leave trees. RMZs and WMZs protecting adjacent streams and wetlands will retain existing vegetation.

Following harvest, the variable retention harvest units will be replanted with native conifer species that will be supplemented by natural regeneration which is expected to occur as a result of the conservation areas in and around the harvest units.

Species, stocking type, and density for plantings are prescribed to be suitable for the unique site conditions and to treat pathogens present in much of the harvest units. After planting, the need for noxious weed treatments will be assessed and occur if necessary.

d. List all noxious weeds and invasive species known to be on or near the site.
 Himalayan blackberry, evergreen blackberry, and holly were observed onsite. For a complete list of noxious weeds in King County please visit the website below.

http://www.kingcounty.gov/environment/animalsAndPlants/noxiousweeds/laws/list.aspx

5. Animals

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fish:

□ bass □ herring ⊠ salmon □ shellfish ⊠ trout

□ other:

amphibians/reptiles:
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\boxtimes frog \boxtimes lizard \boxtimes salamander \boxtimes snake \boxtimes turtle
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\Box other:
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unique habitats:

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\Box balds \Box caves \boxtimes cliffs \Box mineral springs \Box oak woodlands \boxtimes talus slopes \Box other:
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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
BLUFFIN U3	Northern Spotted Owl	Threatened	Endangered

A single northern spotted owl (Stix occindentalis) was detected 5/19/1993 approximately 2,800 feet west of Unit 4, 3,050 feet south of Unit 3 in the NE1/4, SE1/4 of Section 36, Township 27 North, Range 07 East, W.M. The biotic detection recorded a single, sex unknown, life stage: adult northern spotted owl. No management restrictions per Forest Practice regulations nor DNR's Habitat Conservation Plan Long Term Conservation Strategy for Northern Spotted Owl.

No additional species found in DNR's database and DNR's Special Concerns Report, which includes data from Washington Fish and Wildlife.

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

 \boxtimes *Pacific flyway* \square *Other migration route: Explain:*

All of Washington State is considered part of the Pacific Flyway. No waterfowl have been witnessed onsite. It is likely that some birds use adjacent marshes, ponds, and lakes as a stopping-over point. No impacts are anticipated as a result of this proposal.

d. Proposed measures to preserve or enhance wildlife, if any:

This proposal is compliant with the HCP Long-term Conservation Strategy Marbled Murrelet, per DNR's procedure 14-004-320.

This sale is not located in any Owl Areas or in a landscape managed for Northern Spotted Owl Nesting, Roosting, Foraging, or Dispersal Management, and does not meet Young Forest Marginal habitat criteria. This proposal is available for the full range of silvicultural activities permitted under the Habitat Conservation Plan in compliance with PR 14-004-120.

One fish stream culvert replacement will restore and enhance wildlife habitat by providing fish passage at this road crossing.

Cliffs were bounded out of the harvest units for the protection of their ecological value.

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

Species /Habitat: Aquatic Habitat

Protection Measures: HCP RMZs and WMZs. This timber sale proposal conforms to commitments under the 1997 DNR Habitat Conservation Plan (HCP). The HCP includes a number of strategies to enhance and preserve wildlife over time. Specific to this proposal is the riparian strategy to conserve and protect habitat for species that are dependent on aquatic and riparian habitat and quality leave tree retention, which may provide critical elements for upland species and preserve long term site productivity through the maintenance of forest processes.

Species /Habitat: Cliffs and talus slopes

Protection Measures: Cliff features located between Units 3 and 5 have been protected by bounding them out of the harvest units with at least a tree-crown width below the cliffs to protect the talus (comprising less than 1 acre in area) and by leaving a strip of timber at the top of the cliffs. Existing short forest roads that have been used by the public to dump garbage and vehicles over the cliffs will be abandoned under this proposal to aid in further protection to the cliffs.

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

6. Energy and natural resources

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

Petroleum fuel (diesel or gasoline) will be used for heavy equipment during active road building, timber harvest operations, and for transportation. No energy sources will be needed following project completion.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
 No.
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: **None.**

7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.
 - 1) Describe any known or possible contamination at the site from present or past uses. None known.
 - 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
 - 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, hauling operations, and blasting in rock quarries associated with this proposal. 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: Forest Production

Current use of site and adjacent land types: Forest Production

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.
 - 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? **Forestry**

- f. What is the current comprehensive plan designation of the site? Forest Production
- g. If applicable, what is the current shoreline master program designation of the site? **Not applicable.**
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. No.
- i. Approximately how many people would reside or work in the completed project? **None.**
- j. Approximately how many people would the completed project displace? None.
- k. Proposed measures to avoid or reduce displacement impacts, if any: **Does not apply.**
- Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: This project is consistent with current comprehensive plans and zoning classifications.
- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: None.

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
 Does not apply.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
 Does not apply.
- c. Proposed measures to reduce or control housing impacts, if any: None.

10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
 Does not apply.
- b. What views in the immediate vicinity would be altered or obstructed?

- 1) Is this proposal visible from a residential area, town, city, recreation site, major transportation route or designated scenic corridor (e.g., county road, state or interstate highway, US route, river or Columbia Gorge SMA)?
 - \boxtimes No \square Yes, name of the location, transportation route or scenic corridor:
- 2) *How will this proposal affect any views described above?* **Does not apply.**
- c. Proposed measures to reduce or control aesthetic impacts, if any: Single and clumped mature leave trees were scattered across all VRH units to help reduce aesthetic impacts.

11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
 None.
- b. Could light or glare from the finished project be a safety hazard or interfere with views? No.
- c. What existing off-site sources of light or glare may affect your proposal? None.
- d. Proposed measures to reduce or control light and glare impacts, if any: None.

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? Informal recreation consists of hiking, horseback riding, mountain biking, hunting, fishing, and mushroom picking.
- 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.

Yes. Site SN00897 was recorded and determined ineligible for listing in State or National registers and requires no additional protection.

- 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.
 Yes. A DNR Archaeologist has reviewed the proposal area and submitted site records to DAHP.
- 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. **Cultural resources desk review was started in July 2023 by the local Snoqualmie Cultural Resource Technician (CRT). The CRT, two DNR Foresters and the Snoqualmie Forest Engineer conducted field reconnaissance from September 2023 through February 2024 inspecting nearly every acre of the proposal. State Archeologist along with the CRT extensively field examined the site. Findings resulted in additional archival research and sites being documented with Department of Historical Preservation if necessary. Communication regarding the proposal and planned protection of resources was sent in May 2024 to the Tulalip, Snoqualmie, and Muckleshoot Tribes.**
- 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.
 Resources have been excluded from harvest operations and should not be impacted.

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

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
 The haul route will utilize DNR forest roads within the Marckworth State Forest, as well as Cedar Ponds Road and Ben Howard Road leading out of the forest to Monroe. The Purchaser may also use Stossel Creek Road, Kelly Road, and Stillwater Hill Road, which all lead out to Highway 203, for administrative vehicles and moving equipment.
- 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 10 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.

- 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 require temporary closure of the Cedar Ponds Road, lasting no more than 2 hours, for a cross-drain installation. Residents in the area who use the road will be contacted, in addition to, signs being posted along the road 14 days prior to the closure.
- 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:
- \Box electricity \Box natural gas \Box water \Box refuse service \Box telephone \Box sanitary sewer
- \Box septic system \Box other:

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
 None.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Brandon Mohler

Name of signee **Brandon Mohler**

Position and Agency/Organization State Lands Assistant Region Manager/DNR

Date Submitted: <u>11/4/2024</u>

A M 11/1/2024





Modification Date: kfry490 7/19/2024

DRIVING MAP

Prepared By: kfry490

DRIVING DIRECTIONS:

From Monroe, drive south on SR 203 for 1.0 miles and take a left onto Ben Howard Road. Continue for 6.3 miles and take a right onto Cedar Ponds Road. After 3 miles you will arrive at a junction. To access VRH U2 and ROW U5, turn right and proceed through Gate 1020 and onto the 12000 Road. Continue for 0.9 miles and ROW U5 will be on your left. To access all other units, continue on Cedar Ponds Road for 0.3 miles to Gate 1029 and 7000 Road will be on the right. To reach the north end of VRH U1, turn right in 0.5 miles onto the 7010 Road and drive 0.6 miles. Otherwise, continue on the 7000 Road for 1.3 miles. To reach VRH U3 and the south end of VRH U1, continue straight for 1.0 miles. To reach VRH U4 and ROW U6, turn left onto the 7500 Road and drive 2.1 miles. VRH U4 will be on your left. To reach ROW U6, continue for 0.5 miles, turn left onto the 5210 Road, drive 0.4 miles, turn left onto the 5210-5 Road and drive another 0.4 miles. Ν