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: HOMALONE
   Agreement # 30-098227

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, WA 98611-0280
   Phone: (360) 577-2025
   Contact Person: Marcus Johns

4. Date checklist prepared: 12/24/2018

5. Agency requesting checklist: Washington Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):
   a. Auction Date: 09/26/2019
   b. Planned contract end date (but may be extended): 10/31/2021
   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.
   ☒ 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.

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: Crooked Creek and Grays River
  - ☒ temp
  - ☐ sediment
  - ☐ completed TMDL (total maximum daily load)

☐ Landscape plan:
☐ Watershed analysis:
☒ Interdisciplinary team (ID Team) report:
☒ Road design plan:
☐ Wildlife report:
☐ Geotechnical report:
☒ Slope Stability additional information form:
☐ Other specialist report(s):
☐ Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):
☒ Rock pit 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): #2900196-5. A 2008 scientific report, titled, “Recommendations and Supporting Analysis of Conservation Opportunities for the Marbled Murrelet Long-term Conservation Strategy” (Raphael 2008) (Science Team Report). 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; and USGS and GLO maps; Statewide Landslide Inventory (LSI) screening tool maintained by the DNR Forest Practices Division, and State Lands Geologist Remote Review (SLGRR).

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.
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 Homalone Timber Sale is a four unit sale and two right-of-way (ROW) units in the Salmon Creek Block, removing approximately 2,602 MBF. Rock can be obtained from a commercial source and/or the proposed Grays Point Pit.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Proposal Acres (gross)</th>
<th>RMZ/WMZ Acres</th>
<th>Potentially Unstable Slope Acres</th>
<th>Existing Road Acres (within unit)</th>
<th>Sale Acres</th>
<th>Leave Tree Clump Acres</th>
<th>Net Harvest Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>15</td>
<td>5*</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>59</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>17</td>
<td>5*</td>
<td>11</td>
<td>1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>40</td>
<td>24</td>
<td>5*</td>
<td>16</td>
<td>1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>44</td>
<td>12</td>
<td>3*</td>
<td>2</td>
<td>30</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>5 ROW</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>6 ROW</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Totals</td>
<td>134</td>
<td>68</td>
<td>18*</td>
<td>2</td>
<td>62</td>
<td>5</td>
<td>59</td>
</tr>
</tbody>
</table>

*All potentially unstable slope acres are within RMZs and/or leave tree areas.

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:**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Origin Date</th>
<th>Major Timber Species</th>
<th>Type of Harvest</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1962</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td>Variable retention harvest</td>
</tr>
<tr>
<td>2</td>
<td>1962</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td>Variable retention harvest</td>
</tr>
<tr>
<td>3</td>
<td>1976</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td>Variable retention harvest</td>
</tr>
<tr>
<td>4</td>
<td>1978</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td>Variable retention harvest</td>
</tr>
<tr>
<td>5 ROW</td>
<td>1962</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td></td>
</tr>
<tr>
<td>6 ROW</td>
<td>1962</td>
<td>Western hemlock, Douglas fir, red alder, Sitka spruce, western redcedar</td>
<td></td>
</tr>
</tbody>
</table>

**Overall Unit Objectives:**

1. Produce revenue for the University Transferred Trust (05) through the production of saw logs and pulp material.
2. Provide for wildlife and riparian habitat by developing 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.

Rock may be obtained from a commercial source or from a potential rock source on state land, Grays Point Pit.

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>How Many</th>
<th>Length (feet) (Estimated)</th>
<th>Acres (Estimated)</th>
<th>Fish Barrier Removals (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td></td>
<td>4,529</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Reconstruction</td>
<td></td>
<td>2,137</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Abandonment</td>
<td></td>
<td>1,659</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Bridge Install/Replace</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stream Culvert Install/Replace (fish)</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Stream Culvert Install/Replace (no fish)</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross-Drain Install/Replace</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is 14,504 feet of pre-haul maintenance associated with this proposal.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist (See “WAU Map(s)” and “Timber Harvest Unit Adjacency Map(s)” as referenced on the DNR website: http://www.dnr.wa.gov/sepa. Click on the DNR region of this proposal under the Topic “Current SEPA Project Actions - Timber Sales.” Proposal documents also available for review at the DNR Region Office.)

a. Legal description: Units 1-6 ROW is located in T10N R08W section 11,

   **Grays Point Pit is located in T10N R08W section 11**

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

   The timber sale is located approximately 2 road miles northwest of Grays River, WA. From SR 4, southwest of mile marker 17 turn north onto the G-2000 road.

13. Cumulative Effects

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

   **This proposal is located within the Gray’s Bay WAU. Agriculture and home sites are located in the valleys near the major streams with some home sites located in the uplands. There has been a slow trend towards increasing conversion of agriculture and forestry**
lands to home sites in the low to middle elevations. The uplands are primarily managed for timber production. Ownership includes large industrial forests, small private forests, and Department of Natural Resources managed forests. Forest stands within the WAU appear to be almost exclusively second and third growth stands. The number of Forest Practices shown on the WAU map along with observations within the WAU indicates that timber stands are intensively managed on relatively short rotations. Management includes regeneration harvests, thinnings, partial cuts, reforestation, and stand maintenance activities.

In the Grays Bay WAU, portions of Grays River and Crooked Creek were identified as 303(d) waters; both listed for temperature. Due to the distance from the proposal area (over 2 miles to the south) and the mitigation measures in this proposal, there should be no impact to listed waters in the Grays Bay WAU.

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.

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

The applicable strategies incorporated into this proposal are as follows:

- Retaining Riparian Management Zones (RMZs) averaging 198 feet wide along Type 3 streams, a minimum of 100 feet wide along Type 4 streams, measured from the outer edge of the 100 year floodplain. Retaining RMZs will protect water quality, stream bank integrity and stream temperatures. RMZs will develop older forest characteristics that, in combination with other strategies, will help support older forest dependent wildlife populations.

- Some Type 5 streams have leave trees placed around them to protect stream bank integrity and prevent disturbance from logging operations.

- Wetland Management Zones (WMZ) averaging 100 feet wide adjacent to harvest areas around forested wetlands greater than a ¼ acre in size, measured from the edge of the forested wetland. These measures are intended to protect water quality, sensitive wetland soils, and to maintain hydrologic function and natural water flow. WMZs will develop older wetland forest characteristics that, in combination with other strategies, will help support older forest dependent wildlife and aquatic species.
- Evaluating the proposal for slope instability, and excluding harvest activities from approximately 18 acres in Leave Areas and/or in RMZs.

- Retaining a minimum of 8 trees per acre (greater than 10 inches Diameter at Breast Height) clumped and scattered throughout the units. The strategy of retaining leave trees will provide legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination, these features will provide elements of older forest habitat characteristics within the new plantation.

- Analyzing, designing, and constructing roads to minimize effects on the environment.

- Road building, harvest, and hauling restrictions are included in this proposal to reduce potential harm to the environment. Any of these activities that occur outside the restriction is by contract administration written approval.

After harvest, conifer tree seedlings will be planted to reforest the site and may be complemented by the natural regeneration that is expected to occur. Though disturbed, native plants such as grasses, ferns, salal, salmonberry, and huckleberry will remain on site after logging and persist within the western hemlock/Sitka spruce timber type.

Road cut banks will be re-vegetated with native grass seed prior to the onset of wet weather to reduce the risk of potential erosion, sediment delivery and soil instability.

A regular maintenance schedule will be followed to allow for proper road surface run-off and drainage. Haul routes for this proposal have been evaluated for potential environmental impacts. To ensure sediment is controlled during hauling, cross-drains, sediment ponds, and other structures will be used to disconnect ditch water from flowing streams. Road ditch water will be routed to the forest floor for filtering prior to entering flowing watercourses. Minimal new road construction is proposed; haul routes are on existing roads. Road system analysis and design required under the HCP and analysis required under the Forest Practices RMAP process in the Salmon Creek Management Block was completed and approved.

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.

<table>
<thead>
<tr>
<th>WAU Name</th>
<th>Total WAU Acres</th>
<th>DNR-owned WAU Acres</th>
<th>Acres of DNR proposed even-aged harvest in the future</th>
<th>Acres of DNR proposed uneven-aged harvest in the future</th>
<th>Acres of proposed harvest on non-DNR-managed lands currently under active FP permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAYS BAY</td>
<td>57806</td>
<td>4983</td>
<td>234</td>
<td>0</td>
<td>3632</td>
</tr>
</tbody>
</table>

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: GRAYS BAY
         WAU Acres: 57806
         Elevation Range: 0 - 2309 ft.
         Mean Elevation: 309 ft.
         Average Precipitation: 86 in./year
         Primary Forest Vegetation Zone: Sitka Spruce

      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% in the harvest unit for short distances and up to 73% within RMZs.

   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.
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.

There is evidence of small, shallow slope failures. 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 also evidence of relic deep-seated landslides. These landforms typically form in weathered bedrock on steep slopes and the toes of the deep-seated landslides occur in creek valleys.

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

☐ No  ☒ Yes, describe the proposed activities:

A State Lands Geologist and a forester, who is trained in unstable slopes identification, field reviewed the Statewide Landslide Inventory (LSI) mapped landslide polygons 34640, 37673, 34660, and 34656 within this proposal and determined the proposed management activity on these landforms has a low risk of impacting slope stability. None of the mapped LSI polygons qualify as Forest Practices rule-identified potentially unstable landforms and no further investigation was determined to be necessary.

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

- Some steeper Type 5 draws and headwalls have leave tree clumps protecting them.
- Road construction on side slopes over 45% will require full bench excavation with end haul.
- Roads will be constructed during dry weather conditions.
- Cross-drains and ditch outs will be utilized to minimize potential for mass wasting and slope failures associated with poor drainage.
A head scarp was bounded out of Unit 2.

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: 3
Approx. acreage new landings: 1
Fill Source: Native material & select pit run
Purpose of fill: Culverts
Approx. cubic yards of fill: 1000

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Yes. Some erosion could occur as a result of building new roads, installing culverts, and hauling timber.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximate percent of proposal in permanent road running surface (includes gravel roads):

Approximately 1% of the site will remain as gravel roads.

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

- The no harvest RMZs and WMZs will function to protect streams and wetlands from sediment delivery.
- Harvested areas will be replanted with coniferous tree species to reestablish root bound soils.
- Harvest will utilize lead end suspension to minimize soil disturbance.
- Roads were located on ridge-tops where possible.
- Areas of soil exposed through road construction will be grass seeded.
- Roads will be constructed during dry weather.

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: Malone Creek, Grays River, and Columbia River

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

<table>
<thead>
<tr>
<th>Wetland, Stream, Lake, Pond, or Saltwater Name (if any)</th>
<th>Water Type</th>
<th>Number (how many?)</th>
<th>Avg RMZ/WMZ Width in feet (per side for streams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unnamed Forested Wetland</td>
<td>0.60 acre</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Unnamed Forested Wetland</td>
<td>0.10 acre</td>
<td>1</td>
<td>NA</td>
</tr>
<tr>
<td>Malone Creek</td>
<td>3</td>
<td>1</td>
<td>198</td>
</tr>
<tr>
<td>Unnamed Stream</td>
<td>3</td>
<td>7</td>
<td>198</td>
</tr>
<tr>
<td>Unnamed Stream</td>
<td>4</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>Unnamed Stream</td>
<td>5</td>
<td>12</td>
<td>NA</td>
</tr>
</tbody>
</table>

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

RMZs and WMZs are no harvest buffers. Leave trees were placed along portions of some Type 5 streams and headwalls.

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 for safety or operational needs, but will be left in place to provide large woody debris functions in the riparian area.

Trees will be cut within the RMZs in Unit 5 ROW and Unit 6 ROW for road building activities. Two culverts will be installed in two Type 4 streams. One on the G-2151 Ext road at STA 5+83 and the other on the G-2150 road at STA 0+88. The culvert on the G-2151 Ext road is temporary and will be abandoned after harvest operations are complete.

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.

Approximately 1,000 cubic yards of fill will be placed over two Type 4 stream culverts. Fill source is commercial rock and/or native material.

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:

Temporary diversion may be necessary for culvert installation on two Type 4 culverts being installed on the G-2150 at STA 0+88 and the G-2151 Ext at STA 5+83.

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

☐ No ☒ Yes, describe activity and location:

Two Type 4 culvert installations are located at STA 0+88 on the G-2150 and at STA 5+83 on the G-2151 Ext.

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 ☐ Yes, type and volume:

7) Is there a potential for eroded material to enter surface water as a result of the proposal considering the protection measures incorporated into the proposal’s design?

☐ No ☒ Yes, describe:
Soils and terrain susceptible to surface erosion are generally located on slopes steeper than 70%. The potential for eroded material to enter surface water is minimized due to the erosion control measures and operational procedures outlined in B-1-h.

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

GRAYS BAY = 5.2 (mi./sq. mi.)

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

☐ No ☒ Yes, describe:

It is likely some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road 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):

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?
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.

- Type 4 no harvest RMZs to protect stream banks from erosion.
- No harvest WMZs and leave trees on Forested Wetlands.
- The proposal’s harvest units are less than 100 acres to minimize impacts to watershed hydrology.
- Allowing green-up (regenerated stands that are either 4 feet tall or 5 years of age) of adjacent stands to minimize impacts to watershed hydrology.
- See B.1.d.2 and B.1.h for further protection measures.

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:

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

      ☒ No     ☐ Yes, describe possible impacts:

      Note protection measures, if any:

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

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

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

☐ No ☒ Yes, describe:

Waste materials, such as sediment or slash, may enter surface water.

Note protection measures, if any:

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

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

No changes to drainage patterns are expected.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-13, B-3-b-3, and B-3-c-2.

4. Plants

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

☒ Deciduous tree:
☐ Alder ☑ Aspen ☐ Birch ☐ Cottonwood ☐ Maple ☐ Western Larch
☐ Other:
☒ Evergreen tree:
☐ Douglas-Fir ☐ Engelmann Spruce ☐ Grand Fir ☐ Lodgepole Pine
☐ Mountain Hemlock ☐ Pacific Silver Fir ☐ Ponderosa Pine ☒ Sitka Spruce
☒ Western Hemlock ☐ Western Redcedar ☐ Yellow Cedar
☐ Other:
☒ Shrubs:
☒ Huckleberry ☐ Rhododendron ☒ Salmonberry ☒ Salal
☐ Other: vine maple, Oregon grape
☒ 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: oxalis
☐ 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 operations. Most of the vegetation will re-establish within 2 – 3 years after harvest 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 and east is a young conifer stand origin year 2016. To the south and west is a mature conifer stand origin year 1954 to 1970s.

Unit 2: Unit is completely surrounded by mature conifer (all in RMZ), origin years 1945 to 1980.

Unit 3: To the east is a young conifer stand origin year 2016. To the north, south, and west is a mature conifer stand origin year 1964 to 1980. The southern tip of the Unit is near private property with an approximate origin year of 1992, conifer stand.

Unit 4: To the west is a private conifer stand origin years 1980s to 1990s. To the south is a private conifer stand origin year 1980 and 2006. To the east a mature conifer stand approximate origin year 1964.
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 over story 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 ☐ x coyote ☐ x cougar ☐ x deer ☐ x elk
   ☐ other:

   fish:
   
   ☐ bass ☐ herring ☒ salmon ☐ shellfish ☒ trout
   ☐ other:

   amphibians/reptiles:

   ☐ frog ☐ lizard ☒ salamander ☐ snake ☐ turtle
   ☒ other: rough skinned newt

   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).

Occupied Marbled Murrelet habitat is over ¼ of a mile away from the proposal.

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:

This sale has been designed to comply with the Department’s HCP and provides for the protection of wildlife and their habitats. Scattered and clumped leave trees provide nesting, roosting and foraging areas for avian species. Well engineered and constructed roads reduce potential water quality impacts for downstream fish populations. Grass seeding exposed soil aids water quality and provides forage for ungulates. Large diameter leave trees, and leave trees with unique structure, will remain post-harvest to enhance the wildlife habitat value of the future stand. The regenerated stand will be composed of mixed hardwood and/or conifer species.

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 (except U5 ROW) and Type 4 streams.
- No harvest WMZ on a forested wetland.

Upland habitat

- A minimum of 8 leave trees per acre were left clumped and scattered
- Older large down 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.

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: Managed for timber production by the DNR and private timber companies.

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

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

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

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

No.
c. Describe any structures on the site.
   None.

d. Will any structures be demolished? If so, what?
   No.

e. What is the current zoning classification of the site?
   All units are zoned Commercial Forest (CF).

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 project is consistent with current comprehensive plans and zoning classifications.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
   None.

9. Housing
a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Does not apply.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Does not apply.

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

None.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

Does not apply.

b. What views in the immediate vicinity would be altered or obstructed?

1) Is this proposal visible from a residential area, town, city, recreation site, major transportation route or designated scenic corridor (e.g., county road, state or interstate highway, US route, river or Columbia Gorge SMA)?

☐ No ☒ Yes, name of the location, transportation route or scenic corridor:
Proposal may be visible from SR 4 near Grays River, WA.

2) How will this proposal affect any views described above? Views of standing timber will be decreased in the short term until vegetation and tree seedlings begin to grow back.

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.

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.

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.

Cultural Resources were not observed on or next to the site.

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.

This proposal was reviewed for archeological/historic resources using DNR’s Land Resource Manager database, USGS and GLO maps.
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 4 accesses the forest roads which access the proposal area.

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. 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 project will have minimal to no additional impacts on the overall transportation system 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: None.
☐ electricity  ☐ natural gas  ☐ water  ☐ refuse service  ☐ telephone  ☐ sanitary sewer
☐ septic system  ☐ other:

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None.
C. SIGNATURE

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

Signature:  

Name of signee: Lisa Kaino  

Position and Agency/Organization: Naselle Unit Forester/ DNR

Date Submitted: 12/27/18
Driving Directions:

From State Route 4 East of Mile Marker 16:
Turn North on the G-2000 road and continue 0.3 miles to gate. 
Continue through gate on the G-2100 road 1 mile to Unit 4. 
Continue on the G-2100 road 0.3 miles to access Unit 3 & 2. 
Continue on the G-2100 road 0.7 miles to access Unit 1.