Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. 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 under "SEPA Center." 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.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write “do not know” or “does not apply.” Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered “does not apply.” IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words “project,” “applicant,” and “property or site” should be read as “proposal,” “proposer” and “affected geographic area,” respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:
   Timber Sale Name: Cougar Creek
   Agreement #: 30-092255

2. Name of applicant: Department of Natural Resources

3. Address and phone number of applicant and contact person:
   Northwest Region
   919 North Township St.
   Sedro Woolley, WA 98284-9384
   Contact Person: Laurie Bergvall
   Telephone: (360) 856-3500

4. Date checklist prepared: 12/9/15

5. Agency requesting checklist: Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):
   a. Auction Date: 6/15/2016

Cougar Creek, 2/23/2016

October 2014
b. Planned contract end date (but may be extended): 03/31/2019

c. Phasing: Does not apply.

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

Timber Sale

a. Site preparation: Logging slash may be piled or possibly burned upon completion of harvest to allow for adequate planting spots. Herbicides may be applied after harvest operations are complete.

b. Regeneration Method: Hand plant Douglas-fir and western redcedar totaling approximately 360-400 trees per acre on the proposal.

c. Vegetation Management: To be surveyed 3 to 5 years following planting to assess the need for hand cutting and/or chemical treatment.

d. Thinning: The need for a pre-commercial thinning will be assessed in 10 to 15 years. A commercial thinning is possible in 25 to 45 years.

Roads: NF-ML, RH-ML, RM-ML and RM-23 will be used for future management activities.

Rock Pits: S-1100 AND Red Mtn. pits will be used for future management activities. Onsite rock may be used for road construction, if rock sources are discovered along haul routes or within the sale area.

Other: Firewood from piled material, if available, may be sold following the completion of harvest activities.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

- 303 (d) - listed water body in WAU:Racehorse Creek, Kenney Creek, Kendall Creek, Bells Creek
- Watershed analysis:
- Interdisciplinary team (ID Team) report:
- Road design plan: See the Cougar Creek Road Plan available at Northwest Region office.
- Wildlife report: See the Biologist memo available at Northwest Region office.
- Geotechnical report: See the Engineering Geologist Assessment available at Northwest Region office.
- Other specialist report(s):
- Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):
- Rock pit plan: See the Cougar Creek Road Plan available at the Northwest Region office.
- Other: Policy for Sustainable Forests, dated December 2006; Final Habitat Conservation Plan (HCP) and Environmental Impact Statement, dated September 1997; State Soil Survey, dated 1992; ICN #131112.

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.

☐ HPÅ □ Burning permit □ Shoreline permit □ Incidental take permit □ FPA # □ 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 specific information on project description.)

a. Complete proposal description:

The total area considered for this harvest activity was approximately 270 acres. Of this total area, 150.6 acres were deducted in riparian areas and 7.3 acres were removed to protect Forest Practices rule identified features, leaving a gross proposal area of 113.1 acres. From this gross acreage, 0.2 acres were deducted to account for active roads and 3.9 acres were left unharvested as leave tree areas resulting in a net harvest area of 109.0 acres.
This proposal is expected to be a Class IV-special due to road construction over inner gorge features.

Estimated Volume: 3,167 MBF
Logging Systems: Cable and Ground-based systems
Cable Landings: 15 (approximately)
Existing rock pits: 2
New rock pits: 0

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

Pre-harvest stand description:
The proposed sale area is comprised of second growth conifer, primarily western hemlock and Pacific silver fir with a secondary component of Douglas-fir, western redcedar and red alder. The origin dates of stands within the proposed area vary from 1958-1969.

Overall objectives:
1. Generating revenue for state trusts the State Forest Transfer Trust 03 and the Common School Trust 01;
2. Maintaining biological productivity of the site, retaining short and long term forest structural diversity, protecting and maintaining water quality;
3. Meet or exceed internal procedures derived from the Forest Practices Rules, Policy for Sustainable Forests, and the HCP;
4. Identify and protect historic and archaeological sites consistent with state/federal law.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>How many</th>
<th>Length (feet) (Estimated)</th>
<th>Acres (Subgrade) (Estimated)</th>
<th>Fish Barrier Removals (#)</th>
<th>Steepest Side Slope Road Crosses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reconstruction</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Abandonment</td>
<td>0</td>
<td>300</td>
<td>0.11</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Temporary construction</td>
<td>8,876**</td>
<td>3.26</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
<tr>
<td>Bridge Install/Replace</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Culvert Install/Replace (fish)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Culvert Install/Replace (no fish)</td>
<td>12*</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

* This refers to only typed stream crossings and does not include relief culverts.
** Of the length listed for Temporary Construction in the above table, zero feet up to the entire length listed may be built.

12. Location of 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 timber sale map available at DNR region office, and/or color landscape/WA U map on the DNR website http://www.dnr.wa.gov under “SEPA Center.”)

a. Legal description:
The proposal area is located in Sections 17 and 18 of Township 39 North, Range 6 East, Willamette Meridian. There is road work associated with Section 16 of Township 39 North, Range 6 East, Willamette Meridian. Rock pit activities will occur in Section 1 of Township 39 North, Range 5 East and Section 23 of Township 40 North, Range 05 East, Willamette Meridian.

b. Distance and direction from nearest town (include road names):
The proposed harvest units lie approximately 5.5 miles northeast of Deming, WA. The Red Mountain Rock Pit is approximately 1.5 miles northeast of Kendall, WA. The S-1100 Pit is approximately 1.5 miles southeast of Kendall, WA.
c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under “SEPA Center.”)

<table>
<thead>
<tr>
<th>WAU/Sub-basin Name</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racehorse Creek</td>
<td>12,534</td>
</tr>
<tr>
<td>Sub 3</td>
<td>7,281</td>
</tr>
</tbody>
</table>

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under “SEPA Center” for a broader landscape perspective.)

<table>
<thead>
<tr>
<th>Land Manager</th>
<th>Acres</th>
<th>% of WAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNR</td>
<td>9,597</td>
<td>76.6</td>
</tr>
<tr>
<td>Other Land (Private and Other Public)</td>
<td>2,937</td>
<td>23.4</td>
</tr>
</tbody>
</table>

No cumulative change in the environment is expected from the combination of past and future activities with this proposal. This proposal as well as past and future activities either meet or surpass Forest Practice Rules by complying with the commitments of the HCP and as such protect water quality and mitigate environmental impacts.

The Department's Habitat Conservation Plan (HCP) outlines strategies to protect Federally listed threatened and endangered species, and species that are in danger of being listed in the future, as well as uncommon habitat types found on forest lands in western Washington. HCP riparian buffers were applied to this proposal with the intent of protecting salmon and trout habitat, and will be applied to all future sales in the vicinity. The HCP identifies large, structurally unique trees and snags as uncommon habitats that need to be protected. An average of 8 trees per acre will be left in the proposed harvest unit. These trees will function for future snag and large structurally unique tree recruitment.

Under the Interim Strategy for the Marbled Murrelet in the North Puget Planning Unit, under the Department's HCP, several stands in this WAU have been deferred from timber harvest to provide habitat. The Interim Strategy also requires Department field staff to search for and delineate any "newly identified" marbled murrelet habitat in the vicinity of any proposed timber sales. These stands may be deferred from timber harvest throughout the remainder of the Interim Strategy (with occasional exceptions made to allow road and/or yarding access into non-habitat areas), and may be considered to be removed from harvest rotation for a longer period of time under the Department's yet-to-be-developed Long-Term Strategy for marbled murrelets. Field staff have determined that no "newly identified" marbled murrelet habitat exists within this proposal area and this proposal meets all requirements of the Interim Strategy. However, there are newly Identified, Criteria 2 Habitat polygons adjacent to Units 2b and c of this proposal. The boundaries of this proposal area that are adjacent to these habitat polygons have been reviewed by a wildlife biologist and meet all requirements of the Interim Strategy. Adjacent to the S-1100 rock pit, a Criteria 3 Habitat polygon has been identified. Operation of heavy equipment will be prohibited within ¼ mile of the identified habitat boundary from one hour before official sunrise to two hours after official sunrise, and one hour before official sunset to one hour after official sunset, from April 1 to August 31. In addition, suitable, occupied marbled murrelet habitat has been previously identified adjacent to the RH-ML. Operation of heavy machinery associated with maintenance will be prohibited within ¼ mile of the identified habitat boundary from one hour before official sunrise to two hours after official sunrise, and one hour before official sunset to one hour after official sunset, from April 1 to August 31.

The table below reports timber harvest activity during the last seven years on Department lands and private lands within the Racehorse Creek WAU. This information was derived from a GIS based WAU report dated 8/14/2015. No attempt was made to predict future timber harvests on private land.

<table>
<thead>
<tr>
<th>NAME OF WAU</th>
<th>DNR ACRES EVEN-AGED HARVESTED IN LAST 7 YEARS</th>
<th>DNR ACRES UNEVEN-AGED HARVESTED IN LAST 7 YEARS</th>
<th>DNR EXPECTED ACRES HARVESTED WITHIN NEXT YEAR</th>
<th>PRIVATE ACRES EVEN-AGED HARVESTED IN LAST 7 YEARS</th>
<th>PRIVATE ACRES UNEVEN-AGED HARVESTED IN LAST 7 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Racehorse WAU</td>
<td>271</td>
<td>0</td>
<td>91</td>
<td>61</td>
<td>119</td>
</tr>
</tbody>
</table>

Cougar Creek, 2/23/2016
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 WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

   The Racehorse Creek WAU ranges in elevation from 300 to 5,000 feet in elevation. It features steep to mountainous terrain with few moderate slopes. The entirety of Racehorse Creek, a tributary of the Nooksack River is located within this WAU. The climate is typical of North Temperate Zone forests, and influenced by Puget Sound marine flow, the Fraser River valley outflows, and Mt. Baker. Average annual rainfall is 80 inches, ranging from 60 to over 110 inches in the higher elevations. Second growth conifer and mixed conifer/hardwood stands dominate the landscape. The forest vegetation zone is the westside western hemlock zone with the major timber type being Douglas-fir, western redcedar, and western hemlock.

   2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

   This proposal is located at 1,400 to 2,800 feet elevation on a northern aspect. The proposal area exhibits many of the attributes listed in the general description of the WAU.

b. What is the steepest slope on the site (approximate percent slope)? 110%

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.

   See table below.

   Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil strata. The actual soils conditions in the sale area may vary considerably based on landform shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

<table>
<thead>
<tr>
<th>State Soil Survey #</th>
<th>Soil Complex name</th>
<th>% Slope</th>
<th>Mass Wasting Potential</th>
<th>Erosion Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>0126</td>
<td>Andic Cryochrepts-Rock Oustrop-Complex</td>
<td>50-110</td>
<td>High*</td>
<td>High*</td>
</tr>
<tr>
<td>2400</td>
<td>Gallup</td>
<td>30-80</td>
<td>High*</td>
<td>High*</td>
</tr>
<tr>
<td>2456</td>
<td>Getchell</td>
<td>30-60</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>2836</td>
<td>Hartnit-Gallup-Rock Oustrop-Complex</td>
<td>50-110</td>
<td>High*</td>
<td>High*</td>
</tr>
<tr>
<td>3896</td>
<td>Kindy</td>
<td>30-60</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>6856</td>
<td>Oaks</td>
<td>30-60</td>
<td>Medium</td>
<td>Medium</td>
</tr>
</tbody>
</table>

   * Potential impact to soils with high mass wasting and erosion potentials will be mitigated by achieving lead end suspension of logs using cable yarding techniques.

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

   1) Surface indications: Small shallow rapid landslides have been observed within stream segments of the proposal area. This proposal includes the construction of temporary road across inner gorge slopes. This proposal is directly adjacent to inner gorge slopes and bedrock hollows.

   The statewide landslide inventory (LSI) screening tool indicates the presence of polygons mapped as landslides within the proposed harvest unit boundaries. This landslide database is maintained by the Washington Department of Natural Resources, Forest Practices Division. The LSI includes landslides mapped during many different projects including large-scale geologic mapping, watershed analyses, landscape planning, and landslide hazard zonation, in addition to other case studies and mapping efforts. A large majority of landslides identified by these projects are mapped by remote review with minimal field verification. In addition, dormant and ancient deep-seated landslides are mapped in many projects.
Included in the LSI. A large number of the remotely identified landslides and deep-seated features have been mapped with a questionable, probable, or unknown certainty. As a result, the LSI database is meant to be used as a screening tool and 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.

2) Is there evidence of natural slope failures in the sub-basin(s)?
☐ No ☑ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
Inner gorge slopes are present along steep gradient, type 4 and type 5 streams throughout the sub-basin. Bedrock hollows also exist throughout the sub-basin. Within some of these slopes, there is evidence that shallow, rapid landslides and debris flows have occurred. Within the WAU there are also identified deep-seated landslides, most of which are associated with peak flow or rain on snow events.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?
☐ No ☑ Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:
See B.3.a.8.

Associated management activity:
Past road construction.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
☐ No ☑ Yes, describe similarities between the conditions and activities on these sites:
The construction of the RH-53 will cross two inner gorge slopes adjacent to type 4 streams. The RH-53 road discussed in the Geologist report, is a previously orphaned road grade.

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.
The Region Geologist has field-reviewed boundary locations for this proposal and any areas of potential concern have been excluded from the sale. Specifically, inner gorge slopes present along type 5 streams and isolated bedrock hollows. Roads and stream crossings associated with this sale that are planned to over-winter (“two operational season roads” as defined in the Cougar Creek Road Plan) were designed to provide above adequate drainage for peak flow events. Roads and stream crossings beyond and including the crossing of Cougar Creek are “single operational season” roads (as defined in the road plan) and will be built in accordance to specific guidelines identified in the road plan by a state lands roads engineer and reviewed by the state lands geologist. The abandonment of all road beyond and including the Cougar Creek crossing will ensure that a significant portion of road across steep slopes will not over-winter. Roads along steep slopes will utilize full bench/end haul construction. See Geologist report, dated January 25, 2016.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

No new permanent roads will be constructed with this proposal. Acreage of new temporary roads will be 3.26 acres. Acreage of new landings will be approximately 3.75 acres.

Road construction will utilize standard cut and fill methodology to obtain grade and alignment. Native soil and rock will be excavated from the road prism and used for fill in construction of subgrade, over cross drains, and/or stream crossings. Fill source will be native (bank run) materials.

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

Minor erosion may occur from freshly exposed soils along road cut slopes and embankment slopes. Erosion could result from road and landing construction during periods of heavy rainfall or as a result of yarding during periods of saturation. Additionally, erosion could result if ditches and culverts are not properly installed and maintained during and after the harvest operation. Road use during unfavorable weather conditions may contribute to an increased potential for surface erosion.

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):

Less than 2 percent of the site will be covered with new rock-covered (gravel) roads or landings.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
(Include protection measures for minimizing compaction or rutting.) All roads will be constructed to meet or exceed minimum Forest Practice standards. Measures are in place to help reduce and control erosion. Riparian (RMZ) buffers as described in B.3.a.1.b and c. will be retained.
For harvest activities, ground-based operations will be limited to sustained slopes generally 35% or less. The lead end of the logs will be suspended during yarding to reduce soil disturbance. Skid trails will be water-barred as necessary.

For road work, rock haul and log haul, appropriate drainage devices including proper culvert size and placement, drain dips, water bars, and ditching will be used as necessary to reduce surface erosion on roads. Erosion dissipaters will be installed with culverts to reduce erosion. Relief pipes will be strategically placed to minimize the amount of road ditch water that enters surface waters. Slopes that are exposed during road work activities will be revegetated to reduce erosion and sediment-laden runoff. Storm patrols will be conducted as necessary on roads to identify and address potential erosion problems. Hauling will be restricted to dry months. No haul will occur from November 1 to March 31.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minor amounts of engine exhaust from logging equipment and dust from vehicle traffic and logging equipment are expected while the project is active. Following harvest, logging slash debris may be reduced by accumulating it into piles and then burned.

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

None.

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

If slash burning occurs, it will be in adherence to the Washington State Smoke Management Act.

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 timber sale map available at DNR region office, or forest practice application base maps.)

   a) Downstream water bodies:

      All streams associated with this proposal are tributaries to Racehorse Creek, which is a tributary to the North Fork of the Nooksack 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>Racehorse Creek</td>
<td>1</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Unnamed streams</td>
<td>5</td>
<td>26</td>
<td>30-foot equipment limitation zone</td>
</tr>
<tr>
<td>Unnamed streams</td>
<td>4</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

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

   Ditchwater will be diverted through relief culverts prior to stream crossings to keep sediment out of streams. Exposed soils will be grass seeded.

   Ground-based equipment limitation zones of 30 feet will be applied to all type 5 streams. Temporary log crossings that protect stream bank integrity are required for type 5 stream crossings during yarding operations. Streambeds and banks may be protected by the use of log puncheon or other approved structures at these crossing points and will be removed upon the completion of yarding activities. Where possible, trees will be felled to avoid stream bank disturbance on all typed streams. Logs will have lead end suspension during cable yarding.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.
No ☑ Yes (See RMZ/WMZ table above and timber sale map available at DNR region office.)

Description (include culverts):
Seven type 4 and five type 5 stream crossings will be constructed as part of this proposal. This work will be done per contract specifications.

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

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (Include diversions for fish-passage culvert installation.)
No ☑ Yes, description:
All water flow may be temporarily diverted through bypass culverts or retained behind (or pumped around) coffer dams during culvert installations. Also, typed waters may be temporarily diverted, if culvert replacement is deemed necessary, through the course of operations, on typed water crossing on existing roads.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
No ☑ Yes, describe location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
No ☑ Yes, type and volume:

7) Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
Yes. The following data was reported in the Department's GIS database on August 10, 2015. This data is not available by sub-basin.

<table>
<thead>
<tr>
<th>Racehorse WAU:</th>
<th>Erosion Potential</th>
<th>Acres</th>
<th>% in WAU</th>
<th>Mass Wasting Potential</th>
<th>Acres</th>
<th>% in WAU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>3994.4</td>
<td>31.9</td>
<td>High</td>
<td>4042.9</td>
<td>32.3</td>
</tr>
<tr>
<td></td>
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</table>

8) Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), and change in channel dimensions)?
No ☑ Yes, describe changes and possible causes:
There is evidence from state GIS data and aerial photos that shows minor changes to the channels of some streams within the WAU, during peak flow events. Debris flows or torrents have scoured some channels down to bedrock and may have historically resulted in small course changes in some low gradient channel segments. There are shallow failures in some of the inner gorges of streams in the sub basin due to inadequate drainage of old grades and most likely associated with 100-year storm events and peak flows.

9) Could this proposal affect water quality based on the answers to the questions 1-8 above?
No ☑ Yes, explain:
This proposal includes both the harvest of timber and road work. The removal of overstory vegetation will temporarily reduce interception of water and increase infiltration and saturation of water into forest floor which could temporarily increase overland flow.
The protection measures identified in B.1.d.5 keep harvest activities away from potentially unstable slopes. RMZ buffers (see B.3.a.1.b) and other harvest-system control measures (see B.1.h) ensure that any overland flow from disturbed soil areas will filter through substantial amounts of forest-floor vegetation before entering any perennial stream channels.
Road work will disturb surface soils where some temporary surface erosion is likely to occur, especially with the first winter rains following road work at culvert installation locations and road abandonment.

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related culvert removal locations. These installations and removals will follow Forest Practice Rules and RMAP requirements to minimize any erosion-related water quality impacts. See question B.1.b, B.3.a.1.c, and B.3.d. for a partial listing of some of the specific erosion protection measures.

10) What are the approximate road miles per square mile in the WAU and sub-basin(s)?
Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?
☐ No  ☐ Yes, describe:
Racehorse Creek WAU: 3.8 miles per square mile
The percentage of roads carrying water is unknown.
The information above was taken from the DNR WAU GIS data layer and is current as of 8/14/2015.

11) Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.
☐ No  ☐ Yes, approximate percent of WAU in significant ROS zone: 47.3%
Approximate percent of sub-basin(s):
Sub-basin 3: 63.3%
This information was taken from the DNR corporate GIS layer as of 8/14/2015. See B.3a.12 below for percentage of sub-basin(s) in significant ROS zone.

12) If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
Based on a GIS report generated on 8/14/2015:

<table>
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<th>WAU or sub-basin(s)</th>
<th>ROS Acres:</th>
<th>% sub-basin in significant ROS zone</th>
<th>DNR hcp-managed forest land acres in ROS:</th>
<th>% DNR hcp-managed forest lands in ROS:</th>
<th>% DNR managed lands rated hydrologically mature</th>
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</thead>
<tbody>
<tr>
<td>Racehorse Sub-basin 3</td>
<td>4,612</td>
<td>63.34%</td>
<td>4,489</td>
<td>97.33%</td>
<td>86.1%</td>
</tr>
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</table>

It is not known what percentage of other ownerships is hydrologically mature within the significant rain on snow zone.

13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
☐ No  ☐ Yes, describe observations: See B-3-a-8.

14) Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.
The scientific data used to develop the Department's HCP policy on rain-on-snow suggests the following: Measurable damage to salmonid fish habitat (i.e. destabilization and transport of coarse woody debris, excessive sedimentation that fills in pools, and destruction of salmon redds) occurs when peak flows are increased by an amount equivalent to what would be generated by increasing the 10-year 24-hour storm by 1 inch.
This threshold is believed to be exceeded in sub-basins that have at least 1/3 of their area in the significant rain-on-snow zone, and less than 2/3 of the forest in the rain-on-snow zone is in a hydrologically mature state. This proposal is not expected to contribute to a peak flow impact.

15) Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?
☐ No  ☐ Yes, possible impacts: Public resources in the area appear to be confined to unnamed creeks that flow south into Racehorse Creek and then into the North Fork Nooksack River.

16) Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures addressing possible peak flow/flooding impacts.
As stated in B.3.a.14, this proposal is not expected to cause a significant increase in peak flows. In order to minimize the risk of failures along "two operational season" roads during peak flow events, culverts utilized in new road construction will be sized to withstand a 100-year flood event. All culverts and ditches will be maintained so that they remain functional. Storm patrols will be conducted as necessary on existing and newly constructed roads to identify and address potential erosion problems.

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b. Ground Water.

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Road cross drains capturing surface water, snow melt and ground water from road cut banks from newly constructed roads may increase ground water directly below culvert outlets. This may cause saturation directly below the culvert outlets. Channelized water through ditches and culverts emptying out onto the forest floor will increase surface saturation in localized areas, but is not expected to affect ground water.

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 and other lubricants could be inadvertently spilled as a result of heavy equipment use. No lubricants will be disposed of on site.

3) Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater amounts, timing, or movements as a result of this proposal?

☐ No ☐ Yes, describe.

a) Note protection measures, if any.

Road locations are designed to minimize ground water interception by balancing cuts and fills. Intercepted ground water will remain within its original drainage basin.

c. Water Runoff (including storm water):

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.

The source of water runoff is rain and snow melt which results in overland, stream, and groundwater flow (intercepted from road cut banks). This runoff will be discharged onto stable areas of the forest floor or into natural drainages via road ditches, cross drains or ditch outs.

This water runoff flows via unnamed streams and underground flow and is tributary to Racehorse Creek Creek, and the North Fork Nooksack River. See B-3-a-1-a.

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

No waste material is anticipated to enter any water as a result of this proposal.

a) Note protection measures, if any.

Existing regulations and contract requirements regarding spill prevention and waste cleanup will be followed.

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

New road construction may intercept subsurface water flows. Intercepted water will be collected by ditches and directed to relief culverts affecting drainage patterns as described in B.3.b.1.

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

(See surface water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-3-c-2-a.)

On roads, constructed ditches, cross-drain culverts, drain dips, and water bars will be used to control road-related runoff. Straw, grass seeding, or other appropriate methods may be used on any soil exposed cut and fill slopes during the course of this proposal in order to prevent sediment movement. Roads and landings will be crowned to avoid water accumulation. Falling and yarding away from all seasonal streams will be applied where feasible. All activities associated with this proposal will meet or exceed Forest Practices standards and will follow the Habitat Conservation Plan. See also B.1.d.5 and B.1.h.

4. Plants

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

☐ deciduous tree: ☑ alder, ☑ maple, ☑ aspen, ☑ cottonwood, ☑ western larch, ☑ birch, ☑ other.

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

Second growth conifer and some hardwoods will be removed via variable retention harvest. Understory vegetation will be disturbed by logging or road building activities. The current stand will be replaced with conifer seedlings (hand planted), as well as naturally regenerated western hemlock, red alder and bigleaf maple. This managed stand will retain snags, dominant and co-dominant and/or structurally unique trees via clumps and scattered trees to increase horizontal and vertical diversity over the landscape.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under “SEPA Center.”)

Unit 1: These units are adjacent to a mixed conifer stand with an origin date of 1967. Racehorse Ridge, a recent timber harvest on state land forms the southern boundary of the proposal area.

Unit 2: These units are adjacent to a mixed conifer stand with origin dates varying from 1950 to 1964.

Species composition of these stands are a mix of Douglas-fir, silver fir, redcedar and western hemlock.

2) Retention tree plan:

An average of eight trees per acre have been retained in the proposal area; approximately 874 trees in total. There are leave tree clumps and additional leave trees marked for retention that are individually scattered throughout the site. Individual trees marked for retention were in the dominant or co-dominant crown classes. Leave tree clumps were left to provide protection for existing snags, type 5 streams, large downed wood, advanced understory regeneration, retain groups of structurally unique trees and largest trees, and provide the HCP required leave tree spacing across the unit. Legacy trees will enhance the structural diversity of the future stand and will potentially serve as wildlife habitat.

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

The DNR TRAX indicates no known threatened or endangered plant species.

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

Refer to the retention tree plan in B-4-b-2, above. Riparian leave areas will protect native plants. Conifer species of similar site will be planted at approximately 360-400 trees per acre throughout the proposal area upon completion of the harvest. Naturally regenerated western hemlock, western redcedar, and red alder will also be managed with planted conifers.

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

The DNR TRAX indicates no known noxious weeds or invasive species. However, it is likely that Himalayan blackberry, bull thistle, Canadian thistle, or Scotch broom may be found on or near the site.

5. Animal

a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, pigeon, other: Marbled murrelet
mammals: deer, bear, elk, beaver, other:
fish: bass, salmon, trout, herring, shellfish, other:
unique habitats: talus slopes, caves, cliffs, oak woodlands, balds, mineral springs

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Marbled murrelet: Units 2b and 2c have portions that are adjacent to Newly Identified Criteria 2 Marbled murrelet habitat. These boundaries were reviewed and approved by a statelands Wildlife Biologist. The S-1100 rock pit and a portion of the road maintenance activities on the RH-ML Road are within 0.25 miles of a Criteria 3 suitable habitat block.

Bald Eagle: Communal roost sites are adjacent to the S-1100 rock pit and RH-ML road maintenance activities associated with this proposal.

b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species). The DNR TRAX indicates no known threatened or endangered animal species.

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

☑ Pacific flyway ☐ Other migration route: Explain if any boxes checked: All of Washington State is considered part of the Pacific flyway. No impacts are anticipated.

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

See B-4-b-2 above.

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

Species /Habitat: Marbled Murrelet

Species /Habitat: Mature Forest Components
Protection Measures: Retention tree plan described B.4.b.2

Species /Habitat: Fish Habitat
Protection Measures: Stream protection measures listed in B.3.a.1.b.c., B.3.a.2.; soil protection measures in B.1.h.; slope stability protection in B.1.d.5; and peak flows protection in B.3.a.16.

Species /Habitat: Bald Eagle
Protection Measures: In accordance with national bald eagle management guidelines (USFWS), explosives will not be used within 0.5 miles of the Maple Falls, Hatchery Creek, Bear Creek and Racehorse Creek communal roosts between November 15 and March 15. This applies to the S-1100 rock pit and the road maintenance on the RH-ML Road.

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

None.

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.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

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:

Does not apply.

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.

There is minimal anticipated hazard from heavy equipment operations. There is a slight chance of hydraulic or oil spills from equipment operating on the site. There is also a potential fire hazard if operations occur in moderate to severe fire weather conditions during summer months. The timber sale contract contains language that addresses hazardous materials spill prevention; hazardous material spill containment, control and cleanup; hazardous material

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release reporting. If any toxic or hazardous chemical spill occurs, or if past contamination is discovered, the Department of Ecology will be notified. The contract also contains language for operations during fire season.

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.

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.
   None.

4) Describe special emergency services that might be required.
   • Firefighting by the Department of Natural Resources, possibly supported by local fire districts.
   • Emergency medical and/or ambulance service for personal injuries.
   • Responses by the Department of Ecology if a spill were to occur.

5) Proposed measures to reduce or control environmental health hazards, if any:
   Safe operation of all equipment will be encouraged. Industrial restrictions and precaution levels regarding forest fire protection will be enforced. The timber purchaser will be required to have fire suppression equipment on site during the restricted fire season while harvest activity is ongoing and operations will cease if relative humidity falls below 30%.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
   Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.
   Noise from rock drilling/crushing machinery, rock blasting, road building, and logging equipment such as chain saws, yarding whistles, and log/dump trucks will increase noise levels during periods of operation, typically occurring between 4 a.m. and 5 p.m. on weekdays, on a short-term basis. Noise from road construction and harvest activity will be present in the immediate vicinity of this proposal during operations. Noise from log hauling will be present along the haul routes during operations.

3) Proposed measures to reduce or control noise impacts, if any:
   Noise associated with harvest and road construction activity will be minimal anywhere but in the immediate vicinity of the proposal. Harvest activity and log hauling are historic activities in the area and noise should not be present above customary levels.

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.)
   Forest land. No, proposal surrounded by forest land.

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? No.

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:
   Yes. The proposal is a forest land management operation. This is typical for the area and has been so historically. See also A.7.a, A.11.a, A.11.c, B.1.h, B.3.a.1.c, and B.3.d.

c. Describe any structures on the site.
   There are no structures on the site.
d. Will any structures be demolished? If so, what?
There are no structures on the site.

e. What is the current zoning classification of the site?
Commercial Forestry.

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

g. If applicable, what is the current shoreline master program designation of the site?
Does not apply.

h. Has any part of the site been classified as an “environmentally sensitive” area? If so, specify.
No.

i. Approximately how many people would reside or work in the completed project?
Does not apply.

j. Approximately how many people would the completed project displace?
Does not apply.

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:
The design of this project is consistent with current comprehensive plans and zoning regulations.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: The proposal lands are managed by DNR for long-term commercial forestry. The Department developed a long-term Habitat Conservation Plan. See also A.8.

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:
Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principle 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, developed recreation site, or a scenic vista?  
☒ No ☐ Yes, viewing location:

2) Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?  
☒ No ☐ Yes, scenic corridor name:

3) How will this proposal affect any views described in 1) or 2) above?
Does not apply.
c. Proposed measures to reduce or control aesthetic impacts, if any:
Timber harvesting is a normal occurrence in the vicinity of the proposal, and recent timber harvests are visible throughout the area. Within and around the proposal area, un-harvested stands, stream buffers, and leave tree clumps will remain to reduce the visual impact. These residual stands will break up the view of the harvested area considerably, and will help maintain the aesthetic quality of the area. Additionally, the proposal area will be planted with conifer trees within two years of completion of harvest activities.

11. Light and Glare
a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
   Does not apply.
b. Could light or glare from the finished project be a safety hazard or interfere with views?
   Does not apply.
c. What existing off-site sources of light or glare may affect your proposal?
   Does not apply.
d. Proposed measures to reduce or control light and glare impacts, if any:
   Does not apply.

12. Recreation
a. What designated and informal recreational opportunities are in the immediate vicinity?
   Dispersed recreational use, including hiking, biking, horseback riding, birding, berry, mushroom and moss picking.
b. Would the proposed project displace any existing recreational uses? If so, describe:
   Temporary displacement of recreational activities could occur during periods of active harvest operations.
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 located on or near the site? If so, specifically describe.
   None known.
b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.
   None known. See B.13.c.
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 archaeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
   Forest Practices and DNR TRAX runs indicate no known historical or archeological sites on or near the proposal. Any cultural resources identified during operations will be protected. Should archaeological materials or cultural items be discovered during the course of operations, all work in the vicinity will be stopped and associated tribes and Department of Archaeological and Historic Preservation (DAHP) will be contacted.
   The Nooksack Tribe and Lummi Nation were notified of this proposal on September 18, 2013. No concerns have been raised as of the submittal of this document.
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.
   Forest Practices and DNR TRAX runs indicate no known historical or archeological sites on or near the proposal. Any cultural resources identified during operations will be protected. Should archaeological materials or cultural items be discovered during the course of operations, all work in the vicinity will be stopped and associated tribes and Department of Archaeological and Historic Preservation (DAHP) will be contacted.

14. Transportation

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a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Please see WAU and adjacency maps on the DNR website under “SEPA CENTER”. There are no public streets or highways that serve the site. There will be no addition of public roads to access the site as a result of this proposal.

1) Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?
   No.

b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
   No.

c. How many parking spaces would the completed project have? How many would the project eliminate?
   Does not apply.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
   See A-11-c.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?
   There will be increased truck traffic for rock hauling during road construction and timber hauling during active operations.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation?
   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 nonpassenger vehicles).
   The completed project will generate approximately 1-2 trips per year for management purposes, for the first 5-10 years after the completion of the proposal. Up to 25 vehicular trips per day could occur during peak harvest activities. These trips would occur primarily between the hours of 4 a.m. and 5 p.m. on weekdays.

   What data or transportation models were used to make these estimates?

   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, health care, schools, other)? If so, generally describe.
      Does not apply.

   b. Proposed measures to reduce or control direct impacts on public services, if any.
      Does not apply.

16. Utilities

   a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
      Does not apply.

   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.
      Does not apply.
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.

Completed by: [Signature] Date: ________

Title: ________
### HCP CHECKLIST

(Used to identify which HCP strategies are actually applied to this proposed management activity, i.e. those that affect the activity.)

Name of Proposed Activity: Cougar Creek  
Agreement #: 30-092255  
FPA #:  
Planning Unit: North Puget

#### Location (provide for activities other than timber sales)
- T:  
- N:  
- R:  
- (E/A; W.M.):  
- Sec:

#### HCP strategy or component

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<th>Strategy or Component</th>
<th>Criteria for strategy application</th>
<th>Applicable planning units</th>
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<th>No</th>
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<td>Riparian conservation</td>
<td>Area of proposed activity includes potentially unstable landforms or proposal is modified to avoid potentially unstable landforms</td>
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<td>Potentially unstable slopes</td>
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<tr>
<td>Rain-on-snow</td>
<td>Proposed activity is in the rain-on-snow zone of a subbasin where greater than 2/3 of DNR managed land must remain hydrologically mature</td>
<td>W</td>
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<td>Road construction or maintenance activities are proposed</td>
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</tr>
<tr>
<td>RMZ - Managed</td>
<td>Proposed activity includes riparian forest restoration (RMZ thinning, riparian hardwood conversion, or riparian individual conifer release)</td>
<td>WO</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>RMZ - Unmanaged</td>
<td>Proposed activity is adjacent to an unmanaged RMZ</td>
<td>WO</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>WMZ - Managed</td>
<td>Proposed activity includes WMZ thinning</td>
<td>WO</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>WMZ - Unmanaged</td>
<td>Proposed activity is adjacent to an unmanaged WMZ</td>
<td>WO</td>
<td>☒</td>
<td>☐</td>
</tr>
</tbody>
</table>

#### Northern spotted owl conservation

- Proposed activity is in a NRF or dispersal/DFC management area or a timing restriction area; or adjacent to a 300-acre nest patch core area or a 200-acre buffer area

#### Marbled murrelet conservation

- Different thresholds and strategies apply depending on Planning Unit

#### Uncommon Habitats, Federally listed species and unlisted species conservation

- **Large, structurally unique trees**: Proposed final harvest activity retains 2 upland large structurally unique trees, 3 additional upland green trees, and 3 snags, if available (if snags are unavailable, replace with upland green trees), for each acre of final harvest
- **Balds**: Proposed activity is on or adjacent to a bald
- **Caves**: Proposed activity is adjacent to a cave buffer
- **Cliffs**: Proposed activity is on or adjacent to cliffs greater than 25 feet tall at an elevation of less than 5000 feet or cliffs greater than 150 feet tall
- **Mineral springs**: Proposed activity is within 200 feet of a mineral spring
- **Oak woodlands**: Proposed activity is in or adjacent to oak woodlands
- **Talus**: Proposed activity area is within or adjacent to non-forested or forested talus fields or a buffer or requires road construction or rock mining through forested or non-forested talus
- **Bats**: Area of proposed activity includes myotis bats communal roosts or maternity colonies
- **California wolverine**: Proposed activity is within 0.5 miles of an active California wolverine den site located in a spotted owl NRF management area
- **Common loon**: Proposed activity is within 500 feet of a common loon nest
- **Gray wolf**: Proposed activity is within 8 miles of a class 1 gray wolf observation that occurred in the past 5 years
- **Harlequin duck**: Proposed activity is within 0.55 miles of a harlequin duck nest
- **Northern goshawk**: Proposed activity is within 0.55 miles of a northern goshawk nest site located in a NRF management area
- **Oregon silverspot butterfly**: Proposed activity is within 0.25 miles of an Oregon silverspot butterfly occurrence
- **Pacific fisher**: Proposed activity is within 0.5 miles of an active Pacific fisher den site located in a northern spotted owl NRF management area
- **Pileated woodpecker**: Area of proposed activity includes known pileated woodpecker nesting sites
- **Vaux's swift**: Area of proposed activity includes Vaux’s swift night roosts

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**SIGNATURES**

**Proponent**: Zachary Bastow  
**Title**: Deming Presales Forester  
**Date**: 12/18/2015

**Approved by**:  
**Title**:  
**Date**: 1/23/16

This checklist is required for the following activities: 1) Timber harvest activities 2) Construction or expansion of footprint of a road, rock pit, recreation site, communication site, leasing site (for example: antenna, wind turbine, etc.), or right-of-way.  
Checklist must be filed with the timber sale packet or sent to implementation monitoring@dnr.wa.gov  
Revised 12/2013