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: Lone Spruce
Agreement #30-102834

2. Name of applicant: Washington Department of Natural Resources

3. Address and phone number of applicant and contact person:
   Larry Leach
   Assistant Region Manager
   WA Department of Natural Resources
   713 Bowers Rd.
   Ellensburg, WA 98926
   509-859-4791

4. Date checklist prepared: 5/2/2022

5. Agency requesting checklist: Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):
   a. Auction Date: June 2022
   b. Planned contract end date (but may be extended): 11/30/2022
   c. Phasing: None

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
   ☐ No, go to question 8. ☒ Yes, identify any plans under A-7-a through A-7-d:

   a. Site Preparation:
      Some ground disturbance will occur with ground based operations. Landing slash will mostly be piled and burned in compliance with relevant laws, smoke management, and DNR regulations. Some slash will be placed in skid trails to limit soil disturbance.

   b. Regeneration Method:
      Natural, except in areas where beetle kill has reduced tree density to <40/acre. In these areas (estimated 5 acres), Douglas-fir and/or Ponderosa pine will be planted within 2.5 years of thinning or sooner if planting material is available.

   c. Vegetation Management:
      Thinning treatment will be based on the restoration goal of returning stand structure and vegetation to more open, lower density stands dominated by large individuals of fire-tolerant tree species (ponderosa pine, western larch, Douglas-fir) with smaller amounts of more fire-sensitive species (e.g. grand fir) and enhancing northern spotted owl habitat within Unit 2.

   d. Other:
Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and grading as necessary. Broadcast prescribed burning may be used post-harvest on a portion of the thinning area to achieve restoration objectives and improve forest health. Prescribed burning would be conducted in compliance with relevant laws, smoke management, and DNR regulations.

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(s):
   ☐ temp:
   ☐ sediment:
   ☐ completed TMDL (total maximum daily load):

☐ Landscape plan:
☐ Watershed analysis:
☐ Interdisciplinary team (ID Team) report:
☒ Road design plan:
☐ Wildlife report:
☐ Geotechnical report:

☒ Other specialist report(s): Cultural Resource Survey September 2020; Camas Meadows NAP Flora checklist.
☐ Memorandum of understanding (sportsmen’s groups, neighborhood associations, tribes, etc.):
☐ Rock pit plan:
☒ Other: Forest Practices Board Manual; Forest Practices Activity Map; Policy for Sustainable Forests (PSF 2006); State Soil Survey; Habitat Conservation Plan HCP 1997; HCP Checklist; Road Maintenance and Abandonment Plan (RMAP #2700086L). The following information is provided by DNR’s GIS database: Spotted Owl Habitat Layer; and USGS and GLO maps. DNR 20 Year Forest Health Strategic Plan; RCO State Land Restoration Grant #16-1636; Camas Meadows NAP Management Plan. Referenced documents may be obtained at the SE region office.

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.

NO

10. List any government approvals or permits that will be needed for your proposal, if known.

☒ FPA # 2707305
☐ FPHP
☐ Board of Natural Resources Approval
☐ Burning permit
☐ Shoreline permit
☐ Existing HPA
☐ Other: Incidental Take Permit: PRT 812521

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.)

02/2020
a. Complete proposal description:

This proposal is a thinning for restoration purposes in the Camas Meadows Natural Area Preserve in Chelan County. The thinning is an uneven-aged harvest of 111 gross acres in two units. The proposal will remove approximately 310 MBF of commercial timber to restore forest stand structure and species composition, and to enhance conditions for the northern spotted owl. Wetlands and Ns streams on the edge of the proposal area have been given buffers of 50-100 feet, per Forest Practices Wetland Management Zone requirements. This also provides buffers for the Ns streams associated with these wetlands. The F stream to the east of Unit 2 has been given a minimum 90 foot buffer from the unit boundary. In addition, seasonally wet areas with sensitive species concentrations have been flagged as equipment exclusion zones. Ns stream channels within the units will have a 30’ equipment limitation zone. Following the harvest, the 51-acre Unit 1 in the proposal area will be assessed for potential prescribed burning on a portion of the acres to achieve restoration objectives.

A ground based harvest system will be implemented in all units. The purposes of the harvest are to restore natural stand structure and composition, enhance northern spotted owl habitat in Unit 2, and reduce insect, pathogen, and wildfire risk. The harvest will focus on thinning dense stands that are at high risk to insect and pathogen spread and high-intensity wildfire, by reducing tree density and removing suppressed and diseased trees with poor vigor. In Unit 2, harvest will retain key northern spotted owl habitat conditions and improve the long-term viability of owl habitat into the future. This unit will retain approximately 152 trees per acre (including 107 trees/acre 10 inches or larger DBH), and a basal area of 145 sq ft/acre post-harvest. Modeling projections show the unit will maintain 140-150 trees per acre and basal area of 145-169 sq ft/acre over at least an 80 year time period post-harvest. Species to be removed include ponderosa pine, Douglas-fir, and grand fir. An emphasis will be placed on the retention of large diameter trees and snags, and increasing structural diversity by retaining clumps of 2-20 trees.

<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>51</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>48</td>
<td>0</td>
<td>48.0</td>
</tr>
<tr>
<td>2</td>
<td>60</td>
<td>0 – outside boundary</td>
<td>0.6</td>
<td>0</td>
<td>60</td>
<td>1</td>
<td>58.4</td>
</tr>
<tr>
<td>Totals</td>
<td>111</td>
<td>3</td>
<td>0.6</td>
<td>0</td>
<td>108</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

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

Timber stand composition in unit 1 pre-harvest: The stand is dominated by ponderosa pine, with lesser amounts of Douglas-fir, and scattered young grand fir. There are 129 trees/acre 6 inches DBH or greater and species composition is 77% Ponderosa Pine and 23% Douglas-fir. The majority of overstory trees are 80-100 years old, with some older trees and scattered younger trees in the understory. The understory is dominated by pinegrass, with a shrub layer
of Pacific serviceberry, spirea, and rose. Basal area is 122 ft²/acre, average DBH is 13.2 inches, and volume per acre is 13.0 MBF. Post-harvest the timber stand will retain approximately 47 trees per acre >6 inch DBH of Douglas-fir and ponderosa pine. Additional trees less than 6 inches DBH will also be retained. Post-harvest composition will be approximately 85% Ponderosa Pine and 15% Douglas-fir.

**Timber stand composition in unit 2 pre-harvest:** The stand is dominated by Douglas-fir and ponderosa pine, with lesser amounts of grand fir and western larch. There are 246 trees/acre >6 inches DBH or greater and species composition is 72% Douglas-fir, 22% Ponderosa Pine, 6% Grand Fir., and <1% Western Larch. The majority of overstory trees are 80-100 years old, with scattered older trees and younger grand fir and Douglas-fir in the understory. The understory is dominated by pinegrass, with a shrub layer of Pacific serviceberry, spirea, and rose. Basal area is 183 ft²/acre, average DBH is 11.7 inches, and volume per acre is 18.6 MBF. Post-harvest the timber stand will retain approximately 152 trees per acre ≥4 inch DBH, including 95 trees per acre ≥10 inches DBH, of Douglas-fir, ponderosa pine, grand fir, and western larch. Some patches of young reproduction will be retained for wildlife habitat. Post-harvest composition will be approximately 73% Douglas-fir, 20% Ponderosa Pine, 4% Western Larch, and 3% Grand Fir.

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.

<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>719</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>Reconstruction</td>
<td></td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
<td>8,430</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Abandonment</td>
<td></td>
<td>719</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td>Bridge Install/Replace</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Stream Culvert Install/Replace</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>(fish)</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Stream Culvert Install/Replace</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>(no fish)</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Cross-Drain Install/Replace</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

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:** T23N R18E S27

b. **Distance and direction from nearest town:** 6 miles southwest of Cashmere, Washington.

02/2020
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).

Most of the land in the Mt. Stuart WAU is managed by the US Forest Service, including a large area of Alpine Lakes Wilderness and areas managed for timber production. The lower elevation lands in the WAU are a mixture of agricultural land, home sites and forest lands managed for timber production and livestock grazing. Ownership includes US Forest Service, Bureau of Land Management, industrial forests, small private, and DNR managed forests. Outside of the Wilderness Area, forested stands within the WAU are primarily second and third growth stands. The number of forest practices shown on the WAU map along with observations within the WAU indicate that the WAU is intensively managed for timber production, including variable retention and uneven aged harvests.

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.

These stands are part of the Camas Meadows Natural Area Preserve (NAP), which has been designated for conservation and restoration of rare species and high quality habitats under the NAP Act (RCW. 79.70). The Camas Meadows NAP Management Plan includes the type of forest thinning in this proposal as a restoration objective for the preserve. It calls for restoring historic stand conditions as closely as possible, while minimizing impacts to the site, particularly the soil, and avoiding damage to rare plant population. This proposal is designed to result in more open forest conditions dominated by large, fire-tolerant trees, which is the historic stand condition. Measures to minimize impacts to soil and rare plants are included as described in B-1-d-2 and B-4-d.

The DNRs science-based landscape evaluations for the 20-year forest health strategic plan for DNR managed forests in eastern Washington identified the watershed as a high priority for restoration. This determination was due to the forest health conditions (i.e. overstocked stands) and values at risk associated with this landscape.

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. Applicable strategies incorporated into this proposal are described below in A. 13c.

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

HCP strategies incorporated into this proposal include:

- Retention of biological legacy trees and all trees over 24 inches DBH.
• Retaining buffer around the one area of potential slope instability that was identified. The entire sale areas was evaluated for potential slope instability and one relatively small recent, bedrock deep-seated landslide was found in the proposed units. This landform will be protected with a no-harvest buffer of one-half acre that extends at least two crown widths around the landslide feature. Slopes in the proposed units are generally less than 20 percent. Portions of the western side of Unit 2 slope upward to a ridgetop, generally at 30-50%. Slopes in the sale area do not exceed 70 percent.
• Roads will be maintained to minimize effects on the environment.
• The project area is located within the Chelan Planning Unit of the DNR Habitat Conservation Plan (HCP) but is not within a northern spotted owl (NSO) management area and has no designation as NRF, Dispersal, or DFC habitat. It is located within the Poison Canyon NSO Status 1 Circle which encompasses a 1.8 mile radius of forested and meadow landscape in T23N, R18E. The nest site center, just a half mile from the NAP, was last occupied in 2000 with a reproductive pair. NSO habitat within Unit 2 that overlaps the Poison Canyon Status 1 circle would be categorized as Type C habitat which is defined as “a stand with marginal habitat”. Habitat within Unit 1 that overlaps circle would be categorized as not suitable. Throughout both units there are scattered individuals and patches of mature trees, which are retained within the prescription. These biological legacies are developed over decades, sometimes centuries, thus the focus is on retaining these unique and resilient structures. The proposed treatment will reduce the trees per acre and the basal area but will maintain overall conditions that meet the Northern Spotted owl (NSO) habitat definitions. The treatment will provide the future stand with a more heterogeneous distribution of structural features and biological legacies which are important components in the development of NSO habitat. Treatment will also help protect against potential high-intensity, stand replacement fires that would result in long-term loss of habitat.

Forest Practices strategies incorporated into this proposal include:

• Unit boundaries are placed outside of the Wetland Management Zone (WMZ) and associated 50-100 foot buffer distance. These measures are intended to protect water quality and hydrologic integrity. WMZs, in combination with other strategies, will help support wetland dependent wildlife species.
• Unit 1 boundary is also placed a minimum of 90 feet from the F stream to the east of the unit
• 30 foot Equipment Limitation Zones are placed along all Ns streams within the unit.

In addition to the above strategies, several patches of dense conifer reproduction (saplings) will be retained for wildlife habitat. Post-harvest natural regeneration is also expected to become established. Understory vegetation will be disturbed and/or reduced within the proposed harvest area as a result of timber felling, bucking, yarding and site preparation activities and thus allow for new seedlings to establish.

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

<table>
<thead>
<tr>
<th>WAU Name</th>
<th>Total WAU Acres</th>
<th>DNR-managed 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>Mt. Stuart</td>
<td>48,297</td>
<td>2,267</td>
<td>0</td>
<td>190</td>
<td>323</td>
</tr>
</tbody>
</table>

B. ENVIRONMENTAL ELEMENTS

1. Earth

   a. General description of the site (check one):
   ☒ Flat, ☐ Rolling, ☐ Hilly, ☒ Steep Slopes, ☐ Mountainous, ☐ Other:

   b. General description of the associated WAU(s) or sub-basin(s) within the proposal (landforms, climate, elevations, and forest vegetation zone).

<table>
<thead>
<tr>
<th>WAU:</th>
<th>Mt. Stuart</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAU Acres:</td>
<td>48,297</td>
</tr>
<tr>
<td>Elevation Range:</td>
<td>1,000 – 9,415 ft.</td>
</tr>
<tr>
<td>Mean Elevation:</td>
<td>4,000 ft.</td>
</tr>
<tr>
<td>Average Precipitation:</td>
<td>37 in./year</td>
</tr>
<tr>
<td>Primary Forest Vegetation Zone:</td>
<td>Douglas Fir</td>
</tr>
</tbody>
</table>

2. Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).
   This WAU has a wide range of elevations and vegetation zones, from shrub-steppe at 1,000 ft along the Wenatchee River to alpine rock and tundra at 9,415 ft on the Mt. Stuart peak. This proposal lies at the lower-middle end of this elevation range, at 2,800 to 3,000 ft, and is situated within the Douglas-fir and lower Grand Fir vegetation zones.

   b. What is the steepest slope on the site (approximate percent slope)?
   60%, on <5% of the sale area.

   c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any
agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

**Note:** The following table is created from NRCS soil survey data. It is an overview of general soils information for the soils found in the sale area. The actual soil conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors.

<table>
<thead>
<tr>
<th>State Soil Survey #</th>
<th>Soil Texture</th>
</tr>
</thead>
<tbody>
<tr>
<td>204</td>
<td>NARDINE LOAM</td>
</tr>
<tr>
<td>200, 201</td>
<td>NARD SANDY LOAM</td>
</tr>
<tr>
<td>80</td>
<td>CLE ELUM LOAM</td>
</tr>
</tbody>
</table>

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

☐ No, go to question B-1-e.
☒ Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.

A DNR State Lands Geologist reviewed all units of the proposed timber sale remotely and in the field using available screening tools including digital orthophotos, LiDAR, geologic maps, and the forest practices landslide inventory (LSI) screening tool. During field review, one relatively small recent, bedrock deep-seated landslide was found in Unit 2. This feature meets the criteria for a Category E rule-identified landform. Otherwise, no landforms were observed during the field review that met the definition of forest practices rule-identified potentially unstable slopes within the proposed harvest units.

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

☒ No  ☐ Yes, describe the proposed activities: The Category E landform is excluded from forest management activities by a no-harvest and equipment exclusion zone.

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

1. The deep-seated landslide identified in Unit 2 will be protected with a no-harvest buffer of one-half acre that extends a minimum two crown widths around the landform.
2. All road drainage structures will be maintained in an operable state during and after logging operations.
3. Existing roads being used in this proposal have been designed to divert water to the forest floor to minimize the risk of erosion.
4. Operational restrictions will exist during wet conditions to minimize rutting and soil disturbance on skid trails and logging roads while the proposal is in operation. No operations will be allowed from December 1st through June 30th unless ground and weather conditions are favorable.
5. Skid trails will have slash added and will be water barred every 300 horizontal feet at the completion of each setting on slopes over 10% or as needed.
6. Skid trails and roads will maintain natural drainage patterns and avoid concentrating water onto steep slopes.
7. Existing roads, landings and skid trails will be used wherever practical.
8. The newly constructed roads are small spurs located on flats or gentle slopes and will be abandoned upon completion of the thinning. Abandonment will include ripping and slash placement to minimize erosion and prevent vehicle access.

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: 0.2
   Approx. acreage new landings: 0
   Fill Source: 0

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Some erosion could occur as a result of skid trails and hauling timber, but it is expected to be minimal. Incidental erosion should be confined to the areas of disturbance by vegetation left on-site and erosion control measures. Erosion potential will be minimized by the measures listed in B-1-d-2 above (slope stability protection measures).

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): NONE

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

Refer to B-1-d-2 above (slope stability protection measures). Operations during wet soil conditions will be restricted and skid trails will be water barred and/or slash applied following the completion of use. Constructed road spurs will be abandoned.

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 exhaust and road dust will be created during the operation. Slash burning would emit smoke if any slash piles are burned, but only for short durations. Broadcast burning would also emit smoke. Smoke emissions would be less than 100 tons and therefore would not require a smoke management plan.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. NO

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
All slash and broadcast burning will be conducted under the Washington State smoke management guidelines. Burn planning would include measures to minimize smoke intrusion on sensitive locations, including nearby residences.

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 B-3-a-1-a through B-3-a-1-c below

a. Downstream water bodies: **Peshastin Creek, Wenatchee 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>Camas Creek</td>
<td>F</td>
<td>1</td>
<td>90 feet (unit boundary is located minimum of 90 from this stream)</td>
</tr>
<tr>
<td></td>
<td>Ns</td>
<td>3</td>
<td>30 ft ELZ</td>
</tr>
<tr>
<td>Class A Wetland</td>
<td>1</td>
<td></td>
<td>Sale boundary is located a minimum of 50 ft from wetland edge.</td>
</tr>
<tr>
<td>Class B Wetland</td>
<td>1</td>
<td></td>
<td>Sale boundary is located a minimum of 50 ft from wetland edge.</td>
</tr>
</tbody>
</table>

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers. No logging operations will occur within 90 feet of type F water or within 50 feet of the identified wetlands. Ns channels will have a 30 foot ELZ with 10% or less soil disturbance.

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):
Tree harvesting and equipment operation will take place within 200 feet, but no closer than 90 feet of the F typed stream. Equipment operation will take place within 200 feet, but no closer than 30 feet of Ns typed waters. Tree harvesting will take place within 200 feet of Ns typed waters, including within the 30 foot ELZ where equipment can reach trees without entering the ELZ.

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

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *(Include diversions for fish-passage culvert installation.)*

☒ No ☐ Yes, description:

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

☒ No ☐ Yes, describe activity and location:

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

☐ No ☒ Yes, type and volume:
It is not likely that any waste materials will be discharged into the surface water(s). However, minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the adjacent surface water(s) as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.

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

☐ No ☒ Yes, describe:
Soils and terrain susceptible to surface erosion are generally located on slopes steeper than 70%, which are excluded from the current proposal. The potential for eroded material to enter surface water is further minimized due to the erosion control measures and operational procedures outlined in B-1-d-2 and B-1-h.

8) What are the approximate road miles per square mile in the associated WAU(s)?
Mt. Stuart = 2.45 (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. And cross-drains will be located in a way that maintains natural drainage patterns.

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

☐ No ☒ Yes, describe observations:
There is evidence of changes to stream channels in the meadow outside the proposed thinning units, primarily erosion and incision due to past activities that have removed vegetation and channelized water flow. Currently, erosion results from natural events such as spring runoff from snowmelt and significant storm events. No migration of channels has been observed. No changes in LOD have been observed.

11) Describe any anticipated contributions to peak flows resulting from this proposal’s activities which could impact areas downstream or downslope of the proposal area.

It is not likely the proposed activity will change the timing, duration, or volume of water during a peak flow event. This proposal is a thinning that will leave a mature forest canopy (40-110 trees/acre of 50+ year old trees) and thus no significant increases to peak flows are expected. In addition, this proposal limits harvest unit size and proximity to other recent harvests, minimizes the extent of the road network, and implements wide riparian buffers, which all have mitigating effects on the potential for this proposal to increase peak flows that could impact areas downstream or downslope of the proposal area.

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

☐ No ☒ Yes, describe the water resource(s): Residents in the area have wells for domestic water use.

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

☒ No ☐ Yes, describe possible impacts:

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

1) All road drainage structures will be maintained in an operable state during and after logging operations.

2) Roads have been designed to divert water to the forest floor to minimize the risk of erosion.

3) Operational restrictions will exist during wet conditions to minimize rutting and soil disturbance on skid trails and logging roads while the proposal is in operation. No operations will be allowed from December 1st thru June 30th unless ground and weather conditions are
favorable.

4) Skid trails will be water barred at the completion of each setting on slopes over 10% or as needed.

5) Existing roads, landings and skid trails will be used wherever practical.

b. Ground Water:

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

No water will be withdrawn or discharged.

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

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

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

☐ No ☒ Yes, describe: Residences in the area have wells for domestic water use

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: None.

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.

Storm water and seasonal snowmelt will be channeled into roadside ditches and then into regularly spaced ditch outs designed to dissipate water onto the forest floor. Other roads will be out sloped to divert water to the forest floor.

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.
3) **Note protection measures, if any:**

1. All road drainage structures will be maintained in an operable state during and after logging operations.

2. Roads have been designed to divert water to the forest floor to minimize the risk of erosion.

3. Operational restrictions will exist during wet conditions to minimize rutting and soil disturbance on skid trails and logging roads while the proposal is in operation. No operations will be allowed from December 1st thru June 30th unless ground and weather conditions are favorable.

4. Skid trails will be water barred at the completion of each setting on slopes over 10% or as needed.

5. Existing roads, landings and skid trails will be used wherever practical.

6. All newly-constructed roads will be abandoned upon completion of the project.

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

**Post-hall maintenance of roads identified on the map will be graded and compacted, and rock will be added to the C3000 road which is in the immediate vicinity of the thinning units. During this process, existing drainage patterns will be maintained.**

**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: Spirea, Serviceberry, snowberry, rose
- ☐ Ferns
- ☒ Grass
- ☐ Pasture
- ☐ Crop or Grain
☐ Orchards  ☐ Vineyard  ☐ Other Permanent Crops
☒ Wet Soil Plants:
☐ Bullrush  ☐ Buttercup  ☐ Cattail  ☐ Devil’s Club  ☐ Skunk Cabbage
☒ Other: Mule’s-ears, Wenatchee Mts. checkermallow
☐ Water plants:
☐ Eelgrass  ☐ Milfoil  ☐ Water Lily
☐ Other:
☐ Other types of vegetation:
☐ Plant communities of concern:

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

Approximately 310 MBF will be removed from the site. Tree tops and limbs will be piled and burned on the landings after the timber harvest. Harvesting activities such as skidding and post-harvest prescribed burning will remove a significant portion of the top-growth of shrubs on the site, but nearly all shrub species will re-sprout. The only areas where roots will be removed and will not re-sprout are in the spur roads.

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.)

The adjoining vegetation is mostly 70-100-year old ponderosa pine and Douglas fir, with a lesser component of western larch and grand fir. Approximately 20% of the adjoining area, to the north and east, is open non-forested meadow, consisting of a variety of grasses and forbs and scattered shrubs, as well as scattered patches of aspen. The area is at the upper elevation end of the Douglas-fir zone and lower elevation end of the Grand Fir zone.

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

<table>
<thead>
<tr>
<th>TSU Number</th>
<th>Common Name</th>
<th>Federal Listing Status</th>
<th>State Listing Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>Wenatchee Mts. checkermallow</td>
<td>Endangered</td>
<td>Endangered</td>
</tr>
<tr>
<td>1</td>
<td>Wenatchee larkspur</td>
<td></td>
<td>Threatened</td>
</tr>
</tbody>
</table>

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

Areas within the proposal that have concentrations of rare plants have been excluded from proposed timber sale activities. Around these areas, the timber harvest prescription is designed to enhance habitat for the rare plants by reducing shading and competition. It is well-documented that the rare plant species prefer open, high light growing conditions. Native seed and plugs will be used to re-establish native
vegetation along skid paths and landing areas.

e. List all noxious weeds and invasive species known to be on or near the site.
Diffuse knapweed, spotted knapweed, sulfur cinquefoil, ox-eye daisy, Canada thistle, bull thistle, reed canarygrass.

5. Animals

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

   birds:
   ☐ eagle ☒ hawk ☐ heron ☒ owls ☒ songbirds
   ☐ other:

   mammals:
   ☒ bear ☒ beaver ☐ coyote ☒ cougar ☐ deer ☒ elk
   ☒ other: big brown bat

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

   amphibians/reptiles:
   ☒ frog ☐ lizard ☐ salamander ☒ snake ☐ turtle
   ☐ other:

   unique habitats:
   ☐ balds ☐ caves ☐ cliffs ☐ mineral springs ☐ oak woodlands ☐ talus slopes
   ☒ other: wet meadow

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

<table>
<thead>
<tr>
<th>TSU Number</th>
<th>Common Name</th>
<th>Federal Listing Status</th>
<th>State Listing Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 and 2</td>
<td>Northern Spotted Owl</td>
<td>Threatened</td>
<td>Endangered</td>
</tr>
</tbody>
</table>

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

邢台Pacific flyway ☒ Other migration route:

Explain: This proposal is located in the Pacific Flyway. Migratory waterfowl use the Flyway. The immediate area in which this proposal is contained is not generally the type of area used for resting or feeding by migratory waterfowl. Migratory waterfowl do occasionally use areas in the vicinity of the project during spring when water levels are high. The proposed project will not include any operations in spring.

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

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

   Species /Habitat: Ponderosa Pine and Douglas Fir Habitat (Unit 1)

02/2020
Protection Measures: Existing snags will be retained except where it is not operationally safe to do so or where they pose a danger to vehicles on the C-3000 road. Trees with physical defect such as crooks, forks, cavities, or broken tops will be retained for wildlife. All Ponderosa Pine >20 inches DBH and Douglas fir >24 inches DBH will be retained. Patches of dense conifer reproduction (saplings) will also be retained for wildlife. The uneven-aged thinning will promote structural diversity in the stand.

Species/Habitat: Northern Spotted Owl

Protection Measures: Unit 1 is designed to restore stand structure and to address the forest health issue occurring where pine beetles have had a significant impact on the pine. A seasonal timing restriction will limit operations in Unit 1 within 0.7 miles of the nest site.

The thinning in Unit 2 is designed to retain and enhance northern spotted owl habitat features by retaining 152 trees/acre after thinning, the majority (91 trees/acre) of which are 12 inch diameter or larger with mature crowns. Leave trees will be distributed throughout unit 2 in clumps of 5-20 trees and two ½-acre leave areas, all designed to retain large trees (Ponderosa pine>20” DBH, Douglas-fir >24” DBH), all snags (where safe to do so), and trees with defect such as crooks, forks, cavities or broken tops. The ½-acre leave areas were selected in part to provide cover for elk and unstable slope protection. Additionally, there are legacy trees scattered throughout Unit 2 and the focus of the clumps and leave areas is to also protect those unique and resilient structures. The harvest is intended to reduce the stand stocking and promote development of a more diverse structurally complex stand in order to create conditions for future nesting, roosting, and foraging (NRF) habitat.

Species/Habitat: Northern goshawk

Protection Measures: Northern goshawk are known to occur in the area, however none were observed in the proposed thinning units during surveys. Because they have similar habitat requirements, the protection measures proposed for Northern spotted owl will provide protection for Northern goshawk habitat features. Additionally, if a Northern Goshawk is discovered or suspected in and around the sale area, the Contract Administrator and Region Biologist must be immediately notified.

Species/Habitat: Rocky Mt. Elk

Protection Measures: Elk trails and other sign were found, particularly in Unit 2. Thinning is expected to enhance elk browse by providing more sunlight for preferred forage species. An approximately ½ - acre un-thinned “skip” was flagged in an area identified as having a particularly high level of elk use. This will provide an area of denser trees, shade, and hiding cover.
e. List any invasive animal species known to be on or near the site.
   None known.

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 is most likely to occur between 4:00 a.m. and 4:00 p.m. on days when operations are occurring. 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: Natural Area Preserve for scientific research and education.

Adjacent land types: Residential, Educational camp, Forest management. This proposal is located adjacent to the only access road into the camp and associated residence. The proposal has been designed to minimize effects and to maintain road access during operations.

This proposal will not change the use of or affect the 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 non-forest use?

This proposal site has been used as working forest lands. This proposal will retain the site in Natural Area Preserve for scientific research and education.
This proposal will not change the use of or affect the current/long term land use of areas associated with this sale.

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:

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?
   General zoning for the area is Commercial Forest. Natural Area Preserves are considered Critical Areas.

f. What is the current comprehensive plan designation of the site?
   Natural Systems/Critical Areas

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.
   Yes, the site is a Natural Area Preserve and is considered Fish and Wildlife Habitat Conservation Area under Chelan County Critical Areas Ordinance. This activity will enhance plant and wildlife habitat.

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:
   The proposed project is consistent with current land use designations and zoning regulations. Forest Practices activities, except for those classified as Class 4 - General, are exempt from Critical Areas Review. This project is not classified as Class 4 – General. The proposed project is also consistent with the Chelan County Watershed Management Plan (Wenatchee River watershed), the Peshastin Ck. Drainage Community Wildfire Protection Plan (Chelan Conservation District 2005), and the Camas Meadows NAP Management Plan. The Camas Meadows NAP Management Plan calls for the type of forest thinning in this proposal, to restore historic stand conditions as closely as possible, while minimizing impacts to soil and rare plant populations. This proposal is designed to result in more open
forest conditions dominated by large, fire-tolerant trees, which is the historic stand condition. Measures to minimize impacts to soil and rare plants are included as described in B-1-d-2 and B-4-d.

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

   2) How will this proposal affect any views described above?
      Does not apply.

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.

02/2020
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 known recreational use in the immediate vicinity. Informal uses occur on other portions of the natural area, including bird watching and wildflower viewing. Hunting, hiking, snowmobiling, horseback riding, and other informal outdoor recreation activities may occur on adjacent lands near the proposal area.

b. Would the proposed project displace any existing recreational uses? If so, describe.
   No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
   Roads in the project area are closed to recreationalists. Roads in the project vicinity will remain open to recreationists during the harvest. Signs informing of harvest operations will be posted. The operation is expected to progress quickly and disruptions will be temporary.

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. Sites CH00855 and CH00857 are within the project area.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. Yes, sites CH00855 and CH00857 are located in and adjacent to the project area. DNR conducted a cultural resource survey of the project area, which is reported on in “Cultural Resource Report for the Camas Meadows Forest and Rare Plant Restoration Project, Chelan County, Washington” dated August 7, 2020. Site protection measures were identified in this report and have been established to prevent impacts to these resources.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. Previous cultural resources reports, historical maps, and the DAHP WISAARD database of known archaeological sites were reviewed. The Confederated Tribes and Bands of the Yakama Nation and Confederated Tribes of the Colville Reservation were consulted prior
to the field review. A DNR archaeologist conducted surveys of the proposal area in May and June 2020, which included both pedestrian methods and subsurface tests. No new archaeological sites were identified during the survey. The resulting report entitled “Cultural Resource Report for the Camas Meadow Forest and Rare Plant Restoration Project, Chelan County, Washington” was submitted to Tribes and DAHP for review on August 7, 2020. DAHP issued a letter of concurrence for the project on August 18, 2020.

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. The 2020 cultural resource survey report identifies measures to be taken to avoid all known cultural resources. These measures will be followed in planning and implementing the project. DNR will also utilize their Cultural Resources Inadvertent Discovery Guidance set forth under agency guideline GL 14-004-010. If any archaeological or historic materials are encountered during the project activity, work in the immediate vicinity will stop and these state agency guidelines will be followed.

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. U.S. Hwy 97 to Camas Creek Road to USFS road 7200 to C-3000 to the site of 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 8 miles away in Peshastin, WA.

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:
☐ electricity ☐ natural gas ☐ water ☐ refuse service ☐ telephone ☐ sanitary sewer
☐ septic system ☐ other: none.

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

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

Signature: ________________________________  Larry Leach

Name of signee: ____________________________  Larry Leach

Position and Agency/Organization: State Lands Assistant Region Manager, WA Department of Natural Resources

Date Submitted: 5/17/2022