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: **LOST VRH & WMZ**
   Agreement # **30-099070**

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

3. Address and phone number of applicant and contact person:
   950 Farman Ave N.
   Enumclaw, WA 98022
   Contact: Audrey Mainwaring

   (360) 825-1631

4. Date checklist prepared: **03/10/2020**

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

6. Proposed timing or schedule (including phasing, if applicable):
   a. *Auction Date:* **10/27/2020**

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

   c. Phasing: **None**

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

   a. Site Preparation:

   Site preparation in Units 1, 4, 6, 7, and 9, including chemical herbicide application and burning of slash piles, may be used to ensure planting can be achieved at acceptable stocking levels to meet Forest Practice standards following harvest.

   b. Regeneration Method:

   Units 1, 4, 5, 6, 7, and 9 will be hand planted within three years of contract expiration.

   c. Vegetation Management:

   Surveys will be conducted to determine Pre-Commercial Thinning (PCT) needs at 8-12 years of age. Information from these surveys will be used to schedule PCT.

d. Other:

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

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

☐ *303 (d) – listed water body in WAU*:
- ☐ *temp*
- ☐ *sediment*
- ☐ *completed TMDL (total maximum daily load)*

☐ *Landscape plan:*
☐ *Watershed analysis:*
☐ *Interdisciplinary team (ID Team) report:*
☒ *Road design plan:* **Included in the Road Plan dated April 2, 2020.**
☐ *Wildlife report:*
☐ *Geotechnical report:*
☐ *Other specialist report(s):*
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☒ *Rock pit plan:* **Included in the Road Plan dated April 2, 2020.**
☒ *Other:*

Forest Practices ICN 26676
E-mail, remote review, and field review from the state lands geologist-in-training.
Communications and site review by region biologist

Referenced documents may be obtained at the region office responsible for this proposal.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

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

☒ *FPA #* **2421654** ☒ *FPHP* ☒ *Board of Natural Resources Approval*
☒ *Burning permit* ☐ *Shoreline permit* ☐ *Existing HPA*
☐ *Other:*

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

a. *Complete proposal description*:

The Lost Timber Sale consists of five variable retention harvest (VRH) units, two wetland management zone variable density thinnings (WMZ/VDT) units, and two right-of-way units. The proposed area originally considered for harvest was over 200 acres, but reduced to a gross 137 acres and net 126 sale acres as well as protection for streams and potentially unstable slopes. Approximately 3,085 MBF will be removed from the timber sale area. WMZ thinning units 2 and 8 will each retain 140 square feet of basal area to expedite the growth of older forests structure and enhance forest health within the WMZ.

Unit 1 (VRH) – 36 net acres
Unit 2 (WMZ Thinning) – 3 net acres
Unit 3 (ROW) – 2 net acres
Unit 4 (VRH) – 20 net acres
Unit 5 (ROW) – 1 net acre
Unit 6 (VRH) – 26 net acres
Unit 7 (VRH) – 17 net acres
Unit 8 (WMZ Thinning) – 3 net acres
Unit 9 (VRH) – 18 net acres

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

Pre-harvest Stand Description:

Unit	Origin Date	Major Timber Species	Type of Harvest
1	1966, 1967	Douglas-fir, Western red cedar, Western hemlock	Variable retention
2	1966	Douglas-fir, Western red cedar, Western hemlock	WMZ Thinning
3	1968	Douglas-fir, Western red cedar, Western hemlock	Right-of-Way
4	1968	Douglas-fir, Western red cedar, Western hemlock	Variable retention
5	1966, 1968	Douglas-fir, Western red cedar, Western hemlock	Right-of-Way
6	1966	Douglas-fir, Western red cedar, Western hemlock	Variable retention
7	1968	Douglas-fir, Western red cedar, Western hemlock	Variable retention
8	1968	Douglas-fir, Western red cedar, Western hemlock	WMZ Thinning
9	1954, 1971	Douglas-fir, Western red cedar, Western hemlock	Variable retention

Overall Unit Objectives:

The objective of this proposal is to produce revenue for State grants 06, 10 and 11

through the production of saw logs, poles and pulp material. WMZ thinning will take place within Units 2 and 8 to expedite the growth of older forests structure and enhance forest health within the WMZ.

c. *Describe planned road activity. Include information on any rock pits that will be used in this proposal. See associated forest practice application (FPA) for maps and more details.*

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		**13,463**	**5**	**0**
Reconstruction		**859**		**0**
Maintenance		**39,043**		**0**
Abandonment		**8,561**	**3**	**0**
Bridge Install/Replace	**0**			**0**
Stream Culvert Install/Replace (fish)	**1**			**1**
Stream Culvert Install/Replace (no fish)	**9**			
Cross-Drain Install/Replace	**25**			

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

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

T23-0N R3-0W S06, 07 - Harvest
T23-0N R4-0W S01 - Harvest and Rock Pit

b. *Distance and direction from nearest town:*

Proposal area is located approximately 15.6 miles north of Hoodsport.

From Hoodsport: Travel north on US-101 for 10.3 miles. Turn left onto USFS 24 Road (also known as Jorstad Creek Road). Continue on USFS 24 Road for 4.7 miles. Turn left onto the 2420 Road (gate 08, 383 lock), go 0.6 mile to enter the unit.

13. Cumulative Effects

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

This proposal is located within the Lilliwaup WAU. This WAU has experienced peak flow impacts and include areas of potentially unstable slopes.

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

The Department of Natural Resources has a multi-species Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concerning threatened and endangered species and their habitat. The applicable Habitat Conservation Plan (HCP) strategies incorporated into this proposal include:

- **Retaining Riparian Management Zones (RMZs) to protect water quality, stream bank integrity, stream temperatures, and provide large down woody debris.**
- **Wetland Management Zones (WMZs) will protect water quality, sensitive wetland soils, and maintain hydrologic functions.**
- **Retaining a minimum of 8 trees per acre (greater than 10 inches diameter at breast height) clumped and scattered throughout the units. This strategy provides legacy elements within the new plantation and retains very large diameter, structurally unique trees.**

Agency policies and guidelines from the Policy for Sustainable Forests incorporated into this proposal include:

- **Assessing for and protecting significant historic, archaeological and cultural areas.**
- **Generally limiting even-aged harvests to less than 100 acres per unit.**

Current Forest Practice Rules also require that:

- **Potentially unstable slopes and landforms are evaluated and rule-identified landforms with the potential to delivery to public resources are excluded from the area.**
- **Allowing green-up (regenerated stands that are either 4 feet tall or 5 years of age) of adjacent stands to minimize impacts to watershed hydrology.**
- **Best management practices for road construction and maintenance is implemented to prevent sediment delivery to typed waters and avoid improper drainage patterns that may create slope failures.**
- **After harvest, tree seedlings will be planted to reforest the site and may be complemented by the natural regeneration that is expected to occur.**

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

Rule identified landforms according to the Forest Practices Board Manual have been identified and protected. Several inner gorges and two bedrock hollows were found along streams within and adjacent to Units 1 through Unit 9 and excluded from the sale area.

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

No.

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

WAU Name	Total WAU Acres	DNR-managed WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven-aged harvest in the future	Acres of proposed harvest on non-DNR-managed lands currently under active FP permits
LILLIWAUP	36587	18459	1547	0	1198

Other management activities, such as stand and road maintenance, will likely occur within the associated WAU(s).

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

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

WAU:	LILLIWAUP
WAU Acres:	36587
Elevation Range:	0 - 4010 ft.
Mean Elevation:	680 ft.
Average Precipitation:	73 in./year
Primary Forest Vegetation Zone:	Western Hemlock

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

This proposal is a representative example of the WAUs at the same elevation and aspect.

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

Within the units 70%, outside the units within the RMZ's 102%

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

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

State Soil Survey #	Soil Texture
7331	GRAVELLY SANDY LOAM
6788	V.GRAVELLY SILT LOAM
2976	STONY LOAM
3892	V.GRAVELLY SILT LOAM
2975	GRAVELLY SANDY LOAM

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

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

Several inner gorges, and two bedrock hollows were found along streams within and adjacent to Units 1 - 9 and excluded from the sale area.

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

   ☒ *No* ☐ *Yes, describe the proposed activities:*

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

   Potentially unstable slopes were excluded from harvest area.

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: **5 acres**
Approx. acreage new landings: **2 acres**
Fill Source: **Native Material.**

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

Yes. Some erosion could occur as a result of yarding over/across Type 5 streams, building new roads, installing culverts, and hauling timber.

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

Approximately 3% of the site will remain as gravel roads.

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

Road locations are on stable soils and have little potential for sediment delivery to typed streams. Rutting restrictions and diverting water off the road surfaces onto the forest floor will minimize the potential for erosion. Roads will be maintained to help prevent erosion. At any time during periods of wet weather, the yarding of timber, road construction, and hauling of logs will not be permitted if resource damage may occur in the opinion of the Contract Administrator.

2. Air

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

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

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

None known.

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

If landing debris is burned, it will be in accordance with Washington State's Smoke Management Plan. A burn permit will be obtained before burning occurs.

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If

yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" as referenced on the DNR website: http://www.dnr.wa.gov/sepa. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)*

☐ *No* ☒ *Yes, describe in 3-a-1-a through 3-a-1-c below*

a. Downstream water bodies: **Eagle Creek, Hood Canal, East Fork Lilliwaup Creek, Lilliwaup Creek.**

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

Wetland, Stream, Lake, Pond, or Saltwater Name (if any)	Water Type	Number (how many?)	Avg RMZ/WMZ Width in feet (per side for streams)
Eagle Creek	**Type 3**	**1**	**155**
Unnamed	**Type 3**	**5**	**155**
Unnamed	**Type 4**	**2**	**100**
Water body	**Type 3**	**4**	**155**
Wetland 0.25 acre – 1 acre	**<1 acre**	**4**	**100**
Wetland 0.25 acre – 1 acre	**<1 acre**	**2**	**100' managed WMZ**

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

All streams were typed using the water typing system for forested State Trust HCP Lands and are protected with HCP no harvest buffers as shown above. No wind buffers were applied.

A road will be built through a Type 3 RMZ to access Unit 6. One temporary installation of a fish passage culvert located on the 2435 Ext Road at station 14+00. See associated Forest Practices ICN 26676, dated 03/11/2020 for mitigation measures.

Road construction protection measures in Type 3 stream RMZ includes minimizing right-of-way area, reducing cuts and fills, armoring culvert and sediment control measures with seasonal restrictions.

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):

Harvest will occur within 200 feet of streams and wetlands, but beyond the distances listed in the table in B-3-a-1-b above with the exception of wetland management zone thinning in Units 2 and 8 with a 50 foot equipment exclusion zone. If equipment crossings are needed during work in Type 5 streams, they will be approved by the Contract Administrator prior to beginning work. Type 5 streams have 30 foot ELZs, except crossing where approved by contract administrator to help protect them from soil compaction during harvest operations.

WMZ thinning will take place within Units 2 and 8 (managed WMZ). These thinnings are to expedite the growth of older forests structure and enhance forest health within the WMZ.

There will be 10 culverts installed within 200 feet of streams for road construction. This includes nine Type 5 stream crossings and one temporary installation of a fish passage culvert located on the 2435 Ext road at station 14+00. A road will be built through a Type 3 RMZ to access Unit 6.

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.

Around 75 cubic yards of onsite material could be used for the temporary culvert on Eagle Creek (Type 3 stream) at 14+00 on the 2435 ext. road.

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:*

If water is present during culvert installation at stream crossings associated with road construction, the stream water will be diverted to avoid sediment delivery.

A temporary 60 inch culvert will be installed on the 2435 Ext Road at station 14+00 for fish passage. During installation and removal, water will be re-routed to minimize sediment delivery.

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

☐ *No* ☒ *Yes, describe activity and location:*
Type 3 culvert installation associated with road work will occur within the 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.
It is not likely that any waste materials will be discharged into the surface water(s). However, minor amounts of oil, fuel, and other lubricants may inadvertently be

discharged to the adjacent surface water(s) as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.

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

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

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

LILLIWAUP = 5.0 (mi./sq. mi.)

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

☐ *No* ☒ *Yes, describe:*
It is likely some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road construction, reconstruction, and/or maintenance standards will be applied that address this issue by installing cross-drains to deliver ditch water to stable forest floors.

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

☐ *No* ☒ *Yes, describe observations:*

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

11) *Describe any anticipated contributions to peak flows resulting from this proposal's activities which could impact areas <u>downstream or downslope of the proposal area.</u>*

It is not likely the proposed activity will change the timing, duration, or volume of water during a peak flow event. This proposal limits harvest unit size and proximity to other recent harvests, minimizes the extent of the road network, incorporates road drainage disconnected from stream networks, and implements wide riparian buffers which all have mitigating effects on the potential for this proposal to increase peak flows that could impact areas downstream or downslope of the proposal area.

12) *Is there a water resource (public, domestic, agricultural, hatchery, etc.), or area of slope*

instability, downstream or downslope of the proposed activity?

☒ *No* ☐ *Yes, describe the water resource(s):*

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

☒ *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.*

Cross-drain culvert locations have been designed and will be installed to direct ditch water onto the forest floor prior to entering surface water. Road maintenance and abandonment will reduce the risk of potential negative effects on water quality and flow. Reforestation and leave trees will reduce potential and duration of peak flow impact. Type 5 streams and WMZs (units 2 and 8) are protected by equipment exclusion zones. Designated crossings may be allowed on Type 5 streams. Bank and channel protection and cleanout is required.

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:*

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

☒ *No* ☐ *Yes, describe possible impacts:*

Note protection measures, if any:

c. Water runoff (including stormwater):

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

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

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

☐ *No* ☒ *Yes, describe:*

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

Note protection measures, if any:

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

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

No changes to drainage patterns are expected.

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

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

4. Plants

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

☒ Deciduous tree:

☒ Alder ☐ Aspen ☐ *Birch* ☒ *Cottonwood* ☒ Maple ☐ *Western Larch*

☐ Other:

☒ Evergreen tree:

☒ *Douglas-Fir* ☐ *Engelmann Spruce* ☐ *Grand Fir* ☐ *Lodgepole Pine*
☐ *Mountain Hemlock* ☐ *Noble Fir* ☐ *Pacific Silver Fir* ☐ *Ponderosa Pine*
☒ *Sitka Spruce* ☒ *Western Hemlock* ☒ *Western Redcedar* ☐ *Yellow Cedar*
☐ Other:

☒ Shrubs:
☒ *Huckleberry* ☒ *Rhododendron* ☒ *Salmonberry* ☒ *Salal*
☐ *Other:*

☒ *Ferns*

☒ Grass

☐ Pasture

☐ Crop or Grain
☐ *Orchards* ☐ *Vineyard* ☐ *Other Permanent Crops*

☒ Wet Soil Plants:
☐ Bullrush ☐ Buttercup ☐ Cattail ☒ *Devil's Club* ☒ Skunk Cabbage
☒ Other: **Sedge**

☐ 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).*

Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" on the DNR website: http://www.dnr.wa.gov/sepa. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)

Unit 1: The boundaries consist of approximately 54 years old mixed conifer RMZs and WMZs, a 10 year old plantation, a 13 year old plantation, a 16 year old plantation.

Unit 2 WMZ Thin: The boundaries consist of approximately 54 years old mixed conifer stand.

Unit 3 ROW: The boundaries consist of approximately 54 years old mixed conifer stand.

Unit 4: The boundaries consist of approximately 54 years old mixed conifer RMZs and WMZs.

Unit 5 ROW: The boundaries consist of approximately 54 years old mixed conifer RMZ.

<u>Unit 6</u>: The boundaries consist of approximately 54 years old mixed conifer RMZs and WMZs.

<u>Unit 7</u>: The boundaries consist of approximately 54 years old mixed conifer RMZs and WMZs, and powerlines.

<u>Unit 8 WMZ Thin</u>: The boundaries consist of approximately 54 years old mixed conifer stand.

<u>Unit 9</u>: The boundaries consist of approximately 54 years old mixed conifer RMZs and WMZs, a 6 year old plantation, a 10 year old plantation, a 16 year old plantation.

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

None found in corporate database

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

Replant Units 1, 4, 5, 6, 7 and 9 with native conifer species within three years following the harvest.

In Units 1, 4, 6, 7 and 9 an average of 8 leave trees per acre, clumped and scattered, will be retained. Within the clumped leave tree areas as well as RMZs, all trees and vegetation will remain intact.

Units 2 and 8 consists of forested wetlands greater than 0.25 acres and less than 1 acre. Both wetlands will be thinned to retain a basal area of 140 square feet per acre as well as understory vegetation. Within the four no-cut WMZs, all trees and vegetation will remain intact.

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

None known onsite.

5. Animals

a. <u>List</u> any birds and <u>other</u> 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: grouse, quail
mammals:
☒ bear ☒ beaver ☒ *coyote* ☒ *cougar* ☒ deer ☒ elk
☐ other:
fish:
☐ bass ☐ herring ☐ salmon ☐ shellfish ☒ trout

☐ other:
amphibians/reptiles:
☒ *frog* ☐ *lizard* ☒ *salamander* ☐ *snake* ☐ *turtle*
☐ *other*:
unique habitats:
☒ *balds* ☐ *caves* ☒ *cliffs* ☐ *mineral springs* ☐ *oak woodlands* ☒ *talus slopes*
☐ other:

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

TSU Number	Common Name	Federal Listing Status	State Listing Status
LOST U3	Fisher	Candidate	Endangered

Fisher sighting 2/3 mile south of the proposal in 1969. No management constraints associated with this recording.

c. Is the site part of a migration route? If so, explain.
☒ *Pacific flyway* ☐ *Other migration route:*
Explain:

All of Washington State is considered part of the Pacific Flyway. No impacts are anticipated as a result of this proposal.

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: **Riparian & wetland**
Protection Measures: : **No harvest HCP buffers (besides the WMZ thinnings in Units 2 and 8), 100 foot width on Type 4 streams and wetlands between 0.25 & 1 acre in size, and 155 foot width buffers on Type 3 streams. Approximately 140 square foot basal area will be retained within the Units 2 and 8 WMZ Thinning units. (See B.3.a.1)**

These buffers, while protecting the water quality of the streams and wetlands, will provide shelter and foraging areas for the riparian species that are indigenous to the area. Sale boundary locations will prevent fine sediment generated from the logging operation from entering streams. There are many large trees within the RMZs and WMZs that will help maintain high shade levels, maintain cooler water and air temperatures, and provide for down and dead trees needed for quality wildlife habitat.

Species /Habitat: **Upland Strategy**
Protection Measures: **This proposal conforms to all commitments under the 1997 DNR Habitat Conservation Plan (HCP). The HCP includes a number of**

strategies to enhance and preserve wildlife over time. Specific to this proposal is quality leave tree retention which may provide critical elements for upland species and preserve long term site productivity through the maintenance of forest processes. Retained trees are wind firm and well-formed dominant and co-dominant trees representing the original diversity of species. There is a minimum of 8 trees per acre that were left clumped and scattered throughout the units.

Species /Habitat: **Bald**
Protection Measures: **HCP Non-tradable leave tree clump.**

Species /Habitat: **Cliffs & Talus**
Protection Measures: **Cliff protection includes excluding from the harvest unit and protecting trees within these areas by prohibiting associated trees to be used as tailholds. Talus areas have been excluded from the harvest.**

e. 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.

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

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

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.

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

None known.

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

None known.

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

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

4) Describe special emergency services that might be required.

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

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

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

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

b. Noise

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

None.

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

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

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

None.

8. Land and shoreline use

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

Current use of site and adjacent land types: commercial forestry

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

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

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

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

No.

c. Describe any structures on the site.

None.

d. Will any structures be demolished? If so, what?

No.

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

Forest Resource Zone.

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

Timber Production

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

This project is consistent with current comprehensive plans and zoning classifications.

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

None.

9. Housing

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

Does not apply.

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

Does not apply.

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

None.

10. Aesthetics

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

Does not apply.

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

Views in the immediate area and from nearby forest roads will be altered by the removal of trees.

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

☒ *No* ☐ *Yes, name of the location, transportation route or scenic corridor:*

2) *How will this proposal affect any views described above?*

Does not apply

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

In Units 1, 4, 6, 7, and 9 leave trees will be retained (eight per acre on average) and will be replanted with native conifer species within three years following timber harvest. In addition, RMZs and WMZs will help to lessen the visual impacts of the harvest.

In Units 2 and 8 approximately 2/3 of the trees will be retained.

11. Light and glare

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

None.

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

No.

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

None.

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

None.

12. Recreation

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

Informal recreation opportunities may include hunting, gathering, and fishing.

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

There may be some disruptions to recreational use during periods of harvesting and hauling.

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

No weekend or holiday hauling on the USFS 24 Road.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

Yes, site 45MS00269 is located in the proximity of the proposal. A DNR Archaeologist and Cultural Resource Technician have conducted a site review and survey of the area and recorded site. This site has been determined by Department of Archaeology and Historical Preservation to not be eligible for National Register of Historic Places.

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.

Reviewed DNR's database, GIS data, and historic maps. A DNR Archaeologist and Cultural Resource Technician were also consulted.

c. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

If a presently-unknown cultural resource is discovered during project operations, DNR will comply with the March 2010 Cultural Resources Inadvertent Discovery Guidance.

14. Transportation

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

US Highway 101, USFS 24 Road. See associated Driving Map.

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 15 miles away in the town of Hoodsport.

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:

Caution sign will be installed along the haul route.

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**: BPA Powerlines. They do not service the site.**

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: Dean R. Adams

Name of signee **Dean R. Adams**

Position and Agency/Organization **State Lands Assistant Region Manager/SPS Region**

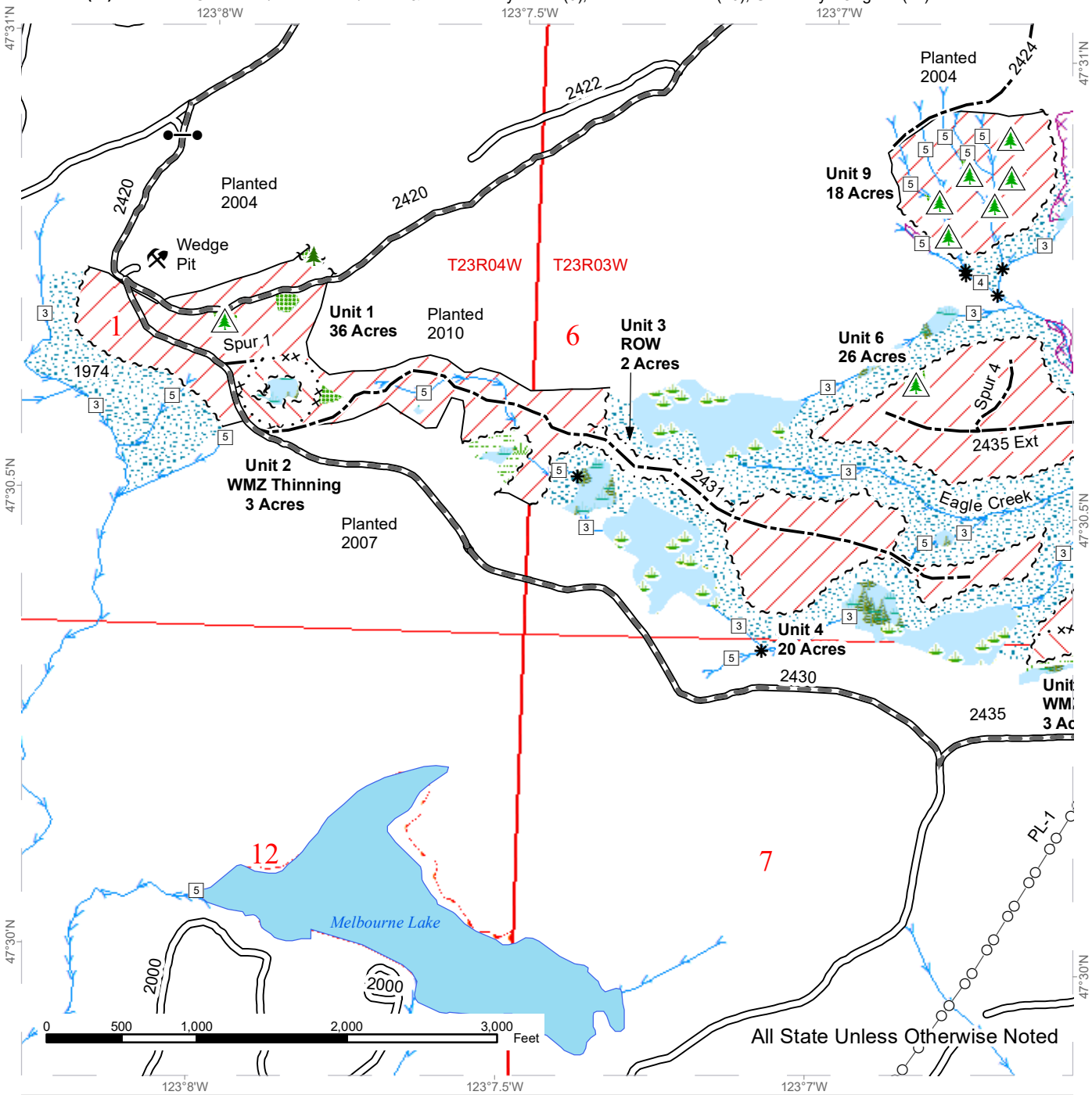
Date Submitted: 7/27/2020

AEM 7-24-20

TIMBER SALE MAP

SALE NAME: LOST VRH & WMZ
AGREEMENT #: 30-099070
TOWNSHIP(S): T23R3W, T23R4W
TRUST(S): Charitable/Educational/Penal & Reformatory Instit. (6), Scientific School (10), University - Original (11)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 600-1280



Variable Retention Harvest
WMZ Thinning
Leave Tree Area
Riparian Mgt Zone
Wetland Mgt Zone
Wetlands - Non-forested
Forested Wetland
Tailhold Restriction Area
Open Water

Sale Boundary Tags
Special Mgmt Area
Leave Tree Tags
Right of Way Tags
Property Line
Timber Type Change

Existing Roads
Required Pre-Haul Maintenance
Optional Construction
Gate
Leave Tree Area <1/4-acre
Non-Tradeable Leave Trees
Rock Pit

Streams
Stream Type
Stream Type Break
Power Lines

N

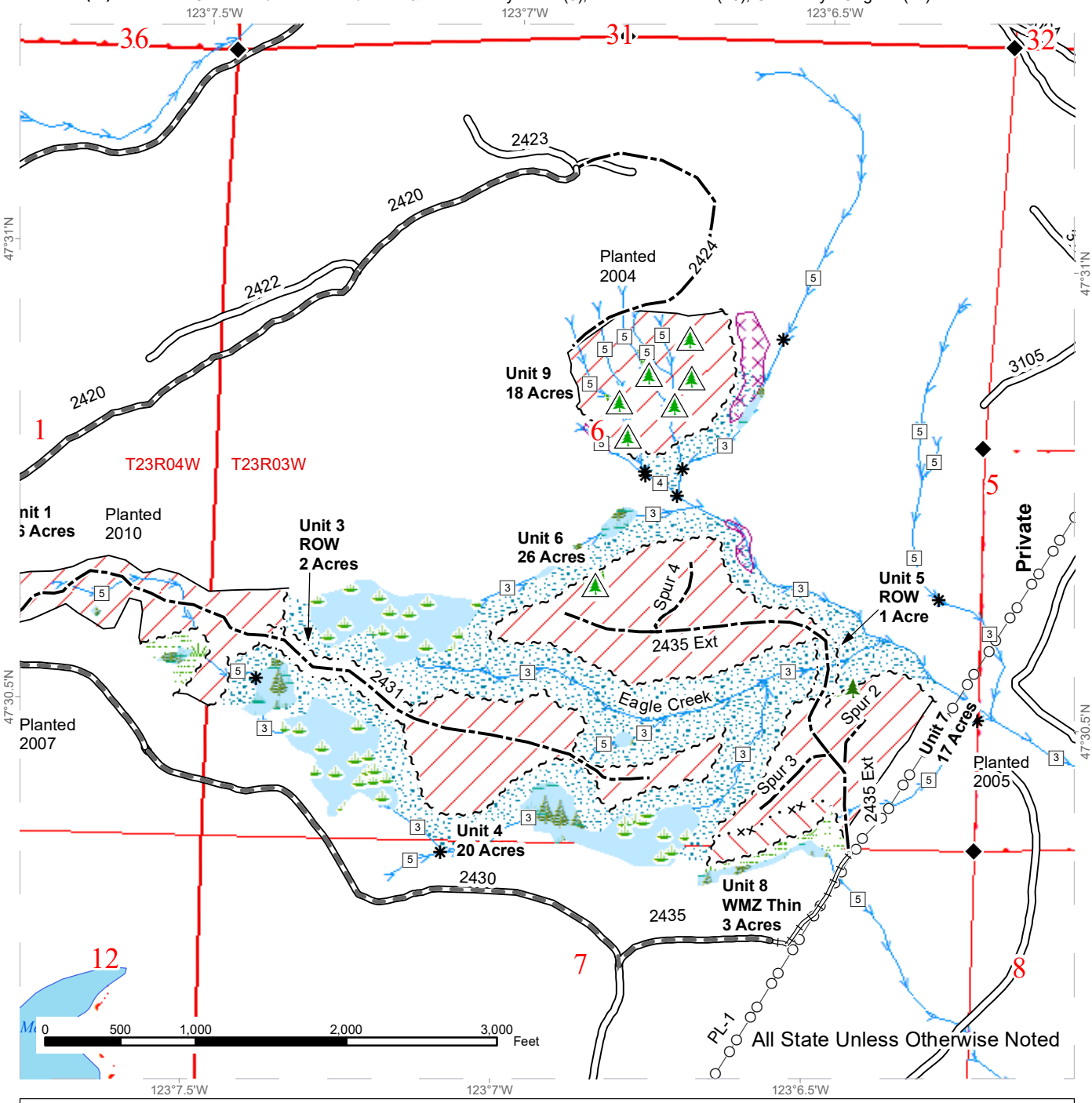
Prepared By: jhom490

Modification Date: kfry490 7/27/2020

TIMBER SALE MAP

SALE NAME: LOST VRH & WMZ
AGREEMENT #: 30-099070
TOWNSHIP(S): T23R3W, T23R4W
TRUST(S): Charitable/Educational/Penal & Reformatory Instit. (6), Scientific School (10), University - Original (11)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 600-1280



Variable Retention Harvest
WMZ Thinning
Leave Tree Area
Riparian Mgt Zone
Wetland Mgt Zone
Wetlands - Non-forested
Forested Wetland
Tailhold Restriction Area
Open Water

Sale Boundary Tags
Special Mgmt Area
Leave Tree Tags
Right of Way Tags
Property Line
Timber Type Change

Existing Roads
Required Pre-Haul Maintenance
Required Reconstruction
Optional Construction
Leave Tree Area <1/4-acre
Non-Tradeable Leave Trees

Streams
Stream Type
Stream Type Break
Survey Monument
Power Lines

N

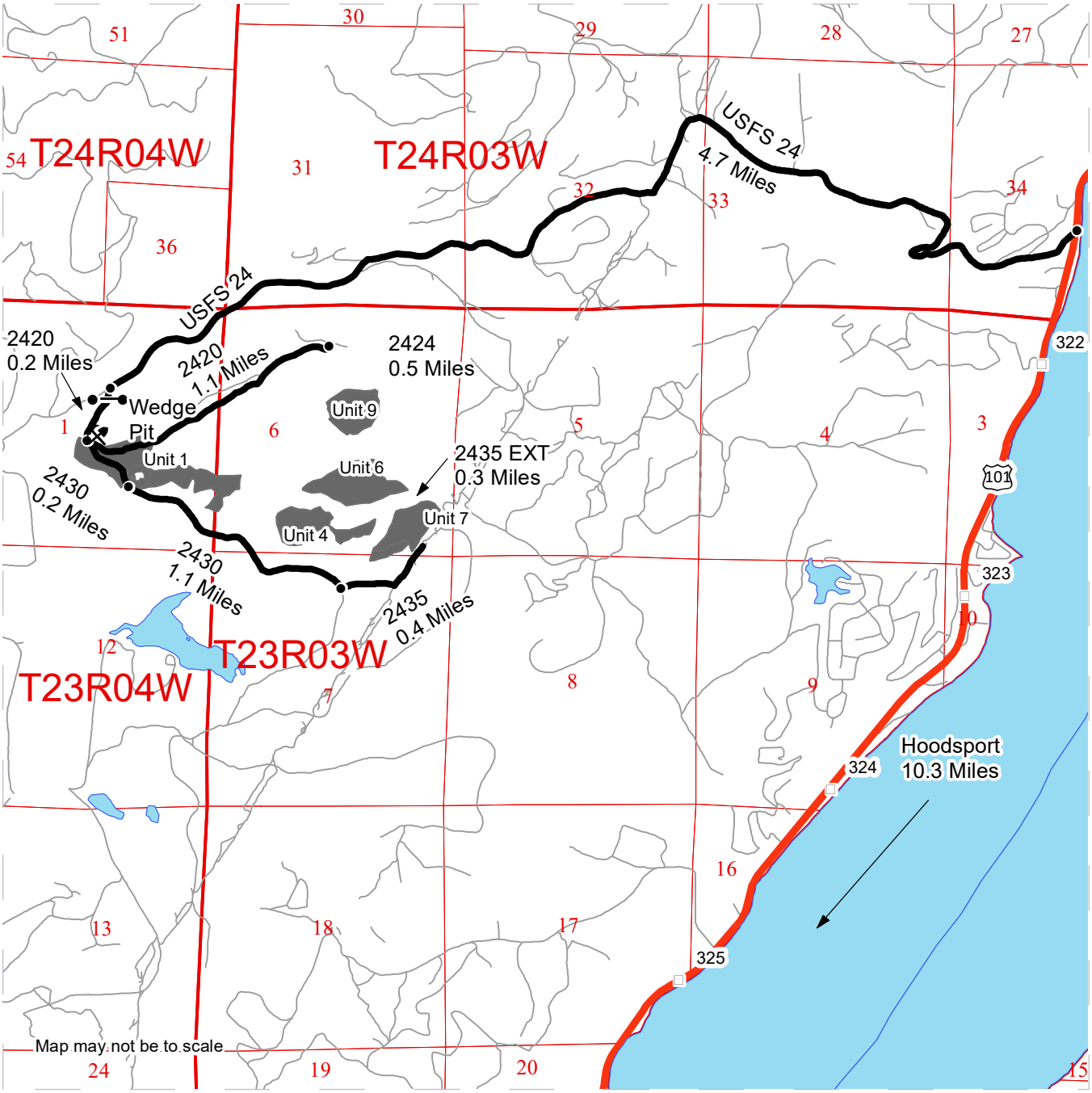
Prepared By: jhom490

Modification Date: kfry490 7/27/2020

DRIVING MAP

SALE NAME: LOST VRH & WMZ
AGREEMENT#: 30-099070
TOWNSHIP(S): T23R3W, T23R4W
TRUST(S): Charitable/Educational/Penal & Reformatory Instit. (6), Scientific School (10), University - Original (11)

REGION: South Puget Sound Region
COUNTY(S): Mason
ELEVATION RGE: 600-1280



- Timber Sale Unit
- Existing Roads
- Haul Route
- Highway
- Open Water
- Distance Indicator
- Gate Master 383 Lock
- Rock Pit
- Milepost Markers

DRIVING DIRECTIONS:

From Hoodsport: Travel north on US-101 10.3 miles. Turn left onto USFS Rd. 24 (also known as Jorstad Creek Rd.). Continue on USFS Rd. 24 for 4.7 miles. Turn left onto the 2420 Road (Gate #8 Masterlock 383), go 0.2 miles to enter Unit 1. The Wedge Pit is on your left.

continue 1.1 miles on the 2420 to the 2424 continue for 0.5 miles to Unit 9.

From Unit 1 turn right onto the 2430 for 0.2 miles to the 2431 turn left and continue for 0.7 miles to Unit 4.

From the 2431 Jct stay on the 2430 for 1.1 miles to the 2435 turn left onto the 2435 for 0.4 miles to Unit 7. The 2435 turns into the 2435 Ext. Continue (walking) on the 2435 Ext for 0.3 miles to Unit 6.

N

Prepared By: jhom490

Modification Date: nchi490 6/30/2020