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: **Q 99 Bees**
Agreement # **30-110311**

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

3. Address and phone number of applicant and contact person:

Southeast Region
713 Bowers Road
Ellensburg, Washington 98926-9031
Phone: (509) 925-8510

Contact Person: Kevin Alexander

4. Date checklist prepared: **2/20/2026**

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

6. Proposed timing or schedule (including phasing, if applicable):
a. *Auction Date:*
10/29/2026

b. *Planned contract end date (but may be extended):*
10/31/2028

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 be piled and burned. Herbicide applications may be utilized to improve the growing condition before planting. Broadcast burn may be utilized to enhance the natural regeneration.

b. Regeneration Method:

Natural regeneration is expected throughout most of the units within 5-10 years. Unit 7 will be planted with Western Larch (WL) and Douglas-fir (DF). The rest of the units will have an adequate number of trees per acre (21-24 TPA) post-harvest that they will regenerate by themselves. Some units might get burned to promote anticipated natural regeneration. The

planted unit will utilize site-specific conditions to determine what species will be planted. All units will meet reforestation standards in accordance with Forest Practice Rules by meeting the regeneration target of a minimum of 150 trees per acre, well-established seedlings by 5 years from planting or harvest operation.

c. *Vegetation Management:*

Selected road cut banks, fill slopes, and ditch lines, will be seeded with grass where necessary to minimize surface erosion, promote soil rehabilitation and reduce the spread of noxious weeds. Road decommissioning will limit traffic and a roadside noxious weed spraying program will further minimize noxious weed introduction and spread. This is anticipated to allow the establishment of the seedlings in conjunction with existing vegetation.

d. *Other:*

Landing slash will be piled and burned unless it is economically feasible to chip it for biomass. Firewood cutting may take place after harvest activities have concluded. Prescribed fire may be utilized to achieve future silvicultural objectives such as reducing standing fuel or enhancing ground conditions to improve natural regeneration. Ongoing road maintenance assessments will be conducted and may include periodic road grading, ditch and culvert cleanout, as necessary. 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(s):* **Dry Creek/Yakima River, Taneum Canyon**
- ☒ *temp:* **Dry Creek, and Taneum Creek**
- ☐ *sediment:*
- ☒ *completed TMDL (total maximum daily load):* **Dry Creek, and Taneum Creek**

☐ *Landscape plan:*
☐ *Watershed analysis:*
☐ *Interdisciplinary team (ID Team) report:*
☒ *Road design plan:*
☒ *Wildlife report:* **Wolf Plan, 2025**
☐ *Geotechnical report:*
☐ *Other specialist report(s):*
☐ *Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):*
☐ *Rock pit plan:*
☒ *Other:*

The following analyses, policies, procedures, documents, and data layers directly pertain to or were reviewed as part of this proposal and are incorporated by reference:

- **DNR Policies and Implementation**
  - **Policy for Sustainable Forests (PSF; 2006a)**
  - **Final Environmental Impact Statement on the Policy for Sustainable Forests (2006b)**

    - **Silvicultural Rotational Prescriptions**
    - **Land Resource Manager Reports and associated maps**
- **Forest Practices Regulations and Compliance**
    - **Forest Practices Board Manual**
    - **Forest Practices Activity Maps**
    - **Trust Lands HCP Addendum and Checklist**
- **DNR Trust Lands Habitat Conservation Plan and Supplemental Information**
    - **Final Habitat Conservation Plan (HCP; 1997)**
    - **Final (Merged) Environmental Impact Statemrryent for the Habitat Conservation Plan (1998)**
    - **Spotted Owl Habitat GIS Layer**
    - **Biological Opinion on the HCP, USFWS; January 27, 1997**
    - **Biological Opinion on the HCP, NMFS; January 29, 1997**
    - **Reinitiated Biological Opinion on the Incidental Take Permit (PRT-812521), USFWS; March 21, 2024**
- **Supporting Data for Unstable Slopes Review**
    - **State Lands Geologist Remote Review (SLGRR)**
    - **Lidar Data and Derivatives**
    - **Draft Landform Remote Identification Model (LRIM) screening tool**
    - **Published Landslide Inventories**
    - **Historic orthophotographs**
    - **Published Geologic Mapping**
- **Supporting Data for Cultural Resources Review**
    - **Historical Aerial Photographs**
    - **USGS and GLO maps**
    - **Department of Archaeology and Historic Preservation database for architectural and archaeological resources and reports (WISAARD)**
- **Additional Supporting Data for Policy Compliance**
    - **State Soil Survey**
- **Road Plan, Archaeologist Memo; HCP Checklist; Special Concerns Reports and associated maps, Road Maintenance and Abandonment Plan (RMAP): #2700086L. All documents available at the SE Region Office for review, with exception of the Archaeologist memo.**
- **Landscape Assessments provided by DNR Forest Resilience Division**

Supporting Data for Unstable Slopes Review:

- **State Lands Geologist Remote Review (SLGRR)**
- **Lidar Data and Derivatives**
- **Draft Landform Remote Identification Model (LRIM) screening tool**
- **Published Landslide Inventories**
- **Historic Aerial Photographs**
- **Published Geologic Mapping**
- **Geologic field summary memo**

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 #* **SE-FPA-26-9041** ☐ *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.)

a. Complete proposal description:

The Q 99 Bees proposal is approximately 598.5 gross acres in Taneum Canyon (40%) and Yakima River/ Dry Creek (60%) WAU in Kittitas County. The proposal includes harvesting 8 units, 5,199 mbf of timber. Overall, approximately 3,515 mbf (68% of the volume) will be removed.

There will be 2 methods of harvest; uneven-aged management, and variable retention harvest (VRH). 518 acres will utilize an uneven-aged management method, reducing 2,907 mbf (64%) of the volume in this category, leaving a minimum of 21-24 TPA on the landscape. 56 acres will be harvested via VRH method, reducing 90% volume (608 mbf), leaving a minimum of 6 trees per acre (TPA) in VRH category.

Harvest areas focus on unhealthy, overstocked stands that are at risk of insect and wildfire damage. In some units, the focus is to reduce the tree competition for resources in very dry, low-elevation areas. Priority will be placed on the retention of healthy trees, existing regeneration, snags, and down woody debris to provide ecological and biological benefits across the proposal area. The sale will utilize a ground-based logging system in all units. All perennial streams identified in the vicinity have been bounded out of the sale to ensure adequate protection of the resource.

Natural regeneration is expected to be established in most of the harvest units. Unit 7 will be planted with DF and WL at densities appropriate for the site. All units will be assessed for fuel reduction and potential pre-commercial thinning 10-20 years after stand establishment. This will assist in shifting stands back to more resilient species.

The road work associated with this proposal includes 28,060 feet of pre-haul maintenance, 5,140 feet of abandonment, 1,675 feet of construction, and 9,370 feet of reconstruction, 14,070 feet of decommission.

Unit	Proposal Acres (*gross*)	RMZ/WMZ Acres	Potentially Unstable Slope Acres	Existing Road Acres *(within unit)*	Sale Acres	Leave Tree Clump Acres	Net Harvest Acres
1	224	4.7	4.5	4	210.8	0	210.8
2	21.8	0	0	0	21.8	0	21.8
3	175.1	3.9	0	2.4	168.8	0	168.8
4	25.5	0	0	0.5	25	0	25
5	7.3	0	0	0.1	7.2	0	7.2
6	24.6	0	0	0.6	23.9	0	23.9
7	56.9	0.1	0	0.5	56.3	0	56.3
8	63.3	0.5	0	3.4	59.4	0	59.4
Totals	598.5	9.2	4.5	11.5	573.2	0	573.2

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 1 is an uneven-aged stand. Major species composition is 48% Douglas fir (DF), 44% Ponderosa pine (PP), 5% Grand fir (GF), and 3% Western larch (WL). This unit has a variable landscape. There are thick patches of commercial trees, non-commercial trees, and many open areas. There are also multiple small patches of established natural regeneration throughout the unit. There are pockets of mistletoe on DF trees in the unit. The overall density of commercial timber is 131 trees per acre (TPA), 109 Basal Area (BA), and 1,850 MBF.

Unit 2 is an even-aged mixed conifer stand. Major species composition is 72% DF, and 28% PP. The present density is 139 TPA, 120 BA, and approximately 224 MBF. There is a maximum of two canopy layers in this unit with no natural regeneration. Unit is extended to the ridge with poor soil quality.

Unit 3 is an uneven-aged mixed conifer stand of 55% PP, and 45% DF. The unit is very patchy and it consists of several established natural regeneration in clumps scattered. The present density is 110 TPA, 103 BA, and approximately 1,390 MBF.

Unit 4 is an uneven-aged mixed species of 64% DF, 34% PP, and 2% GF. There are several older natural regeneration clumps throughout the unit. There is a moderate level of mistletoe infestation in DF in the unit. The present density is 118 TPA, 112 BA, and 209 MBF.

Unit 5 has a similar stand structure and tree composition to Unit 4, but lower volume. Stand is uneven-aged, and species are 50% DF, 44% PP, and 6% GF. The present density is 87 TPA, 101 BA, and approximately 62 MBF.

Unit 6 has a significantly higher number of established natural regeneration and higher volume compared to Unit 4 and 5. Both units 4 and 5 expand to the hill crest, which is

characterized by dry, nutrient-poor soil. Unit 6 is situated in a better location with higher quality soil. The major species composition is 78% DF, 21% PP, and 1% WL. The present density is 117 TPA, 122 BA, and about 244 MBF.

Unit 7 is a uneven-aged stand. The western part of the unit (70%) consists of healthy, 14-inch-diameter DF, and GF timber with no natural regeneration and minimal shrub layer. The remainder 30% is mostly DF and is heavily infested with dwarf mistletoe. Trees are deformed and mostly short, 10 ft tall, at various diameters. The western portion will be thinned to release the dominant trees and allow for the continued development of a desirable tree species. The eastern portion will be harvested to reduce the number of infested trees in the landscape. The Major species composition in the overall unit is 81% DF, 11% GF, 7% PP, and 1% WL. The overall density of commercial timber is 91 TPA, about 109 BA, and 675 MBF.

Unit 8 is an uneven-aged stand with multiple natural openings of varying size and clumps of natural regeneration at different growth stages. There are pockets of root rot and mistletoe scattered in the unit. Major species composition is 71% DF, and 29% PP. The overall density of commercial timber is 74 TPA, about 112 BA, and 546 MBF.

Unit	Origin Date	Major Timber Species	Type of Harvest
1	1900-1989	Douglas fir, Grand fir, Ponderosa Pine, Western Larch	Uneven-Aged
2	1900-1989	Douglas fir, Ponderosa Pine	Uneven-Aged
3	1900-1989	Douglas fir, Ponderosa Pine	Uneven-Aged
4	1900-1989	Douglas fir, Ponderosa Pine, Grand fir	Uneven-Aged
5	1900-1989	Douglas fir, Grand fir, Ponderosa Pine	Uneven-Aged
6	1900-1989	Douglas fir, Ponderosa Pine, Western Larch	Uneven-Aged
7	1850-1989	Douglas fir, Grand fir, Ponderosa Pine, Western Larch,	Variable Retention Harvest
8	1900-1989	Douglas fir, Ponderosa Pine	Uneven-Aged

Origin dates were referenced from forest inventory data (FRIS). These dates represent mostly the remaining very large diameter stems in each unit. All stands in this proposal contain multiple size and age cohorts. When looking at the stands, ages range from 50-100 years old.

Overall Unit Objectives:

The objectives of this proposal are to promote forest health and stand resilience by reducing mistletoe impact. Other objectives are to increase tree vigor, encourage more conducive conditions for natural regeneration establishment, and provide for future wildlife habitat. The proposal generates revenue for the Common School (03) Trust and Agricultural School (04) Trust. These objectives will be achieved by reducing stocking levels and targeting suppressed and unhealthy species while retaining established natural regeneration and healthier trees.

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		**1,675**	**1.5**	**0**
Reconstruction		**9,370**	**8.6**	**0**
Maintenance		**28,060**	**25.8**	**0**
Abandonment		**5,140**	**4.7**	**0**
Bridge Install/Replace	**0**	**0**	**0**	**0**
Stream Culvert Install/Replace (fish)	**0**	**0**	**0**	**0**
Stream Culvert Install/Replace (no fish)	**0**			
Cross-Drain Install/Replace	**2**			

There is a rock pit located along E1730. Rock will be utilized for culvert installation on E1855 and the Spur 7A.

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:* **T19-0N R16-0E S14, 15, 16, 22, 23 and 29**

b. *Distance and direction from nearest town:*

The sale area is approximately 18 miles southeast of Cle Elum, WA, and can be accessed via Exit 93 off Interstate Highway 90, using West Taneum Road and Elk Heights Road.

13. Cumulative Effects

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

This proposal is located within the Lower Swauk Corridor and Taneum Elk Winter Range, and within the Yakima River/Dry Creek, Taneum Canyon Watershed Administrative Units (WAU's). The uplands are primarily managed for timber production and livestock grazing. Ownership includes private land, federal land, Washington Department of Natural Resources, and other state (Non-DNR) managed forests.

Yakima River / Dry Creek WAU is mostly non-forested, with DNR having a small ownership of 18%. In the last 6 years DNR has harvested approximately 1,284 acres of the total 42,927 7 acres within this WAU. There are no future harvests planned for this WAU at this time. The 303 (d) Teanaway River in Yakima River / Dry Creek WAU is listed as a temperature and TMDL. In addition, Swauk Creek and Dry Creek are both listed as TMDL temperature water; however, due to the distance from the proposal area in this proposal, there should be no impact to listed water.

Gray Wolf is a listed T&E species located in Yakima River/Dry Creek WAU. However, measures have been taken to reduce the impact.

Taneum Canyon WAU contains areas of mixed forestland with the primary ownership being the Department of Fish and Wildlife, and the rest with Forest Service and DNR. Over the next 6 years DNR will be harvesting approximately 500 acres of the total 19,771 acres within this WAU. Taneum Creek is listed as TMDL temperature water in Yakima River and Taneum Canyon WAUs; however, due to the distance from the proposal area, there should be no impact to listed water. The application of riparian buffers reduces the impact on adjacent stream temperatures.

Canada Lynx is listed as a T&E species and is located in Taneum Canyon WAU. There is an observation a half a mile from Unit 3 from 2003. There are no required protections for this detection.

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

The Department of Natural Resources has a multi-species Habitat Conservation Plan (HCP) with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service concerning threatened and endangered species and their habitats, which requires the Department to manage landscapes to provide and sustain long-term habitat in exchange for an Incidental Take Permit. This agreement substantially helps the Department to mitigate for cumulative effects related to management activities.

This proposal is located within Yakima River/Dry Creek, Taneum Canyon Watersheds.

There is a moderate to heavy level of mistletoe infestation in localized areas of both WAUs. Majority of both watersheds is less than 3000 ft elevation. This proposal enhances landscape quality by reducing tree competition, which has been exacerbated by recent low-elevation droughts. The proposal is located in a well-connected road network which requires a minimal amount of road expansion and minor amount of soil erosion. The risk of minor soil erosion will be mitigated by installing proper drainage features and grass seeding where necessary.

A state lands biologist review has been completed and plans are in place to protect T&E species.

A State lands geologist has conducted a remote review and field survey of the proposal area and all potentially unstable landforms have been bound out of the proposal area to ensure

no harvest activities will occur on or within the area of influence of these landforms.

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

The proposal area was remotely and field reviewed by State Lands Geologist and any potentially unstable landforms have been excluded from the proposal area.

Road construction, reconstruction, and maintenance will utilize drainage features and construction techniques to allow proper road surface run-off and drainage. Haul routes have been assessed for potential environmental impacts. To minimize the potential for sediment delivery, out sloping, culverts and other drainage structures will be installed to direct run-off onto the forest floor away from live streams. Road work operations are restricted to drier months to limit wet weather impact.

The prescription has been designed to increase resiliency to disease and drought by removing the overstocked and unhealthy trees. Where possible, established natural regeneration clumps will be retained for structural complexity. The long-term thinning of the younger stand will include a design to introduce heterogeneity at a young age in order to reach a more resilient stand condition with diversity in species and structure.

This proposal will improve forest health and fire mitigation and will help limit the spread of fire into nearby land. Reducing fuels is intended to help limit fire intensity making it easier to suppress fires and protect nearby properties The majority of the units are expected to regenerate post-harvest or will be planted/interplanted with suitable species such as Douglas-fir, and western larch.

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 7years. 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
TANEUM CANYON	19,771	3,670	0	0	536
YAKIMA RIVER/DRY CREEK	42,927	7,488	0	0	0

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:	Taneum Canyon
WAU Acres:	19,771
Elevation Range:	1899 - 5003 ft.
Mean Elevation:	3457 ft.
Average Precipitation:	27 in./year
Primary Forest Vegetation Zone:	Douglas Fir

WAU:	Yakima River/Dry Creek
WAU Acres:	42,927
Elevation Range:	1558 - 4257 ft.
Mean Elevation:	2298 ft.
Average Precipitation:	14 in./year
Primary Forest Vegetation Zone:	Douglas Fir

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)?
50%.

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
4311	STONY LOAM
4316	LOAM
4309	STONY LOAM
7558	LOAM
3627	STONY 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.*

The unstable slopes review included published landslide inventories as screening tools. Landslide inventories come from many different projects including published geologic mapping, watershed analyses, landscape planning, landslide hazard zonation, and other case studies and mapping efforts. Other than the Washington Geology Survey landslide inventory, most of these landslide data sources predate lidar availability. The large remotely identified landslides located in and around Unit 1 have been verified in the field and concluded to be dormant-indistinct to relict and inactive, and not a rule-identified landform (RIL). Site-specific analysis may result in conclusions that are different from the information available in the screening tools. Available landslide inventories and other remote screening tools were reviewed for this proposal by slope stability trained foresters and state lands geologist. Potentially unstable slopes and landforms around the harvest area were identified by slope stability trained foresters and a licensed engineering geologist (LEG) and qualified expert (QE) through office and field review in accordance with the Washington State Forest Practices rules.

Category E landforms and Inner gorges are excluded from the proposal. See geology field summary memo for more info.

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.*

   The proposed forest management activities exclude all Forest Practices on potentially unstable slopes and landforms as defined by Forest Practices rules.

   Road plan maintains mass balance and natural drainage patterns across these non-rule-identified, relict, bedrock deep-seated landslides. Rolling dips are constructed to maintain natural drainage pattern on the roads.

Skid trails will be water barred and/or have slash placed on them as required by the contract administrator (CA).

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: **Approximately 1.5 Acres**
Approx. acreage new landings: **Approximately 4 Acres**
Fill Source: **N/A.**

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

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

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

No impervious surfacing is proposed with this project. Approximately less than 1% of the sale area will be covered by native bed road surface for the purpose of this proposal.

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 construction will adhere to departmental policies and procedures to minimize and control erosion. Road activities are designed by a forest road engineer and reviewed by the region engineer and are designed to minimize and control erosion.

Appropriate road maintenance, harvest systems, skid patterns, and landing locations will be utilized.

Active contract administration will also minimize erosion potential by ensuring that operations cease if resource damage becomes a concern.

Use of water bars, rolling dips, ditching, out-sloping, monitoring, and grass seeding will be utilized as necessary.

Natural drainage slope will be restored.

On slopes greater than 25%, skid trails will be water-barred and/or have slash placed on them as required by the contract administrator.

Hauling on any roads will not occur from Nov 1st to May 1st or during extreme wet weather conditions when excess rutting may occur, unless authorized by the CA.

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

a. Downstream water bodies: **Taneum Creek, Shadow 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)
Taneum Creek	**S**	**1**	**200+**
Shadow Creek	**F**	**1**	**90**
Unnamed Stream	**Np**	**1**	**50**
Unnamed Stream	**Ns**	**2**	**N/A**
Np Pond	**Np**	**1**	**50**

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

A 30-foot equipment limitation zone (ELZ) will be placed on the Ns streams within the proposal area to minimize disturbance. Harvest will be accomplished from outside the ELZ to limit disturbance. Designated crossings have been incorporated in the units boundary and will be marked to facilitate the operation. Stream type modifications were conducted in the proposal area and approved by Forest Practices. Landings will be minimized to reduce disturbance and erosion potential. Any slash or debris which enters any stream as a result of operations shall be removed and deposited in a stable position. Removal of slash debris shall be accomplished in a manner that avoids damage to the natural stream bed and bank vegetation. On slopes greater than 25%, skid trails will be water-barred and/or have slash scattered on them as required per the CA.

There is one channel migration zone (CMZ) adjacent to Unit 1. The CMZ boundary has been marked and the units have been adequately buffered from it.

In addition, the CMZ is along Taneum Creek that is identified as a shoreline. Unit has been buffered a minimum of 201 feet from the edge of ordinary high-water mark (OHWM) to comply with the Kittitas County Shoreline Master Program. The buffer also satisfies the Forest practices riparian management zone boundary requirement which is 110 feet from the edge of the outermost channel.

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):

There will be no work conducted within 200 feet of the Taneum Creek Shoreline.
Ns streams have 30-foot equipment limitation zone on either side of the channel and designated crossing has been assigned to the areas for crossing Ns channels.
Np streams have 50-foot riparian management zone (RMZ) on either side of the channel. All buffered zones are excluded from timber harvest.

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%. 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)?

TANEUM CANYON = 3.1 (mi./sq. mi.), YAKIMA RIVER/DRY CREEK = 4.3 (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:*

Water will be diverted onto the forest floor. The current road work standards will be applied that address this issue by installing cross-drains to deliver ditch water to stable forest floors.

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

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

There is evidence of changes to channels across the WAU(s). 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(s); 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 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 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):*

There are agricultural lands and residential areas downslope from the proposal area.

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.*

DNR geologist and DNR forest practices geologist have been to and reviewed the proposal area. The proposed forest management activities exclude all Forest Practices potentially unstable slopes and landforms. There will be no harvest in RMZ to protect banks from erosion.

Skid trails will be water barred when yarding is complete and will be covered with slash to cover the exposed soil and control soil erosion.

Operation is restricted to drier months to prevent skid trail compaction. To maintain natural drainage pattern rolling dips and cross drains will be constructed on the roads where applicable.

See B.1.d.2 and B.1.h for further protection measures.

The current proposal may slightly change the timing, duration, and/or magnitude of peak flows due to decreased evapotranspiration, but measurable impacts are not anticipated.

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, <u>downstream or downslope</u> of the proposed activity?

☐ *No* ☒ *Yes, describe:*

There are agricultural lands and residential areas downslope from the proposal area.

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: **No harvest RMZs are in place to ensure resource protection. Water bars, rolling dips, ditching, and out-sloping will be utilized on forest roads to disperse and direct water out onto natural vegetation on the forest**

floor rather than accumulating on road surfaces. On slopes greater than 25% skid trails will be water-barred and/or have slash strategically placed on them as required by the contract administrator (CA) to disperse water and allow it to percolate into the ground. Grass seeding of roads and landings will also slow the movement of surface water and allow it to percolate into the ground.

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.

This proposal will not significantly alter or otherwise affect drainage patterns in the vicinity of the proposal. Adequate drainage features have been incorporated into the design of all roads involved with this proposal to ensure minimal impact to natural drainage patterns. Harvest boundary locations and harvest systems have been selected to minimize impacts to natural drainage patterns.

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

See surface water, groundwater, 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:* **snowberry, ocean spray**
☐ *Ferns*
☒ Grass
☐ Pasture
☐ Crop or Grain
☐ *Orchards* ☐ *Vineyard* ☐ *Other Permanent Crops*
☐ Wet Soil Plants:
☐ Bullrush ☐ Buttercup ☐ Cattail ☐ *Devil's Club* ☐ Skunk Cabbage
☐ Other:
☐ Water plants:
☐ Eelgrass ☐ Milfoil ☐ Water Lily
☐ Other:
☐ Other types of vegetation:
☐ *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).*

Overall, approximately 3,500 mbf; DF 65%, PP 32%, and GF 3% will be removed. Tree tops and limbs will be piled and burned on the landings after the timber harvest.

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

Unit 1 is bounded to the south by the Washington State Department of Fish and Wildlife (WDFW). Approximately 200 acres of WDFW land was commercially thinned in 2017 leaving 25 TPA. The rest of Unit 1 is adjacent to forested DNR land, and the timber is 60- 100 years old. The landscape is comprised of a mix of DF, GF, PP, and WL. Established older natural regeneration are in clumps.

Unit 2 is bounded in all directions by a 100+ years old shrub-steppe landscape. There is scattered timber in the vicinity comprised of PP, DF, and GF, approximately 50-70 years old. This unit doesn't have natural regenerations.

Unit 3 is bounded to the east by private property. Southeast boundary is the Department of Transportation (DOT) Interstate Highway 90 right of way. Both lands are forested with 70+ year old DF and PP with very little older natural regeneration. DNR manages the rest of the adjacent land. Northeast boundary was harvested in 2021, 180 acres of variable retention harvest, leaving 25 trees per acre in clumps and openings, mostly PP. As a result of harvest, PP natural regeneration is scattered throughout the unit. Unit 3 is bounded to the north by Unit 7, 70+ year-old timber. Adjacent land to the west was harvested in 2010, leaving 25 TPA mature timber and some established natural regeneration, and sage brush. Species combination is PP and DF. A portion of the southern boundary is brush along the Ns channel which has been adequately buffered from the unit.

Units 4, 5, and 6 are surrounded by DNR forested land. Timber is mostly 50-100 years old. Species composition is DF, PP, and GF. North and east of Unit 4 is composed of advanced natural regeneration and mature timber. South of Unit 4 is mostly shrub adjacent to the Ns channel. South of Unit 5 is very open and mostly sage brush.

Unit 7 is bounded by DNR land in all directions. To the north is a Ns channel, continuation of the one south of Unit 4, and thick shrub vegetation that separates Unit 7 and Unit 8 via a dry swale. To the east is the DNR land that was harvested in 2021, discussed before. Majority of the southern boundary was a 513-acre unit that was logged in 2010. The very western neighboring portion, approximately 200 acres, was planted in 2011 and consists of 21 TPA PP, and moderate brush. Unit 7's current density is approximately 70 TPA mature timber. The rest of the landscape consists of open forest with a 21 TPA PP.

Unit 8 is bounded to the north by the private land. The stand consists of very short timber (40 feet height), and relatively thick established natural regeneration. Species composition is DF, PP, and WL. The rest of the adjacent land is DNR ownership. To the south is the dry swale and Unit 7. To the east is 70+-year-old forested land composed of mature timber and many pockets of established natural regeneration. To the west is the portion of the 200-acre unit that was logged in 2010, and planted in 2011, discussed before.

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

None found in corporate database.

TSU Number	Common Name	Federal Listing Status	State Listing Status
N/A			

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

The proposal uses existing native vegetation to create wildlife corridors between some units adjacent to public roads or large open areas. Established natural regeneration will be

protected, and healthier, larger-diameter trees will be left in clumps to create a more natural landscape. Timber harvest during drier months scarifies the soil, resulting in seed release. Natural regeneration of DF, PP, and GF is expected. Tree removal will reduce tree competition and will increase the moisture uptake per tree. Overall, the landscape will be healthier and more resilient to drought and other environmental stress.

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

Knapweed, cheatgrass.

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: **Turkey**
mammals:
☒ bear ☐beaver ☒ *coyote* ☒ *cougar* ☒ deer ☒ elk
☒ other: **Gray Wolf, Lynx**
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
Units 2, 3, 4, 5, 6, 7, and 8	Gray Wolf	Endangered	Endangered
Unit 1	Canada Lynx	Threatened	Endangered

There is a possible lynx sighting from 2002 in the vicinity of the timber sale, however currently, there are no known lynx in the area.

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☒*Other migration route:* **Taneum Elk Winter Range and Lower Swauk Corridor**

Explain: **All of Washington State is considered part of the Pacific Flyway. No impacts are anticipated as a result of this proposal. Units 2-8 are in Taneum Elk Winter Range, and Lower Swauk Corridor.**

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: **Gray Wolf** Protection Measures: **If a den site is discovered or suspected within a mile of the sale area, harvest will be suspended from March 15 to July 30 for all or a portion of the project area.**

Species /Habitat: **American Goshawk** Protection Measures: **American Goshawks are known to be in the vicinity. There are no known active goshawk nests within the sale area.**

Species /Habitat: **Riparian Habitat** Protection Measures: **All RMZs are no-harvest. Well-engineered and constructed roads reduce potential water quality impacts.**

Species /Habitat: **Cliffs** Protection Measures: **Trees will not be dragged across the feature and no equipment will be driven across talus. Most have been bound out of the sale area.**

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. Operators will have spill kits on hand and will report any spills to the contract administrator immediately, and the Department of Ecology (DOE) will be notified.

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.)*

The majority of the adjacent property consists of DNR-managed lands and they are managed for timber production. Dispersed recreational activities such as camping and hunting also take place on DNR lands.

Unit 3 and Unit 8 border residential land. Unit 1 is adjacent to Washington Department of Fish and Wildlife land, which is zoned forested and may be used for timber production.

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

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

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

Forest and Range.

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

Not applicable.

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

No.

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

None.

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

None.

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

Does not apply.

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

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

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

9. Housing

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

Does not apply.

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

Does not apply.

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

None.

10. Aesthetics

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

Does not apply.

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

Portions of the proposal area are close to Interstate Highway 90. The views will appear to be less densely stocked from portions of Interstate Highway 90 and scattered housing in the vicinity near Exit 93.

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:*

A small portion of the proposal area is visible from the residential area due to its proximity to the private property.

Portions of the proposal area are visible from Interstate Highway 90 near Exit 93. Elk Heights Road, Horseshoe Canyon Road, Microwave Road, Taneum Road. Portions of the units are visible from these routes.

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

The treated area will appear to be less densely stocked.

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

None.

11. Light and glare

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

None.

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

No.

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

None.

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

None.

12. Recreation

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

The sale is within a Green Dot Road Management Area where designated roads are open to motorized access as indicated by Green Dots on carsonite posts. Informal dispersed recreational opportunities such as hunting, hiking, snowmobiling, camping, ORV use, recreational shooting, and other informal outdoor recreation activities may occur within and in the immediate vicinity.

There are extensive unauthorized user-built trails within the proposal boundary and immediate vicinity for horseback riding and ORV riding.

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. Unauthorized trails will not be protected.

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

Green dot roads in the project area may be temporarily blocked/closed to recreationists during the harvest. Signs informing of active timber sale, and logging trucks utilizing the roads will be posted on the main green dot roads. Unauthorized trails will be abandoned with this proposal to limit resource damage caused by unauthorized use

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.

There are no known cultural resources within the project areas. Sites recorded outside the proposal boundary are KT00092, KT00806, KT00838, KT00839, KT00841, KT01086, KT01201, KT01202, KT01203, KT01204, KT01205, KT01206, KT01216, KT01217,KT01278,KT01279, KT02180, KT03517, KT03518, KT03953, KT03954, KT04027, KT04307, KT04397, KT04435, KT04447, KT04476,KT04486,KT04490, KT04491, KT04495, Property ID: 670018, WF00300, WF00301, and WF00302.

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.

The State Lands Archaeologist conducted a field review of high probability areas within the timber sale October 8, 2025. No evidence of any archaeological resources were found in any area reviewed within the timber sale. All units have undergone multiple harvest entries.

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.

The State Lands Archaeologist reviewed historical maps, aerial imagery, and area LiDAR. Areas identified as of high probability for cultural resources in the vicinity of the timber sale units were reviewed in the field.

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 proposal has been designed to avoid impact to all known cultural resources. Any cultural resources identified during operations will be protected. Should archaeological materials or cultural items be discovered during the course of operations, all work in the vicinity will be stopped and the associated tribes and the Department of Archaeology and Historic Preservation (DAHP) will be contacted.

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.

See timber sale map and sale driving map, and Adjacency and WAU maps on the DNR website under "SEPA Center." http://www.dnr.wa.gov/sepa. Click on the DNR region of this proposal under the Topic "Current SEPA Actions- Timber Sales." Proposal documents are also available for review at the DNR Region Office.

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. The nearest transit spot is approximately 15 miles away.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

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. Access to existing roads within the proposal area may be restricted or limited during operations for safety.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?

Approximately 10 to 15 truck trips per day while the operation is active. Peak volumes would occur during the yarding and loading activities between 4:00 a.m. and 4:00 p.m. of the operating period. The completed project will generate less than one vehicular trip per day. Estimates are based on the observed harvest traffic of past projects.

f. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. **Utilities**

a. Check utilities currently available at the site:
☐ electricity ☐ natural gas ☐ water ☐ refuse service ☐ telephone ☐ sanitary sewer
☐ septic system ☐ other**:**

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

None.

C. SIGNATURE

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

Signature:

Name of signee **Maryam Majidian.....**

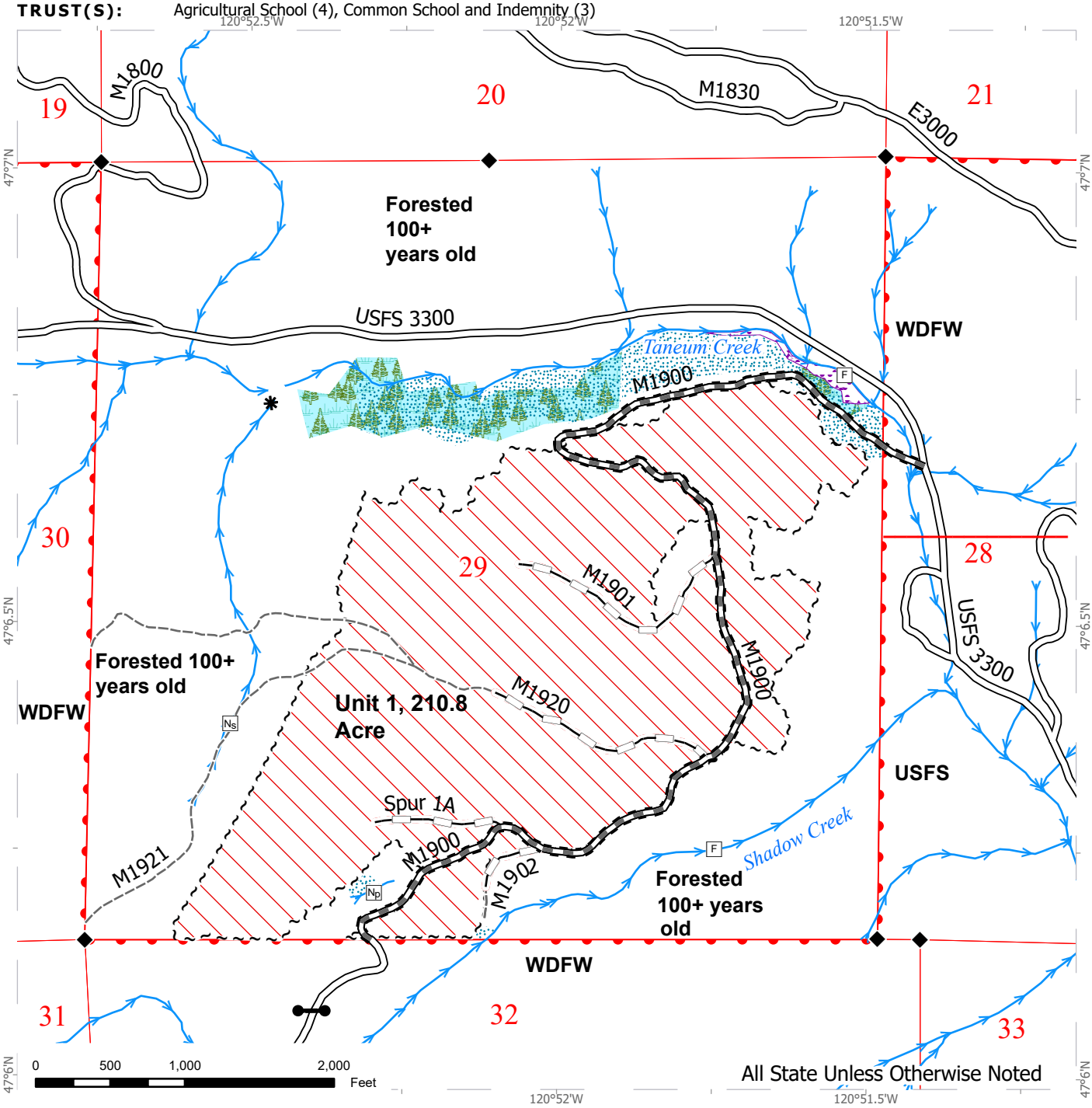
Position and Agency/Organization **Forester, SE Region / WA DNR Southeast Region .....**

Date Submitted: **3/6/2026**

TIMBER SALE MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



- Variable Density Thinning
- Forested Wetland
- Riparian Mgt Zone
- Channel Migration Zone
- ~~ Sale Boundary Tags
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Reconstruction
- Old Grades/Trails
- Streams
- Stream Type
- Stream Break
- Gate
- Survey Monument

N

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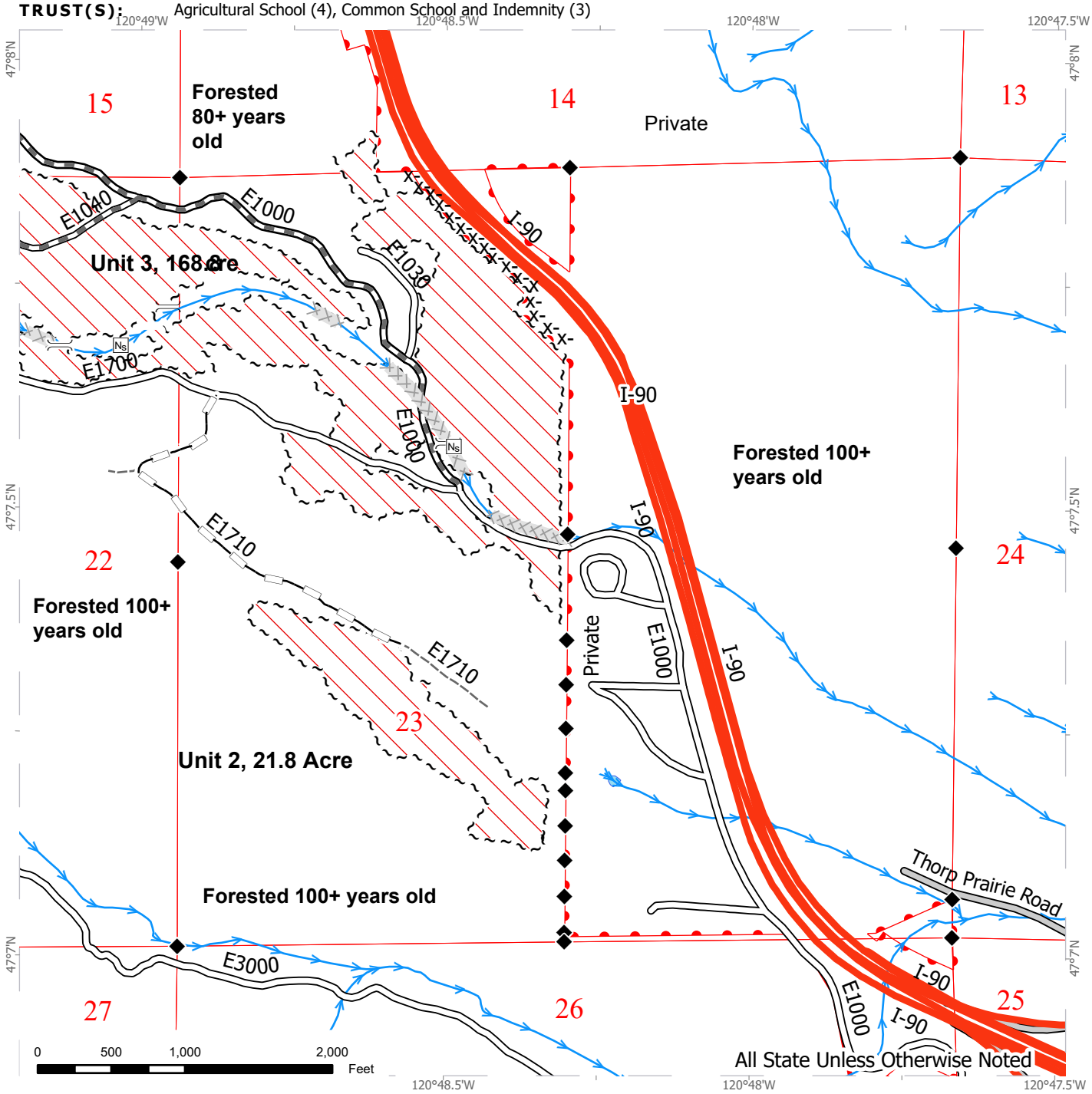
TIMBER SALE MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



- Variable Density Thinning
- Sale Boundary Tags
- Equipment Limitation Zone
- -x- Fence
- Highway
- County Road
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Reconstruction
- Old Grades/Trails
- Streams
- Stream Type
- Stream Break
- Designated Crossing
- Survey Monument

N

Created By: gmon490

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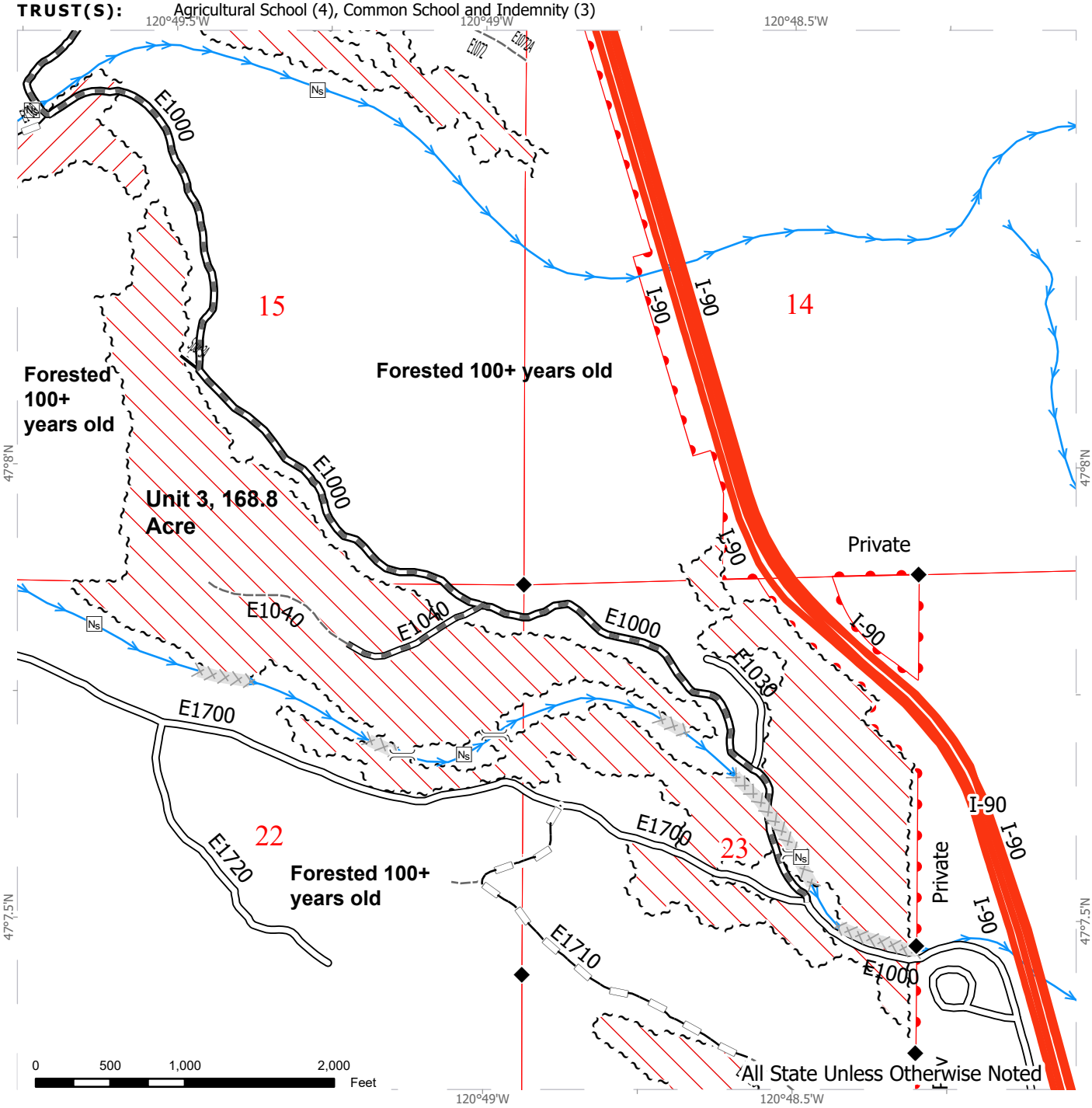
TIMBER SALE MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



- Variable Retention Harvest
- Variable Density Thinning
- Sale Boundary Tags
- Equipment Limitation Zone
- Highway
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Optional Reconstruction
- Old Grades/Trails
- Streams
- Stream Type
- Stream Break
- Designated Crossing
- Survey Monument

N

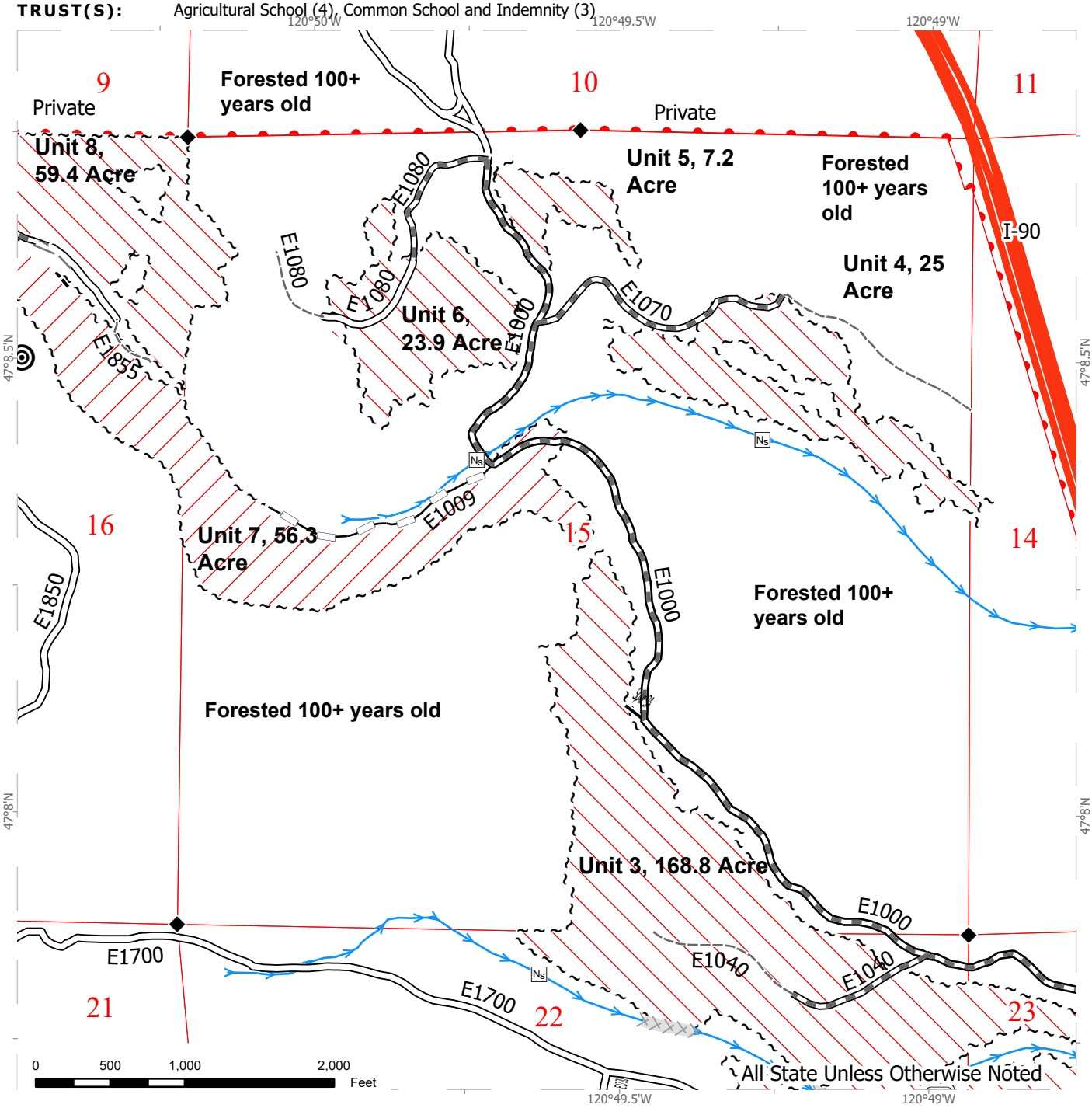
Created By: mman490

Exported By: mman490 4/22/2026

TIMBER SALE MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



- Variable Retention Harvest
- Variable Density Thinning
- Sale Boundary Tags
- Equipment Limitation Zone
- Highway
- Existing Roads
- Required Pre-Haul Maintenance
- Optional Construction
- Optional Reconstruction
- Old Grades/Trails
- Streams
- Stream Type
- Stream Break
- Designated Crossing
- Other Feature 2
- Survey Monument

N

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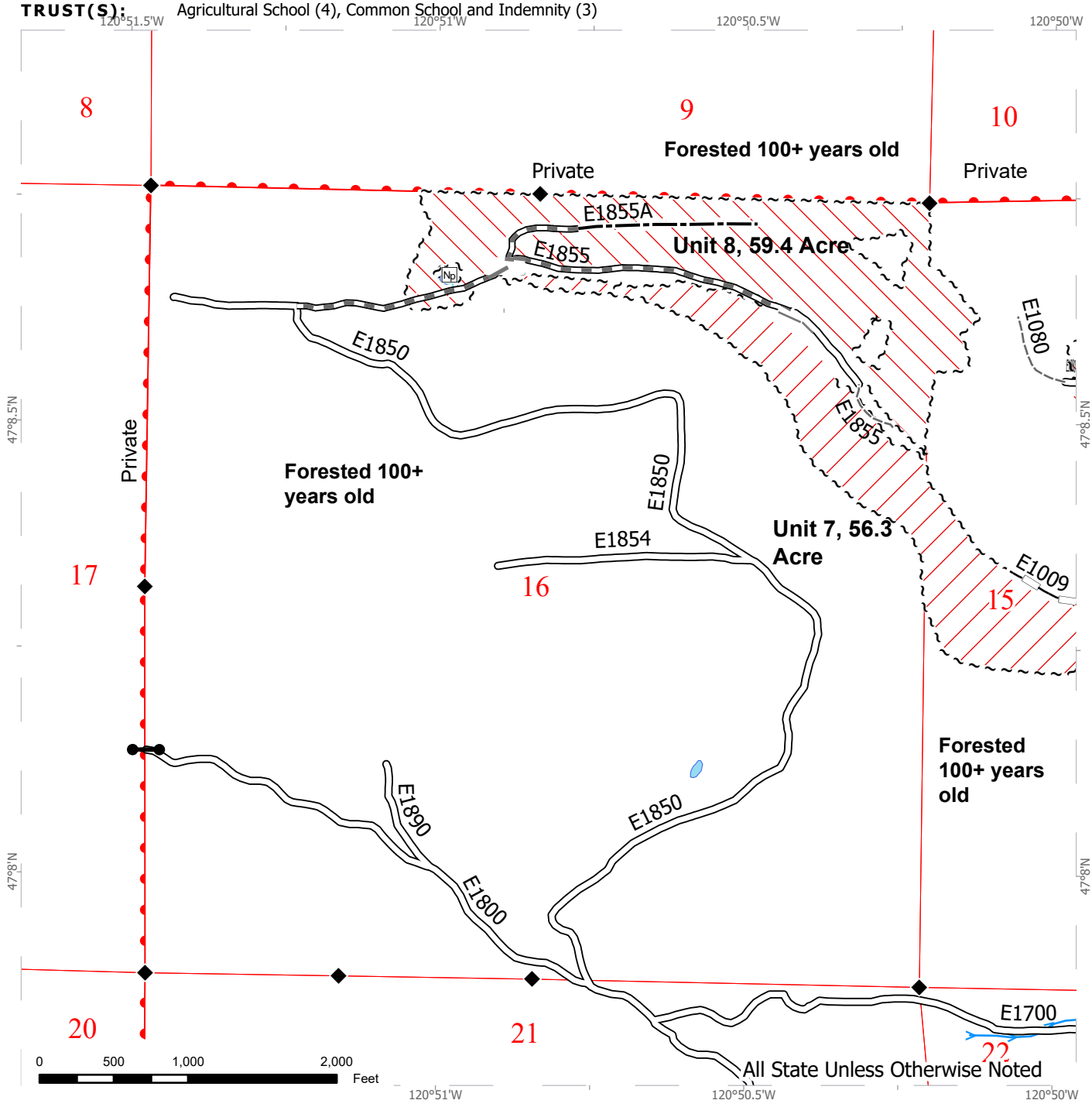
TIMBER SALE MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



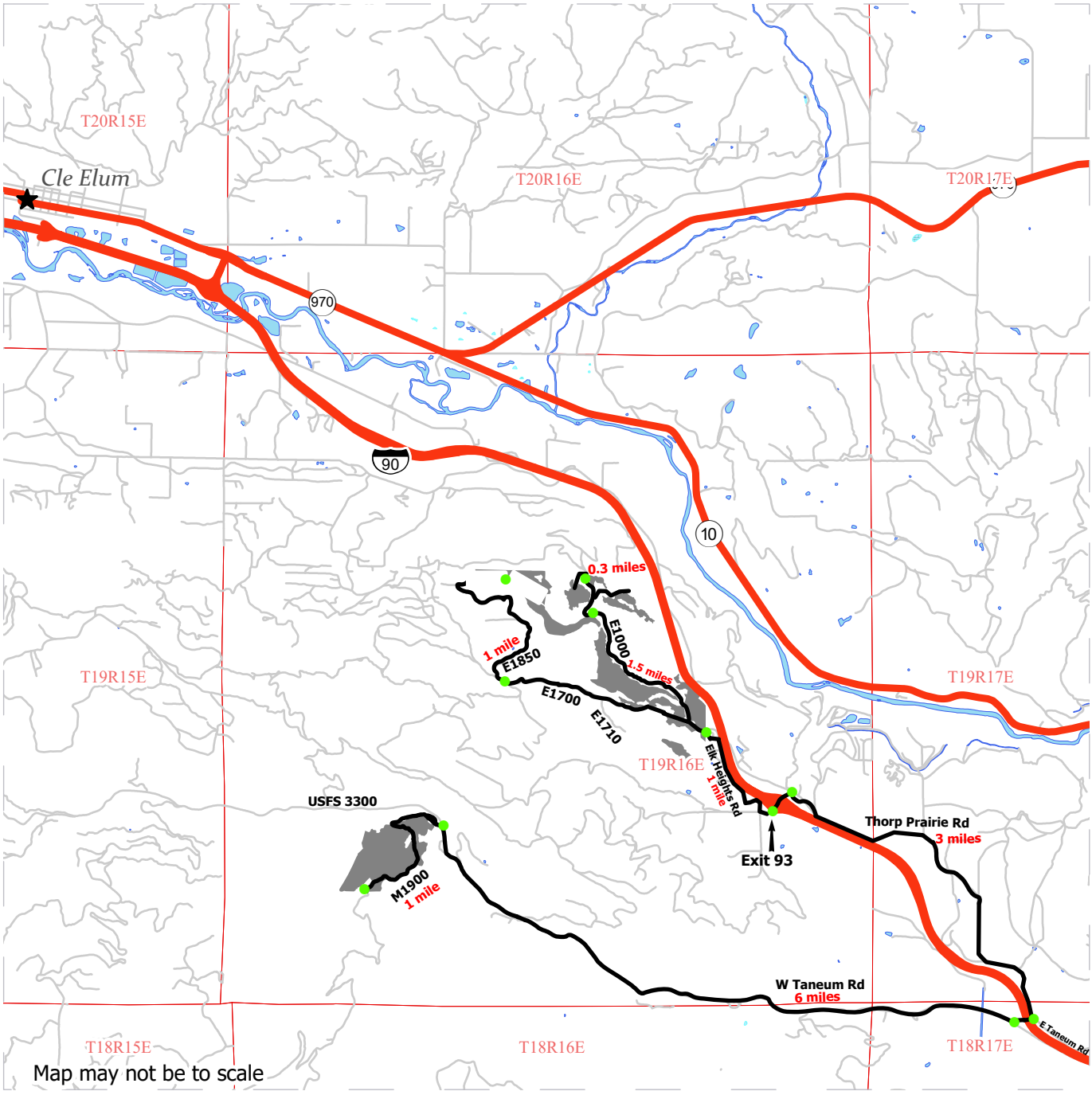
Variable Retention Harvest
Variable Density Thinning
Sale Boundary Tags
Existing Roads
Required Pre-Haul Maintenance
Optional Construction
Optional Reconstruction
Old Grades/Trails
Streams
Stream Type
Stream Break
Gate
Survey Monument
N

Created By: mman490
Exported By: mman490 4/22/2026

DRIVING MAP

SALE NAME: Q 99 BEES
AGREEMENT#: 30-110311
TOWNSHIP(S): T19R16E
TRUST(S): Agricultural School (4), Common School and Indemnity (3)

REGION: Southeast Region
COUNTY(S): Kittitas
ELEV RGE (FT): 2360-3800



- Harvest Unit
- Highway
- Haul Route
- Other Route
- Distance Indicator

DRIVING DIRECTIONS:

The sale area is approximately 18 miles south of Cle Elum, WA. The sale is located in 2 geographical areas; Taneum and Elk Heights.

Unit 1 in Taneum: from Exit 93, turn left over the overpass on Elk Heights Rd. At the junction, turn right onto Thorp Prairie Rd and continue for 3 miles. Turn right onto E Taneum Rd, and cross the overpass. At the stop sign turn right on West Taneum Rd. After 6 miles, turn left at the M1900 junction and cross the bridge. The unit starts past the bridge and continues for approximately 1 mile.

The rest of the units in Elk Heights:

Units 3,4,5,6,7 in Elk Heights: from Exit 93, turn right into Elk Heights Rd. At the first junction, turn right to remain on Elk Heights Rd. Continue for 1 mile to reach Unit 3 on E1000. Follow the road for another 1.5 mile to reach Unit 7. Units 4, 5, and 6 are located approximately 0.3 miles further ahead.

Units 2, 7, 8: From E1000, stay turn left onto E1700 for 0.2 miles to Unit 2. Continue on E1700 for 1 mile, then turn right onto E1850. Follow the road for another 1 mile to reach Units 7 & 8.

N

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Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

Consideration of Alternatives

RCW 43.21C.030 (2)(e) requires the Department to conduct an analysis of "appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources". The objective of the current proposal, a timber harvest conducted on state trust lands, is to increase stand and landscape resilience to insects, disease and high severity wildfire while generating revenue for the trust beneficiaries to fulfill DNR's fiduciary duty to make the trust lands productive. The proposal is consistent with statutory direction to sell timber from Department managed lands on a sustained yield basis. RCW 79.10.320, .340. The Department is instructed to prioritize "investments in forest health treatments that…(i) reduce wildfire hazards and losses from wildfire; (ii) reduce insect infestation and disease; and (iii) achieve cumulative impact of improved forest health and resilience at the landscape level". RCW 79.06.180. To facilitate this work, the Legislature created a forest health revolving account where all "receipts from the proceeds of forest health treatment sales" are deposited and where expenditures are authorized to conduct treatments that are "necessary to improve forest health". RCW 79.64.130. While the Department gives priority to revenue producing uses of lands which are chiefly valuable for the purpose of growing forest crops over other uses, revenue generation is a critical component to ensure continued management to increase forest health and resilience in eastern Washington landscapes..

The objectives of this timber harvest proposal on DNR-managed trust lands in eastern Washington are: to generate revenue for the trust beneficiaries as described in RCW 79.64.130 (any "unobligated amounts exceeding ten million dollars at the end of the calendar year must be disbursed to the appropriate trust beneficiaries…"); to generate revenue for the Forest Health revolving account (21Q) and Agriculture trust beneficiaries for continued investment in prioritized landscapes for forest health and resilience; and to effectively manage forest resources within the diverse set of ecotypes across eastern Washington.

The State Trust Lands Habitat Conservation Plan (HCP) and Amendment #1 apply primarily to forested state trust lands west of the Cascade Crest within the range of the northern spotted owl, with limited applicability beyond the eastern slopes of the Cascades. Large portions of eastern Washington trust lands fall outside the geographic and species coverage of the HCP and are therefore managed under other conservation and landscape management plans. Where HCP coverage applies in eastern Washington, conservation obligations are species-limited and apply only to northern spotted owl habitat and the protection of wolves. Riparian protections where streams occur are governed by Forest Practices (FP) Rules or the provisions outlined in the Loomis State Forest Landscape Plan. West-side old-growth unit requirements and marbled murrelet conservation provisions do not apply east of the Cascade Crest. However, the Department's procedure "Retention and Perpetuation of Biological Legacies and Green Trees (Eastern Washington)" protects and promotes the recruitment of larger fire-resistant old trees in eastern Washington.

The Department manages eastern Washington trust lands in compliance with the Forest Practices Habitat Conservation Plan, statutory and regulatory requirements, and a multiple use concept (RCW 79.10.100 - .200). The Department also manages for multiple objectives consistent with its fiduciary duties, including habitat protection and development, forest health, catastrophic loss prevention, riparian conservation, and revenue generation. To balance these management objectives, the Department identifies lands best used for conservation and for revenue generation for the trust beneficiaries. For

eastern Washington, these determinations are made as part of landscape level planning efforts such as the State Lands Forest Health Prioritization (RCW 79.10.520); A strategy to Restore Forest Health on State Lands in Eastern Washington (2018); the Sustainable Harvest Calculation; the State Lands HCP (in certain areas); Policy for Sustainable Forests; Lynx Habitat Management Plan; Loomis State Forest Landscape Plan; Teanaway Community Forest Management Plan; Klickitat Canyon Community Forest Management Plan; Commissioner's Order #201226, Forest Health Hazard Warning Designation, Eastern Okanogan County, Ferry County; Commissioner's Order #201225, Forest Health Hazard Warning Designation, Klickitat County, Yakima County; and applicable landscape evaluations associated with the 20-Year Forest Health Strategic Plan: Eastern Washington.

All forested lands managed by DNR in eastern Washington have been prioritized for forest health treatments per RCW 79.10.520. This process considers economic and non-economic value across a suite of variables including but not limited to timber, infrastructure, recreation, and ecosystem services. The intent of prioritizing investments is to reduce wildfire hazards and losses, reduce insect infestation and disease and improve forest health and resilience at a landscape level. The lands included in the Q 99 Bees sale have been identified to be managed for forest health/wildfire resilience objectives and/or revenue generation through timber harvest. This proposal consists of approximately 599 gross acres. Of the gross acres 573 acres will be harvested spread over 8 units. Additionally, 12 acres of existing roads, 9 acres of RMZ, and 5 acres of potentially unstable slopes will be differed from harvest.

The proposed use of this site is consistent with the uses of land surrounding the site and does not affect those uses. Forests in eastern Washington differ substantially from west-side forests and are generally drier, more fire-adapted, and subject to a variety of forest health risks including insects, disease, wildfire and drought stress. Historic management has included timber harvest (both regeneration and thinning), reforestation, and other silvicultural treatment actions consistent with trust objectives, existing management plans, Department policy and Forest Practices Rules applicable east of the Cascade Crest. Over the past century, land use patterns and fire exclusion policies have altered natural fire regimes and ecosystem characteristics. Some forests have become more homogenized, with unnaturally high accumulations of live and dead vegetation, many have had species shifts away from more fire-tolerant early-seral tree species, and many of the large old fire-tolerant trees have been lost due to historic logging practices, wildfire and competition with shade-tolerant species. This proposal is in whole or part implementing treatments that will address these types of landscape imbalances. A specific silvicultural prescription is developed for each timber sale harvest unit that is designed to adjust the forest structure and/or composition to a state that is better able to resist insect and disease outbreaks, fire damage, and drought impacts.

Consistent with this purpose and in accordance with RCW 79.22.070 (which requires conveyed lands "be logged, protected, and cared for in such manner as to ensure natural reforestation of such lands"), this proposal is designed to generate revenue for Common School and Indemnity and Agricultural School trusts.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

Comparison of Environmental Impacts, Part A

	No Action (Alt A)	Project As Proposed (Alt B)
Earth	No change to existing conditions. Potentially unstable slopes including potential failing existing roads would not be assessed by licensed geologist and mitigation efforts may not occur. Sterile soils in the event of a wildfire burning the overstocked stand during a stand replacing fire amplified by forest pathogen mortality When forest pathogens are damaging the stands, the resulting mortality could result in weakened root strength and loss of soil stability.	All Earth impacts and mitigation were fully described in the checklist. Thinning and Final Harvests of existing stands are anticipated to result in higher potential instability due to a temporary reduction rooting strength. New forest road construction as described in checklist. Erosion potential is described in the checklist. Mitigation measures for this sale include avoiding potentially unstable landforms and buffers on riparian and wetland areas. Thinning reduces fuel loads and the risk to high severity wildfire as well as addressing the impacts from pests and disease. The proposal is compliant with all rules and regulations under the Forest Practices Act and the Q 99 Bees timber sale was assessed under forest practice application number **SE-FPA-26-9041**.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

	No Action (Alt A)	Project As Proposed (Alt B)
Air & Climate	Existing carbon will remain onsite for a period of time, until overstocking causes the stand to experience mortality and/or until next stand-replacing disturbance resets the successional forest cycle. Maintaining high forest densities, layered canopies and shade tolerant species increases risk of high severity wildfire. Wildfire emissions contribute to climate changing gasses and release harmful particulates into the atmosphere. Risk of epidemic outbreaks in areas of root rot, pathogens, insect infestation, carbon storage and emissions may be impacted.	Short-term emissions from timber harvesting operations, hauling, and decay of harvest residuals. Carbon will remain onsite in approximately 14 acres designated for conservation in addition the post-harvest residual stand components of the 573-acre timber sale proposal. Wood products from timber harvested from the project area will store carbon offsite. Carbon will accumulate at the project site in leave trees and other areas identified for conservation during project design, and with forest growth of the next stand following harvest. All Air and Climate impacts and mitigation were fully described in the checklist for the Q 99 Bees timber sale.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

	No Action (Alt A)	Project As Proposed (Alt B)
Water	No change to existing conditions. Road maintenance on existing roads would not occur, except for emergency road repairs. Maintaining high forest densities, layered canopies and shade tolerant species increases risk of high severity wildfire. Large scale disturbances like wildfire often lead to increases in seasonal runoff volume and damage to streams and hydrologic infrastructure associated with forest roads. This can increase sedimentation and other water quality metrics. Less snowpack is captured for instream flows necessary for fish, riparian health, and irrigation purposes as some of it is captured in the canopies and then sublimated into the atmosphere.	Road work associated impacts to streams will be mitigated by Forest Practices Rules, best management practices and conditions of approved forest application number: **SE-FPA-26-9041** Potential for sediment delivery to streams and wetlands will be mitigated through riparian and wetland buffers. Peak flow considerations are not a primary driver in eastern Washington forest systems and are evaluated where applicable based on site-specific hydrologic conditions and Forest Practices compliance. Depending on size and orientation, regeneration harvests can produce large quantities of snowpack retention for use by fish, riparian and wetland habitats, and irrigators in these systems.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

	No Action (Alt A)	Project As Proposed (Alt B)
Plants & Animals	Existing species use would likely continue, until trees die, blow down, or burn. Improvement of habitat for species dependent on older forest conditions could take place as stand development continues, assuming no major disturbances impact the area. Maintaining high forest densities, layered canopies and shade tolerant species increases risk of multiple bark beetle species, multiple defoliator species and multiple mistletoe species in addition to high severity wildfire. Without stocking intervention and species manipulation, the stand may not naturally meet the habitat characteristics needed for Northern Spotted Owls (NRF or Dispersal) and as the stand is impacted by pathogens, the habitat structure that is currently present may be lost to drought, wildfire, or mortality from insects and disease therefore leading to less habitat available across the landscape.	Thinning of the overstory and favoring early seral species will allow for continued development of the under story while still providing cover. Initial impacts from thinning the overstory show an increase of windthrow during storm events. These impacts are more likely to occur in the residual late successional species. Early seral species are more resilient to fire impacts equating to lower likelihood of mortality in the overstory. Thinning will shift residual stand composition to more resilient species and adequately addressing species imbalances between early seral and shade tolerant species. Thinning can reduce risk of mortality to forest pathogens as well as encourage canopy layering at lower densities to address bark beetle and defoliator risk. The small irregular VRH unit enhances the mosaic in the habitat and forest types on the landscape with gaps providing forage habitat for large ungulates intermixed with the thinning unit and conservation areas containing long-term forest cover. Multi-harvest types in conjunction with conservation areas creates a mosaic of habitat and forest types on the landscape. Canopy gaps provide forage habitat for large ungulates intermixed with conservation areas containing long-term forest cover, including areas conserved due to riparian/wetlands buffers, potentially unstable slopes, and/or leave tree retention areas.
Energy & Natural Resources	No change	Petroleum fuel is used by equipment during active operations and transportation of workers and forest products.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

	No Action (Alt A)	Project As Proposed (Alt B)
Environmental Health	No change. Forest pathogens may spread to neighboring stands and cause further mortality across the landscape No harvest may result in further risk for catastrophic wildfire and increased risk without the reduction of forest fuels. In Eastern Washington, fires fueled by large pockets of overstocked timber can move several miles within a burn period, therefore creating threats to nearby communities, impacting life, economy, air quality, and adding suppression costs.	Minor fire hazard and petroleum-based product spill potential during active operations mitigated as described in checklist. Moderate-to-high risk to workers' safety due to working around higher retainage of leave trees during active operations. Low intensity thinning may increase resilience to insect, disease and wildfire for a short timeframe.
Land/ Shoreline Use	No change	No change
Transportation	No change. Forest roads may not receive necessary maintenance and would not be expanded. Adequate transportation would not be available in the event of weather favorable for high severity wildfire	Minimal impact. Road work as described in the checklist, forest application number: **SE-FPA-26-9041** including maintenance improving existing forest road. Well maintained transportation systems allow rapid response and control features during fire weather events.
Public Services/ Utilities	No change.	No Change.

Appendix A:
DNR's Consideration of Alternatives, Comparison of Environmental Impacts Parts A, B, & C

	No Action (Alt A)	Project As Proposed (Alt B)
Recreation	Road maintenance upgrades within the proposal area would not be funded for the fiscal year and intentional maintenance in the area would be delayed. Roads utilized for recreation access would continue to degrade as has occurred on other lands (e.g., USFS) lacking timber sale revenue to fund this work. Any unauthorized, two track motorized trails that cross this area will not be rehabilitated or closed, leading to the continued sedimentation and disturbance of wetlands, upland meadows, and habitat disturbance	Recreation use may be temporarily impacted during operations. Forest roads will receive maintenance. New road construction will expand the road network available for recreation.
Cultural Resources	No assessment and no change	The proposal areas were assessed by a trained cultural resource tech and a State Lands Archaeologist. DNR will comply with Discovery of Skeletal Remains or Cultural Resources procedure during active operations.

Comparison of Environmental Impacts, Part B

Earth: The direct impacts on soil productivity such as compaction, erosion and displacement are expected to be higher for the Proposal than Alternative A. All types of harvesting can result in short-term surface erosion until the site is re-vegetated. Likelihood of compaction varies based on harvest systems and underlying geology. Ground based systems generally have the greatest potential to impact soils adversely because of the weight of the machinery and distribution of the weight. Soil impacts are evaluated relative to eastern Washington soil conditions, harvest systems, and Forest Practices requirements applicable east of the Cascade Crest. Due to mitigation measures and site-specific conditions, none of the alternatives would result in significant soil impacts. There is risk of high severity wildfire having negative soil impacts in Alternative A. With greater amounts of biomass present on the site, a wildfire would burn with greater intensity and suppression difficulty. This could result in sterile soils, loss of root strength bonding the soils on slopes, and erosion from denuded vegetation during the wet season. These observations are all on a relative basis – because of the buffering systems and other mitigation, such as unstable slope avoidance, both the proposal and the alternative have a low likelihood of causing significant impacts to earth/soil.

Air: Comparison of emissions and air pollutants across the two scenarios shows that direct activity emissions increase as the intensity of harvest increases. The no-harvest alternative would result in minimal short-term emissions (in the absence of wildfire), while the Proposal is a net emitter of greenhouse gases (GHG) from fossil fuel and biogenic sources in the short term. However, emissions from the Proposal will be mitigated and offset by a number of DNR's management practices at both the landscape and project scale. Eastern Washington forest management does not include west-side HCP old-growth unit requirements. Carbon storage and emissions are evaluated in the context of dry forest systems, retention levels, and reforestation requirements under Forest Practices Rules. The Legacy Tree Procedure and HCP protect and enhance habitat and require more retention of leave trees than forest practice rules alone, as a result more carbon is retained on the landscape. Examples include larger wetland and riparian buffers, more and larger leave trees and leave tree areas, conservation of thousands of acres of NSO habitat, management for other federal and state listed and candidate species, and protection of less common habitat elements such as caves, cliffs, and balds. DNR tends to employ longer rotation ages than the industry standard, which results in greater carbon sequestration. Across eastern Washington, DNR conserves more than 49,000 acres of lands in natural areas and manages over 52,000 acres under Community Forest management plans. All these conservation measures, combined with any prescribed reforestation following the harvest, result in carbon sequestration and storage across DNR lands that may contribute to an offset of project emissions. Additionally, harvest and subsequent silvicultural treatments may reduce wildfire susceptibility and result in avoidance in the event of a wildfire impacting the project area.

Decades of scientific investigations have concluded that many disturbance-prone drier inland forests, including much of those in eastern Washington, are significantly overstocked and/or homogenized compared to their historical conditions (Hessburg and Agee 2003; Hessburg et al. 2005; Hagmann 2021; Hagmann et al. 2021). These changes have shifted the fire regime from predominantly low- and mixed-severity to a greater proportion of mixed- and high-severity fire, as well as increased forests' vulnerability to drought, insects, and pathogens (Hessburg et al. 2005; Hagmann et al. 2021). Maximizing carbon storage is typically not a primary objective in

disturbance-prone forests. Under natural disturbance regimes that sustain the function and biodiversity native to these ecosystems, forest density is generally far below maximum carrying capacity (North et al. 2022, LeFevre et al. 2020). DNR's 20-year Forest Health Strategic Plan (produced by the Forest Resilience Division; DNR 2018) and DNR's Strategy to Restore Forest Health on State Lands in Eastern Washington (2018) both focus on treatments that promote forest health and disturbance resilience rather than maximizing carbon storage. This approach is well supported because, while carbon sequestration in forests is a valid climate mitigation strategy, overlooking the influence of disturbances such as wildfire in fire-prone forests can ultimately undermine the effectiveness of forest carbon policies (Kurz et al. 2008; North et al. 2009; Metsaranta et al. 2010; Hagmann 2021. Hessburg et al. 2025). Forest treatments in drier forests are more often evaluated in terms of forest health and resilience objectives, which foster *sustainability* of carbon stores, rather than maximizing carbon storage (Hurteau et al. 2016, 2019; Hagmann 2021). High carbon stocks are considered unsustainable in drier forests; landscapes with uncharacteristically high tree density or biomass (carbon) are more susceptible to drought, insect outbreaks, and stand-replacing fires, whereas those with low to moderate biomass levels are more resistant to these disturbances (Prichard et al. 2021; Hagmann 2021). The latter, more characteristic biomass levels can thus result in more sustainable live carbon stocks over time (Hurteau et al. 2019).

Water: Comparison of water impacts considers the potential for surface erosion delivery, and effects to riparian function including water quality and peak flows. The potential impacts to water quality are anticipated to be low for the proposal and mitigated by the implementation of unmanaged riparian buffers. DNR's policy of maintaining significant canopy cover and structure within stream and wetland buffers is a means of ameliorating harvest effects on the sub-basin and watershed level considering that the largest, direct contributor to riparian function is from mature trees providing shade, large woody debris, leaf and needle litter, and retained root structure. Water quality and quantity impacts are evaluated based on eastern Washington watershed characteristics specific direction in landscape plans and Forest Practices riparian protections. Peak flow impacts are assessed where applicable based on site-specific conditions.

Potential environmental impacts due to roads resulting from increased sedimentation affect both water quality and fish habitat. Alternative A has no added riparian impacts with no associated roadwork although no maintenance of roads and drainage structures would be performed under this alternative. These observations are all on a relative basis – because of the buffering systems and other required regulation and mitigation in riparian areas discussed above, none of the alternatives would immediately create significant impacts to waters or fish. The project as proposed is fully compliant with all regulatory rules and regulations under forest practice application number (FPA) **SE-FPA-26-9041**

Alternative A promotes canopy intercept of snowfall which prevents snowpack buildup and retention. Eastern Washington streams and rivers rely on snowpack to sustain flows during salmonid migrations and to provide cool water for fish life. More snowpack results in a hydrograph that has moderated peak flows that extend further into the summer months, providing water for riparian habitats and aquatic life. In the event of a high severity fire in Alternative A, the peak flows are amplified by less snowpack retention due to lack of shade, along with loss of vegetation to slow overland flows. In the Proposal, there are gains in snowpack retention which result in improvements in the natural system flows of watersheds.

Water is the limiting factor in tree growth in Eastern Washington. With light and nutrient resources, forests will continue to grow trees until the soil water becomes limited. At that point the forest system becomes unstable and results in mortality either directly from drought, or from drought combined with insects and disease. By periodically thinning the forest, more water resources become available to promote growth and sustained mature forest conditions in most mixed conifer and pine stands. However, regeneration harvest may be necessary when the species mix is inappropriate for the climate of a particular site, when forest pathogens are impacting the stand so severely that mortality is eminent, and when overstocking has persisted long enough to where the stand is not able to respond to thinning.

Fire Risk and Forest Health: In eastern Washington, the no-harvest alternative may increase long-term forest health risks, including fuel accumulation, insect and disease susceptibility, and vulnerability to uncharacteristic large high severity wildfire. According to the 20-Year Forest Health Strategic Plan: Eastern Washington "much of the 10 million acres of forestland in eastern Washington faces serious threats to forest health. Decades of fire suppression and past management practices have put these forests at higher risk of damage by disease, insects and wildfire and reduced ecosystem resilience in the face of climate change". Active management, including commercial treatments, are identified as an important aspect of reducing these risks while maintaining forest resilience and meeting trust obligations.

Plants/Animals: The harvest in the Proposal is mitigated through stream and wetland buffers which maintain riparian function and provide intact habitat corridor connectivity for other wildlife. Alternative A will have significant impacts on vegetation due to the elevated levels of insects and disease within the stand as the trees grow large and require more water. As water becomes more in demand the trees will be less able to fend off attacks from forest pathogens, leading to increased mortality within the stand. The Proposal potentially has the greater initial impact due to the harvest. Expectations of negative impacts are on a relative basis – because of the buffering systems and other mitigation incorporated into the Proposal and the unknowns related to incidence and likelihood of wildfire impacts. Alternative A does not meet the project objective of making trust lands productive by generating income and does not balance competing uses of the eastern Washington forest resource. While technically feasible, it would shift timber production pressure to other landownerships, potentially further degrading mill infrastructure and harming intergenerational commitments to the trust beneficiaries and harming other timberland owners while increasing forest health and wildfire risks. Alternative A does not address the forest health factors that are impacting the forest's ability to provide habitat for many species, nor does it allow additional water resources to allow the vegetation to thrive as the forest continues to mature.

Built Environment Elements: No meaningful differences in environmental impacts among alternatives emerge from the built environmental elements. The Proposal is consistent with current and historical use of this land and current local land use ordinances per RCW 70A.45.090.

Recreation: Alternative A provides no meaningful direct impact to recreation. However, there is an indirect impact from alternative A due to the absence or lack of road improvement and maintenance work being performed on forest roads associated with the no harvest alternative and the risk carried by not increasing resilience to insect, disease and wildfire which can significantly degrade recreation opportunities, from abundant snag hazards to total loss of recreational

infrastructure. Alternative A does not allow the harvest activity to address unauthorized public use impacts by eliminating or re-routing unauthorized trails. The Proposal will perform road maintenance work due to revenue generation and available funds to conduct road work.

Cultural resources: Under the Proposal, the agency will have conducted a review and assessment of the proposed sale area for cultural significance and DNR will comply with Discovery of Skeletal Remains or Cultural Resources procedure during active operations.

Consideration of Alternatives with Objectives, Part C

Alternative A does not meet the proposal objective of making trust lands productive by generating income and does not balance competing uses of the eastern Washington's varied ecotypes. While technically feasible, it would shift timber production pressure to other lands and would not fulfill legislative and stakeholder expectations of the Department to manage lands for resilience to forest health and wildfire risks. Therefore, it is not an appropriate alternative use of the proposal site. WAC 197-11-786.

The Proposal incorporates harvest treatments consistent with eastern Washington's varied ecological conditions and balances competing uses of the forest resource while meeting trust obligations. The Proposal provides the greatest revenue to the trusts while addressing forest health and resilience at the stand and landscape scale consistent with the State Lands Forest Health Prioritization (RCW 79.10.520) and the 20-Year Forest Health Strategic Plan: Eastern Washington. The Proposal is most consistent with the Legislature's directives to DNR to manage forest lands on a sustained yield basis. RCW 79.10.300 -.340. Additionally, the Proposal meets the intent of the legislature found in RCW 70A.45.090-Forsest and Forest Products sector-Climate Response.

At this site, no other specific, income-producing proposal exists. Timber harvest is consistent with historic use of this site. While recreational uses may be temporarily displaced, such displacement is consistent with RCW 79.10.120. The Proposal is consistent with all legal requirements associated with this type of forest management activity, including Forest Practices Rules and other binding natural resource protection. Given DNR's statutory obligations to manage forested trust lands on a sustained yield basis, and its fiduciary duty to act with undivided loyalty and prudence on behalf of trust beneficiaries, proceeding with Q 99 Bees Timber Sale as proposed best satisfies increasing forest resilience, adhering to conservation commitments and long-term trust revenue objectives.