

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:

BROOM CLOSET

Agreement #: **30-100110**

2. Name of applicant:

Washington Department of Natural Resources

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

Pacific Cascade Region

PO Box 280

Castle Rock, WA 98611-0280

Phone: (360) 577-2025

Contact Person: Marcus Johns

4. Date checklist prepared:

07/23/2019

5. Agency requesting checklist:

Washington Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

a. *Auction Date:*

10/29/2020

b. *Planned contract end date (but may be extended):*

10/31/2022

c. *Phasing:*

None

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

No, go to question 8.

Yes, identify any plans under A-7-a through A-7-d:

a. Site Preparation:

Site preparation, including a chemical herbicide application, may be used to ensure that planting can be achieved at acceptable stocking levels to meet or exceed Forest Practice standards following harvest. Slash piles may be burned during the fall before planting.

b. Regeneration Method:

The units will be hand planted with conifer species following harvest to promote the continuation of a healthy conifer forest with diversity of tree species.

c. Vegetation Management:

Possible treatments, including a chemical herbicide application, could occur following harvest. Treatments will be based on vegetative competition, and will ensure a free-to-grow status that complies with Forest Practice standards.

d. Other:

Road maintenance assessments will be conducted by Department of Natural Resources staff, and will include periodic ditch and culvert cleanout, and grading as necessary to meet Forest Practices standards.

Piled slash may be burned following harvest activities. Firewood permits for the sale area may be issued to the public after timber harvest activities are completed.

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:

Abernathy Creek, Cameron Creek, Mill Creek, Mill Creek South Fork, Wiest Creek

temp

sediment

completed TMDL (total maximum daily load)

Landscape plan:

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: 10/26/2019

Wildlife report:

Geotechnical report:

Appendix D. slope stability informational form:

Other specialist report(s):

Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):

Rock pit plan: 10/26/2019

Other:

Forest Practices Board Manual; Forest Practices Activity Maps; Policy for Sustainable Forests (PSF 2006); State Soil Survey; Habitat Conservation Plan (HCP 1997); HCP Checklist; Riparian Forest Restoration Strategy (RFRS); Land Resource Management (LRM) Reports and associated maps; Road Maintenance and Abandonment Plan (RMAP): #2900196; DNR's State Trust Land Final Habitat Conservation Plan Amendment for the Marbled Murrelet Long-term Conservation Strategy (MM LTCS) (2019). The following information is provided by DNR's GIS database: Weighted Old Growth Habitat Index (WOGHI); WAU Rain-On-Snow Layer; Marbled Murrelet Habitat Layer; Spotted Owl Habitat Layer; and USGS, GLO maps, State Lands Geologist Remote Review (SLGRR) tool; Statewide Landslide Inventory (LSI) screening tool maintained by the DNR Forest Practices Division.

Referenced documents may be obtained at the Pacific Cascade Region Office.

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

None known.

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

- FPA* *FPHP* *Board of Natural Resources Approval*
 Burning permit *Shoreline permit* *Existing HPA*
 Other:

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

a. Complete proposal description:

The Broom Closet timber sale proposal is comprised of Variable Retention Harvest (VRH) units and one Right-Of-Way unit in the Elochoman Block, removing approximately 4.226 million board feet. Rock for this proposal will be obtained from the R-120 Pit. This proposal will use cable and ground-based harvesting methods.

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	22	1	0	<1	21	3	18
2	84	24	3*	0	60	6	54
3	19	13	0	0	6	1	5
4	80	10	14*	2	68	12	56
5	23	11	4*	1	11	4	7
6	7	4	0	0	3	0	3
7	4	0	0	1	3	1	2
8 ROW	1	0	0	0	1	0	1
Totals	240	63	21*	4	173	27	146

*All Potentially Unstable Slope Acres are contained within RMZ/WMZ or Leave Tree areas

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

Pre-harvest Stand Description:

Unit	Origin Date	Major Timber Species	Type of Harvest
1	1970	Douglas-fir, western hemlock, red alder, western red cedar	Variable Retention Harvest (VRH)
2	1971/74	Douglas-fir, western hemlock, red alder	Variable Retention Harvest (VRH)
3	1912	Douglas-fir, western hemlock	Variable Retention Harvest (VRH)
4	1971/73/75	Douglas-fir, western hemlock, red alder	Variable Retention Harvest (VRH)
5	1974	Douglas-fir, western hemlock, red alder	Variable Retention Harvest (VRH)
6	1969	Douglas-fir, red alder	Variable Retention Harvest (VRH)
7	1969	Douglas-fir, red alder	Variable Retention Harvest (VRH)
8 ROW	1974	Douglas-fir, western hemlock, red alder	Right-of-Way (ROW)

Overall Unit Objectives:

The objective of this proposal is:

- 1) Produce revenue for the Common School and Indemnity (03) and Scientific School (10) through the production of saw logs, poles, and pulp material.
- 2) Provide for wildlife and riparian habitat by developing vertical stand structure and age class distribution in the future stand.

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

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		1,995	2.3	0
Reconstruction		4,157		0
Abandonment		869	1.0	0
Bridge Install/Replace	0			0
Stream Culvert Install/Replace (fish)	0			0
Stream Culvert Install/Replace (no fish)	2			
Cross-Drain Install/Replace	11			

There is 17,444 feet of pre-haul maintenance associated with this sale.

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:

T9N R4W S33, T8N R4W S04

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

The sale units are located 7.5 miles west of Longview, Washington. The route from Longview is via SR 4 to the west, to Mill Creek Road, to Robertson Road, and then to the R-100 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 may temporarily affect elements of the environment including, but not limited to: earth, water, soils, air quality, noise, aesthetic, plants & animals, and recreation.

Cameron Creek, a 303 (d) listed stream in the Abernathy WAU (Listing ID: 34959, Parameter: Temperature, Current Category: 5), lies directly adjacent to the east of sale Units 2, 3, and 5. At a minimum, an average 100-year Site Index (SI) buffer measured from the creek's 100-year floodplain separates the waterbody from all harvest operations. This buffer should be sufficient to prevent any impact to the listed waters.

Mill Creek, a second 303 (d) listed stream in the Abernathy WAU (Listing ID: 34959, Parameter: Temperature, Current Category: 5), lies within a mile of sale unit 1. As the closest harvest operation will be 3,800 feet away from the creek, operations will not impact the listed waterbody.

All other 303 (d) listed streams within the Abernathy WAU (Abernathy Creek, Wiest Creek, and South Fork Mill Creek) are all sufficiently distanced from the sale (over 1.5 miles) that harvest operations will have no impact on the listed waters.

- 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. The Department follows Forest Practices Rules as applicable to roads and potentially unstable slopes. The Department follows WAC-332-24, Forest Protections.

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

None.

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

No.

- e. *Complete the table below with the reasonably foreseeable future activities within the associated WAU(s) (add more lines as needed). Future is defined as occurring within the next 7 years.*

WAU Name	Total WAU Acres	DNR-owned 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
ABERNATHY	39560	21357	1930	581	766

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:	ABERNATHY
WAU Acres:	39560
Elevation Range:	0 - 2642 ft.
Mean Elevation:	883 ft.
Average Precipitation:	64 in./year
Primary Forest Vegetation Zone:	Western Hemlock

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

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

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

114%

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 entire 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
5682	GRAVELLY SILT LOAM
5687	SILT LOAM
5688	SILT LOAM
5684	SILT 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 DNR state lands geologist did a remote review and a two-day onsite field review of the proposed units. The geologist remotely reviewed these units utilizing historic aerial photographs, Forest Practices Statewide Landslide Inventory Date, and Landslide Remote Identification Model (LRIM). LRIM is a screening tool which identifies areas of potentially unstable landforms using remote sensing data from Light Detection and Ranging (LIDAR) and slope. The result of the geologists review, available in SLGRR (State Lands Geologist Remote Review), indicates the proposal area has areas of slope instability. Potentially unstable slopes were identified and excluded from the sale using white "Timber Sale Boundary" tags.

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.

Approximately 22 acres of potentially unstable slopes, exhibiting characteristics of a deep-seated landslide, bedrock hollow, convergent headwall, and/or inner gorge, were excluded from the proposed harvest area within Leave Tree Areas, RMZs, and WMZs.

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: 2.5 acres

Approx. acreage new landings: 1 acre

Fill source: Native material and rock from the R-120 pit in SEC 4, T08 R04W

Total rock quantity: 6,572 cubic yards (5571 cy road, 1000 cy stockpile)

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

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

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

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

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

Erosion control and reduction measures are addressed in the sale layout and harvest system design.

- **The no harvest RMZs and WMZs will function to protect streams and wetlands from sediment delivery.**
- **Leave tree clumps were left around the headwalls of most Type 5 streams.**
- **Harvested areas will be replanted with Douglas fir and western hemlock to reestablish root bound soils.**
- **Roads will be constructed during dry weather conditions.**
- **Roads were located on ridge-tops where possible.**
- **Areas of soil exposed through road construction will be re-vegetated.**
- **Skid trails may be water barred post-harvest, if necessary.**
- **The proposal will be harvested utilizing lead end suspension to minimize soil disturbance**

2. Air

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

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

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

None known.

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

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

3. Water

a. Surface Water:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" as referenced on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)

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

a. Downstream water bodies:

All streams associated with the proposal (i.e. Cameron Creek, Mill Creek, and Abernathy Creek) are tributaries to the Columbia River.

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)
Forested Wetland	>1 acre	1	193 feet
Forested Wetland	0.25 – 1 acre	2	100 feet
Forested Wetland	<0.25 acre	1	N/A
Cameron Creek	1	1	193 feet
Unnamed Stream	3	9	193 feet
Unnamed Stream	4	15	100 feet
Unnamed Stream	5	25	N/A

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

Skid trails within the units may be water-barred. Leave trees were placed along some of the Type 5 streams. RMZs are no-harvest buffers. No wind buffers were applied to this proposal. There is low potential for blowdown due to the topography, as evidenced by an absence of any significant riparian blowdown resulting from several major windstorms in recent years.

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):

In Variable Retention Harvest, trees will be felled away from all streams unless safety or operational needs arise. Trees may be cut in RMZ/WMZs for safety or operational needs, but will be left in place. Cable lines for tailholds may be strung through Type 1, 3, and 4 RMZs, as well as over Type 5 streams. Timber will not be yarded through RMZs, but may be yarded across Type 5 streams. Timber harvest will occur within 100 feet of a Type 4 stream in Unit 8 Right-of-Way to facilitate road construction, including the placement of one culvert (R-130 road, station 35+90) and subsequent removal of two culverts (R-130 road, stations 35+30 and 37+84). Otherwise, timber harvest may occur as close as 100 feet (required minimum RMZ width) to all Type 4 streams in the proposal area.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Approximately 500 cubic yards of native material will be filled in a culvert installation. Approximately 1000 cubic yards of native material will be removed in two culvert removals.

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

No Yes, description:

Temporary diversion may be necessary for a culvert installation on one Type 4 stream and two culvert removals on two Type 4 streams in Unit 2. These activities may include the diversion and subsequent return of water from/to the stream channel during installation.

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

No Yes, describe activity and location:

Installation and removal of culverts will require work in the 100-year floodplain of Type 4 streams.

- 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.

- 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)?*

ABERNATHY = 5.4 (mi./sq. mi.) These road miles are required for proper forest management activities.

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

No Yes, describe:

It is possible some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current road construction, reconstruction, and/or maintenance standards will be applied that address this issue by installing cross-drains to deliver ditch water to stable forest floors.

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

No Yes, describe observations:

During the winters of 1996, 2007, and 2009, (suspected) 100-year return interval precipitation events occurred. The storms set rainfall and flood level records in Southwest Washington and Northwest Oregon. The events caused many shallow mass-wasting events, which caused stream channels to change location and/or dimension. The full extent and long-term impacts across the WAU from these storms is not known due to varying ownerships.

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

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

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

No Yes, describe the water resource(s):

Domestic water resources in the form of private wells are located downstream of the proposed activities. With the protection measures outlined in B.1.h., no impacts to

those resources are anticipated. There are minimal areas of slope instability located downslope from the proposed harvest area. These areas lie within RMZs, WMZs, and Leave Tree Areas.

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

No Yes, describe possible impacts:

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

- **Harvest and road building activities will be monitored and potentially restricted during adverse weather conditions.**
- **The proposal harvest units are each less than 100 acres to minimize impacts to watershed hydrology. See B.1.h. for further protection measures.**

b. Ground Water:

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

No ground water will be withdrawn or discharged.

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

None.

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

No Yes, describe:

There are minimal areas of slope instability located downslope from the proposed

harvest area. These areas lie within RMZs, WMZs, and Leave Tree Areas. A public water resource, Cameron Creek ultimately leading to the Columbia River, is present downslope and downstream of the proposed activity.

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

No *Yes, describe possible impacts:*

Note protection measures, if any:

c. **Water runoff (including stormwater):**

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

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

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

No *Yes, describe:*

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

Note protection measures, if any:

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

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

No changes to drainage patterns are expected.

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

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

4. Plants

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

Deciduous tree:

Alder Aspen Birch Cottonwood Maple Western Larch

Other:

Evergreen tree:

Douglas-Fir Engelmann Spruce Grand Fir Lodgepole Pine

Mountain Hemlock Noble Fir Pacific Silver Fir Ponderosa Pine

Sitka Spruce Western Hemlock Western Redcedar Yellow Cedar

Other:

Shrubs:

Huckleberry Rhododendron Salmonberry Salal

Other: Blackberry

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).

All conifer and hardwood trees will be removed as part of this harvest proposal, except the wildlife leave trees, green recruitment trees, and the vegetation within the RMZs and WMZs. Understory vegetation will be disturbed and/or reduced within the proposed harvest area as a result of timber felling, bucking, yarding, and site preparation activities. Most of the vegetation will re-establish within 2-3 years after forestry activities are complete.

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

Unit 1: To the north: 10-year old conifer stand. To the east: 5-year old alder stand. To the south: 5-year old conifer stand and 10-year old conifer stand. To the west: 10-year old conifer stand.

Unit 2: To the north: 86-year old mixed stand. To the east: 45-year old mixed stand, 17-year old alder stand. To the south: 50-year old mixed stand. To the west: 5-year old conifer stand.

Unit 3: To the north: 17-year old alder stand. To the east: 107-year old conifer stand. To the south: 107-year old conifer stand. To the west: 107-year old conifer stand.

Unit 4: To the north: 46-year old conifer stand. To the east: 43-to-45-year old conifer stands, 6-year old alder stand. To the south: 48-year old conifer stand. To the west: 7-year old conifer stand and 43-year old conifer stand.

Unit 5: To the north: 45-year old mixed stand. To the east: 45-year old mixed stand. To the south 17-year old alder stand.

Unit 6: To the north: 5-year old alder stand, 52-year old mixed stand. To the east: private ownership. To the south: 52-year old mixed stand. To the west: 52-year old mixed stand.

Unit 7: To the north: 50-year old mixed stand. To the east: 5-year old conifer stand. To the west: 5-year old alder stand.

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

None found in corporate database or observed on/near site.

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

Retention tree clumps are identified across the harvest area. Some clumps were selected for their species diversity of native flora. These clumps will provide a local seed source for native overstory and understory species. Some natural regeneration of native species will occur on site after harvest. Wildlife trees were left in areas to protect snags, large down logs, advanced regeneration, most Type 5 streams, and potentially unstable slopes. Trees with defects such as split or broken tops, dominant crowns, large diameters, and large limbs were favored as leave trees to enhance wildlife potential. Older legacy trees were identified and retain individually and in leave tree clumps.

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

Scotch broom, Himalayan blackberry.

5. Animals

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

birds:

eagle hawk heron owls songbirds

other:

mammals:

bear beaver coyote cougar deer elk

other:

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
BROOM CLOSET U1	Northern Spotted Owl	Threatened	Endangered

Site 863- Cameron (7,570 feet from proposed activity). Not a Status 1 or 2 NSO circle.

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

Pacific flyway Other migration route:

Explain:

This proposal is located in the Columbia River Flyway, which is part of the Pacific Flyway. Migratory waterfowl use the Columbia River Flyway; however, the area in which this proposal is contained is not generally the type of area used for resting or feeding by migratory waterfowl. While migrating through Pacific Northwest Forests, many Neotropical migratory birds are closely associated with riparian areas, cliffs, snags, and structurally unique trees. Riparian areas and special habitats are protected through implementation of DNR's Habitat Conservation Plan.

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

This sale has been designed to comply with the Department's HCP and provides for the protection of wildlife and their habitats. Scattered and clumped leave trees provide nesting, roosting and foraging areas for avian species. Well-engineered and

constructed roads reduce potential water quality impacts for downstream fish populations. Revegetating exposed soil aids water quality and provides forage for ungulates. Large diameter leave trees, and leave trees with unique structure, will remain post-harvest to enhance the wildlife habitat value of the future stand. The regenerated stand will be composed of mixed conifer species.

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

Riparian habitat

- **No harvest 100-foot RMZs on Type 4 streams**
- **No harvest 193-foot average RMZs on Type 3 streams**
- **No harvest 100-foot WMZs on forested wetlands 0.25 - 1 acre**
- **No harvest 193-foot average WMZs on forested wetlands >1 acre**

Upland habitat

- **A minimum of 8 leave trees per acre were left clumped and scattered**
- **Older large down woody debris will be left onsite**
- **Snags will be left where operationally feasible**

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

Invasive species have not been observed on or near the site.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

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

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

No.

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

None.

7. Environmental health

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

Slash accumulation from harvest operations will temporarily increase risk of ground fire in red slash. Fire hazard will be mitigated through implementation of WAC-332-24. Overall risk of fire will decrease within 1-2 years of harvest competition.

- 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.

A natural gas pipeline runs adjacent to the R-130 road, passing near Units 2, 3, 5, and 7. Contract clauses H-140 and H-141, as well as road plan requirements, protect the pipeline from all harvest activities.

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

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

- 4) Describe special emergency services that might be required.

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

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

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

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

b. Noise

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

None.

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

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

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

None.

8. Land and shoreline use

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

Current use of site and adjacent land types: the DNR and large industrial landowners manage the land surrounding the units for timber production. There are small private/residential ownerships along Robertson Rd.

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

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

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

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

This proposal is consistent with current and standard forestland harvest activities; there are no anticipated effects on this or adjacent lands that would affect normal forest land business operations. Equipment access, application of pesticides and timber harvesting are normal activities that would be expected on forest lands.

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?

Not zoned.

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

The comprehensive plan designation is rural.

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

Not applicable.

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

No.

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

None.

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

None.

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

Does not apply.

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

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

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

This proposal is consistent with the Department's Habitat Conservation Plan (HCP) and Washington Forest Practices rules.

9. Housing

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

Does not apply.

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

Does not apply.

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

None.

10. Aesthetics

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

Does not apply.

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

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

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

Robertson Rd

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

This proposal will resemble previous timber harvest in the area. Views will change from a stand of mature timber to that of a recent harvest. Standing timber in leave tree areas, scattered and single leave tree clumps, RMZs, and WMZs will create a visual mosaic against the harvested areas. With planted units and passing time, forest cover will gradually increase.

- 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 proposal area is in a gated Disabled Hunting Access zone. Hunting, hiking, horseback riding, mountain biking, mushroom/berry picking, and other informal outdoor recreation activities may occur within the proposal area.

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

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

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

None.

13. Historic and cultural preservation

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

No.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any

professional studies conducted at the site to identify such resources.

Cultural resources were not found on or near site.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

Site was remotely assessed by a DNR Cultural Resource Technician reviewing historic maps and historic cultural resources.

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

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

14. Transportation

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

Robertson Road provides access to the forest roads accessing the harvest units.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No. Nearest transit spot is approximately 13 miles east of the proposal.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None.

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

Yes, see A-11-c.

- 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area and any existing safety problem(s), if at all?*

This project will have minimal to no additional impacts on the overall transportation system in the area.

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

No.

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

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

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

No.

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

None.

15. Public services

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

No.

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

None.

16. Utilities

- a. Check utilities currently available at the site:

electricity natural gas water refuse service telephone sanitary sewer
 septic system other: **None.**

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

None.

N.B. A natural gas pipeline runs adjacent to the R-130 road, passing near Units 2, 3, 5, and 7. Contract clauses H-140 and H-141, as well as road plan requirements, protect the pipeline from all harvest activities.

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: Mary D. Robertson
FB

Name of signee: Jonah Salzman-Cohen Mary D. Robertson NR53

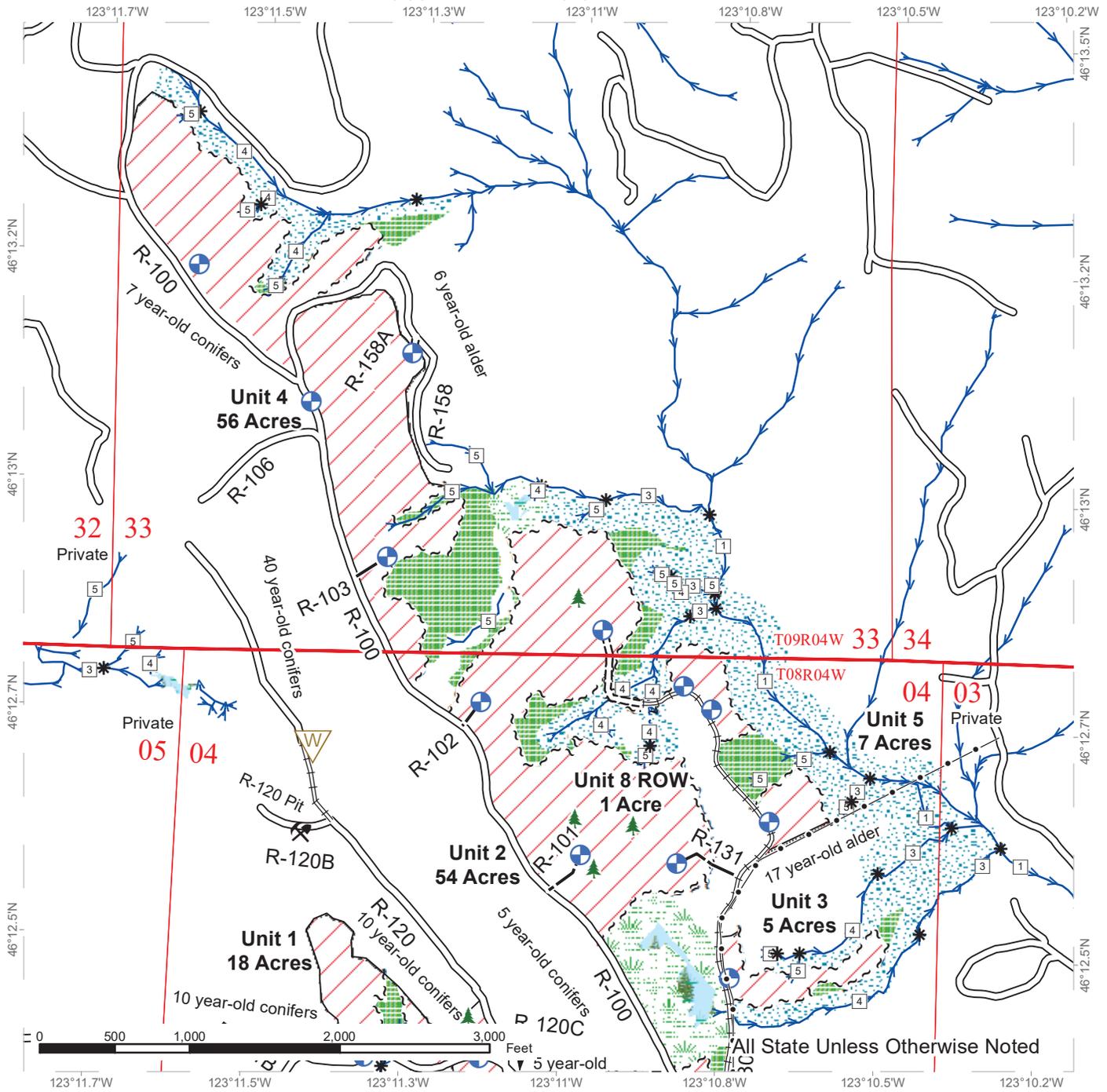
Position and Agency/Organization: Forester, Washington State Dept. of Natural Resources

Date Submitted: 4/17/20

TIMBER SALE MAP

SALE NAME: BROOM CLOSET
AGREEMENT#: 100110
TOWNSHIP(S): T8R4W, T9R4W
TRUST(S): Common School and Indemnity (3), Scientific School (10)

REGION: Pacific Cascade Region
COUNTY(S): Cowlitz
ELEVATION RGE: 280-760



Variable Retention Harvest	Right of Way Tags	Landing - Proposed
Forested Wetland	Existing Roads	Leave Tree Area <1/4-acre
Leave Tree Area	Required Construction	Rock Pit
Wetland Mgt Zone	Required Reconstruction	Waste Area
Riparian Mgt Zone	Optional Construction	Public Land Survey Sections
Sale Boundary Tags	Pipeline	
Timber Type Change	Clipped Streams	



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