

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

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: **FANCY NANCY** *Agreement #* **30-094534**

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

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

Brett McGinley
Department of Natural Resources
411 Tillicum Lane
Forks, WA 98331
(360) 374-2800

4. Date checklist prepared: **08/11/2016**

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

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

- a. *Auction Date:* **04/26/2017**
- b. *Planned contract end date (but may be extended):* **10/31/2018**
- c. *Phasing:*

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

Timber Sale:

a. *Site preparation:*
No

b. *Regeneration Method:*

Unit 1: HAND PLANT	01/01/2019	55 Acres
Unit 2: HAND PLANT	01/01/2019	11 Acres
Unit 3: HAND PLANT	01/01/2019	10 Acres
Unit 4: HAND PLANT	01/01/2019	1 Acres
Unit 5: HAND PLANT	01/01/2019	4 Acres
Unit 6: HAND PLANT	01/01/2019	3 Acres

c. *Vegetation Management:*
Continuing assessment of units to determine future vegetation management strategy

will be required.

d. *Thinning:*

PCT expected 10 to 15 yrs. post-planting.

Roads:

Road maintenance, periodic ditch and culvert cleanout as needed.

Rock Pits and/or Sale:

Dry Creek Pit

Other:

Future forest management activities are anticipated to continue within the WAU and adjacent to the current proposal. Potential activities may include but are not limited to firewood salvage, biomass salvage, hardwood slashing, pre-commercial thinning, commercial thinning and regeneration harvest. All future activities will be consistent with the DNR's Habitat Conservation Plan (HCP) and applicable policy and planning documents.

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

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

Landscape plan: OESF FLP

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: 08/10/2016

Wildlife report:

Geotechnical report:

Other specialist report(s):

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

Rock pit plan: Dry Creek Pit: 08/10/2016

Other: Final Habitat Conservation Plan (September 1997), Forestry Handbook (August 1999), Sustainable Harvest Calculation (Sept 2004), Spotted Owl Habitat Mapping, Forest Practices board manual, WAU Map for Rain-On-Snow areas, Policy for Sustainable Forests (PSF 2006), HCP Checklist, Planning and Tracking reports and associated maps, Road Maintenance and Abandonment Plan (RMAP) for the Upper Clearwater administrative unit: #2610029. The following documents are all generated by Department GIS databases: OESF Habitat Marbled Murrelet Habitat Model, and Marbled Murrelet Proximity Map, Weighted Old Growth Habitat Index (WOGHI).

All documents are available for review at the Olympic Region office during the SEPA comment period.

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

No.

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

FPA FHPA Burning permit Shoreline permit Incidental take permit Existing HPA Other: **Board of Natural Resources approval**

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 Fancy Nancy timber sale is located approximately 26 miles south of Forks, Washington off of the Hoh-Clearwater Mainline, C- 2000, and C-2823 road systems. It is located in the Upper Clearwater Watershed Analysis Unit (WAU). The Fancy Nancy timber sale consists of six units of variable retention harvest (VRH). It encompasses approximately 179 gross proposal acres with an estimated volume of 3,000 mbf. Of the 179 gross proposal acres, there are 84 acres of VRH, 4 acres of existing roads, 85 acres of riparian management zones (RMZ's), 2 acres of wetland management zones (WMZ's) and 4 acres of leave tree areas (LTA's).

Approximately 300 feet of new road construction and 24,265 feet of prehaul maintenance are proposed to provide access to the sale area. Additionally, 645 feet of spur roads will be deactivated after the sale has been harvested. The designated rock source will be Dry Creek Pit, located in Section 15 Township 26 North, Range 11 West W.M.

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

The Fancy Nancy timber sale is a six unit variable retention harvest. It consists of 42 to 72 year-old mixed-conifer timber. The slopes within the harvest units range from 0-70%. Elevations within the proposed area ranges from 635-972 feet. The sale will utilize a combination of logging techniques; 24% cable-based and 76% ground-based logging methods.

Unit 1 is a 103 gross acre unit consisting of primarily 42-year-old Western Hemlock and Douglas-fir. The slopes range from 0-50% and an elevation range of 635- 972 feet. There are 55 acres of VRH, 3 acres of existing roads, 41 acres of RMZ, 2 acres of WMZ, 2 acres of LTA's with a total of 402 trees, and 38 individual leave trees scattered throughout the unit. The unit will utilize 80% ground-based and 20% cable-based logging methods.

Unit 2 is a 28 gross acre unit and consists of primarily Western Hemlock and Douglas-fir. There are 11 acres of VRH, 15 acre of RMZ, 1 acre of existing road, and 1 acre of LTAs with 72 leave trees. There are an additional 16 individual leave trees scattered throughout the unit. The slopes range from 0% to 45% and an elevation range from 760-930 feet. Approximately 45% of this unit will utilize grounded-based logging and 55% will require cable-based logging methods.

Unit 3 is a 25 gross acres and consists of 58-year-old Western Hemlock and Douglas-fir. There are 10 total VRH harvest acres, 14 acres of RMZs, and 1 acre of LTAs. The elevation of the unit ranges from 635-760 feet, with slopes from 0-55%. There are 75 trees in one LTA and 8 individual leave trees scattered throughout the unit. This unit will be logged using 100% ground-based methods.

Unit 4 is 6 gross acres and consists of 58 year old timber. Western hemlock and Douglas-fir are the primary conifer species. The slopes range from 0-60% and an elevation range of 700- 770 feet. There is 1 acre of VRH, 5 acres of RMZ, and 8 individual leave trees scattered throughout the unit. The unit will utilize 100% ground-based logging methods.

Unit 5 is 8 gross acres and consists of 58 year old timber. Western hemlock, Douglas-fir, and Sitka spruce are the primary conifer species. The slopes range from 0-70% and an elevation range of 650-760 feet. There are 4 acres of VRH, 4 acres of RMZ, less than 0.25 acres of LTA's with 24 trees, and 8 individual leave trees scattered throughout the unit. The unit will utilize 75% ground-based and 25% cable-based logging methods.

Unit 6 is 9 gross acres and consists of 49 and 58 year old timber. Western hemlock, Douglas-fir, and Sitka spruce are the primary conifer species. The slopes range from 0-70% and an elevation range of 635-750 feet. There are 3 acres of VRH, 6 acres of RMZ, and less than 0.25 acres of LTAs with 24 trees. The unit will utilize 33% ground-based and 67% cable-based logging methods.

Objectives are as follows:

The overall objectives for this sale includes the production of saw logs, poles, pulp material, and biofuels revenue for trusts while expediting the development of a more diverse multi-storied canopy layer in the future stand. This will be accomplished through the retention of wildlife trees, legacy trees and riparian management zones (RMZ). In addition, these stands will be managed to protect site productivity and maintain the integrity and water quality of adjacent streams.

Ecological- VRH to promote diverse forest structure across the landscape while preserving ecological integrity and function.

Economic- Generate revenue for Common Schools (03) Trust.

Statute- Comply with the OESF HCP, Forest Practice rules, and implement the Policy for Sustainable Forests.

Social- Accommodate dispersed informal recreational activities on DNR managed lands.

Specific objectives are to provide riparian protection, protection of unstable slopes, protection of soils and habitat conservation for threatened and endangered species. Riparian protection measures were designed for all waters in and adjacent to this proposal in accordance with DNR’s OESF Riparian strategy.

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

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		300	0.12	N/A
Reconstruction		0		N/A
Abandonment		0	0	N/A
Bridge Install/Replace	1			N/A
Culvert Install/Replace (fish)	1			N/A
Culvert Install/Replace (no fish)	1			

Additionally, approximately 24,265 feet of pre-haul maintenance is scheduled with the road activities for this sale. Pre-haul maintenance will include grading, ditching, brushing, cleaning culverts, and installing cross-drains on existing forest roads. There is also 645 feet of road deactivation associated with this proposal.

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

- a. *Legal description:* :
T25N R11W S3
T25N R11W S8
T25N R11W S9
T26N R11W S15 (Dry Creek Pit)

- b. *Distance and direction from nearest town (include road names):*
The proposed timber sale is located approximately 26 miles southeast of Forks on the Hoh-Clearwater Mainline and C-2000 and C-2823.

- c. *Identify the names of all watershed administrative units (WAU). (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov/state-environmental-policy-act-sepa> under the topic "Current SEPA Project Actions – Timber Sales" for a broader landscape perspective.)*

WAU Name	WAU Acres	Proposal Acres
UPPER CLEARWATER	58138.70	84

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

LAND MANAGEMENT

Land Manager	Acres	% of WAU
DNR	57219	98.4
Federal	308	0.5
Other Land (Private & Other Public Land)	612	1.1

Data Source & Description: DNR ownership updated weekly. Non-DNR Public Lands (NDMPL) data. Management parcels are for federal, state (excluding DNR), tribal, county, and city lands within the state. Data was created by DNR Engineering Division Resource Mapping in 1994 and is periodically updated by mapping projects (100k quad or statewide MPL map).

Activities within the past seven years and those proposed for the near future are summarized for the Upper Clearwater’s WAU’s in the following table. On DNR ownership in the Upper Clearwater during the past seven years approximately 216 acres of even-aged and 984 acres

of uneven-aged harvests have occurred. In the future, stands will be selected for regeneration, thinning, and partial cut harvests as they meet the Department’s financial and ecological policies and mandates. It is unknown what other private land owners may have planned within the landscape.

FOREST PRACTICE APPROVED APPLICATIONS FOR HARVEST ACTIVITIES

Harvest Type	Acres on DNR Land	Acres on Non-DNR Land	Acres on All Lands
EVEN-AGE	216	1	217
UNEVEN-AGE	984	0	984

NOTE: This information is derived from activity locations collected by varying methods ranging from hand drawn maps to precise GPS collection. No verification of map accuracy or activity completion is conducted. Totals may not be the sum of all harvest types due to overlapping activities. The same land may be counted more than once if, in the past seven years, more than one Forest Practice application has been approved for different harvests (salvage and evenage for example).

NOTE: All acreages are approximate. Rounding to the nearest 10 or even to the nearest 50 acres may be appropriate. Totals may not be the sum of all harvest types due to overlapping activities.

Data Source & Description: DNR Forest Practices Application Review System (FPARS) data. Table shows the last seven years of proposed harvest areas, some of these areas may not have actually been harvested. Data are continuously updated.

This proposal and all future management activities on DNR lands will be conducted in accordance with the State’s Habitat Conservation Plan (HCP, 1997), Policy for Sustainable Forests (2006), and Forest Practices Rules. The HCP is an agreement with the federal government that requires the DNR to manage landscapes in accordance with its terms that include the following applicable strategies that were found to provide a conservation benefit for multiple species:

- Deferring harvest on unstable slopes
- Retaining Riparian Management Zones (RMZ’s) on typed waters. This includes a variable width interior core buffer on type 3, 4, unstable type 5 streams. All interior core buffers are protected by an exterior wind buffer. Equipment limitation zones are required on all streams.
- Retaining a minimum of 8 leave trees per acre dispersed and clumped throughout VRH unit.
- Designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment;
- Implementing procedures pertaining to threatened and endangered species.

In concert, the HCP strategies for spotted owl, marbled murrelet, and riparian conservation will contribute to the retention and development of older forests, while the leave tree procedure will enhance the structural diversity of forests across the landscape. Road

construction and maintenance standards will improve the quality of the existing road network and reduce potential impacts on the environment.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

Flat, Rolling, Hilly, Steep Slopes, Mountainous, Other:

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

Upper Clearwater WAU

Elevation: 252ft- 3,812ft with a mean elevation of 1,443 ft

Annual Precipitation: Weighted average of 133 inches annually

Forest Vegetation Type: Western Hemlock

Peak Rain-on-Snow: 27.2%

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

This proposal is located in slightly lower elevations of the Upper Clearwater WAU, with an elevation range of 635ft- 972ft. There are no portions of this sale located within the designated rain on snow event.

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

70%

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

State Soil Survey #	Soil Texture	% Slope	Acres	Mass Wasting Potential	Erosion Potential
5224	SILT LOAM	30-65	35	MEDIUM	MEDIUM
3976	KLONE-HOKO-COMPLEX	15-40	21	No Data	No Data
5733	SILT LOAM	5-35	20	LOW	LOW
3972	V.GRAVELLY LOAM	30-65	4	MEDIUM	HIGH
2962	GRAVELLY SILT LOAM	20-40	2	MEDIUM	LOW
3975	KLONE-HOKO-COMPLEX	0-15	2	No Data	No Data
3970	V.GRAVELLY LOAM	0-15	0	INSIGNIFIC'T	LOW

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

1) *Surface indications:*

This proposal is located on relatively hilly terrain and portions are adjacent to incised stream channels with actively slumping banks evidenced by over steepened slopes and exposed bare soil. Additionally, bedrock hollows are located adjacent to the harvest unit.

2) *Is there evidence of natural slope failures in the sub-basin(s)?*

No Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There are areas of potential slope instability found within the inner cores of some streams in and around the vicinity of this proposal. Throughout the WAUs there are areas that show evidence of deep-seated landslides and shallow mass wasting. These areas are mainly associated with incised streams and headwall areas. All areas of potential slope instability associated with this proposal that have the potential to deliver sediment to a public resource have been excluded from the sale.

3) *Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads?*

No Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There are areas within the WAU where slope failures have occurred mainly associated with past logging and road construction practices

Associated management activity:

4) *Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?*

No Yes, describe similarities between the conditions and activities on these sites:

5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
All potentially unstable slopes were excluded from the sale area. Potential areas included inner gorge on type 4 and 5 streams that were excluded from the sale area with variable width interior core buffers and no harvest 50 foot exterior wind buffers.

Additionally, an office and field review were conducted by a licensed State Lands Geologist. All Potentially unstable slopes were excluded from the sale area.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Approx. acreage new roads: 0.12 Approx. acreage new landings: 0.1 Fill Source: Dry Creek Pit

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

Yes. A small amount of incidental surface erosion could occur during the course of road construction and harvest activities. However, prudent road location, construction, and maintenance, as well as the mitigating measures outlined in question (h). below will minimize and control any possible erosion.

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

Less than 2% in gravel roads and landings.

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

Harvesting and road construction will be restricted during periods of heavy rainfall when rutting and surface erosion may occur. Roads will be constructed with properly located ditches, ditch outs and cross drains to divert water onto stable forest floor and/or into stable natural drainages. Ground based operations will be suspended during periods of wet weather or wet soil conditions when rutting of skid or shovel roads begins.

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.

Engine exhaust from logging equipment and dust from passage of log trucks is the only foreseeable emissions to the air. Logging slash, if burned, will be burned adhering to the State's smoke management plan.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. **N/A**
- c. Proposed measures to reduce or control emissions or other impacts to air, if any: **None**

3. Water

- a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *(see timber sale map available at DNR region office, or forest practice application base maps.)*

- a. *Downstream water bodies:*

Unnamed perennial streams, Bull Creek, Clearwater River, Queets River, and Pacific Ocean.

- 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)
Stream	3	12	Variable width interior core(10'-50') and a 150' exterior wind buffer

Stream	4	1	Variable width interior core buffer (10-50') and a 50' exterior wind buffer
Stream	5	29	Variable width interior core buffer (05'-50') on unstable 5's and a 50' exterior wind buffer and a 30' equipment limitation zone (ELZ) for stable streams
Wetland	Forested	1	The forested wetland received a 2/3's site index buffer of 103'

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

For all sales in accordance with the Habitat Conservation Plan, all floodplains and unstable slopes are protected with variable width interior core buffers based on site specific conditions.

There are 12 Type 3 streams, 1 Type 4 streams, and 29 Type 5 streams, and 1 forested wetland associated with this proposal. The Type 3 streams have been protected with 10-50' interior core buffers and 150' exterior wind buffers. The Type 4 streams have been protected with 10-50' interior core buffers and 50' exterior wind buffers. Type 5 streams have been protected with 30' equipment limitation zones (ELZ's) and individual leave trees. Unstable Type 5 streams are protected with interior core buffers (5' – 50') and 50' exterior wind buffers. There is one forested wetland adjacent to Unit 1. The wetland has been protected with a no-harvest Wetland Management Zone (WMZ) that was determined using a 2/3rd 100-year site index buffer of 103'.

The work detailed in the road plan has been designed to improve surfacing on the haul roads, and provide for better drainage by installing additional culverts, replacing inadequate culverts that will divert storm water onto stable forest floor, and installing a temporary bridge over Bull Creek. These actions will minimize the potential for delivery of sediment to streams. Soils exposed during road construction activities will be protected from erosion by grass seeding and mulching with hay.

- 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 map available at DNR region office.)

Description (include culverts):

Timber felling, bucking, yarding, live water culvert pipe replacements on non-fish streams, and road construction will occur within 200 feet of all the described waters above. Additionally, a temporary 60'x16' bridge will be installed over Bull Creek to allow access to Unit 1. All activities will be done in accordance with the HCP and Forest Practice rules.

- 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

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:* **Surface water will be diverted during the installation of a bridge on Type 3 waters using a temporary stream flow bypass. Surface waters are required to bypass the in stream work area using a flume / culvert or pump bypass around the work area to avoid sedimentation. If using a pump system, the intake must have a mesh screen to avoid injury to fish present.**

4)

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

No *Yes, describe location:*

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

No *Yes, type and volume:*

- 7) *Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?*
Yes.

The potential for eroded material entering surface water is low. The possibility for eroded material entering surface water has been minimized due to the fact that unstable slopes within, or directly adjacent to, the sale area has been appropriately buffered and the measures listed in B. 1. h.

8) *Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)?*

No Yes, describe changes and possible causes:

Yes, areas within the Upper Clearwater WAU show evidence of changes to stream channels. Some steep drainages in the WAU show evidence of debris torrent events which have increased the dimensions of affected drainage channels, exposed native bedrock which now forms the floor along segments of channels, and decreased the overall amount of large woody debris in the streams. These events may be attributed to past road construction techniques, inherently unstable slopes, soil composition or significant amounts of precipitation in short time periods.

9) *Could this proposal affect water quality based on the answers to the questions 1-8 above?*

No Yes, explain:

This proposal will have minimal effects on water quality. Measures described in B 1-h, wet weather restrictions on road work and logging operations will all contribute to reducing the potential of affecting water quality.

10) *What are the approximate road miles per square mile in the WAU and sub-basin(s)?*

Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor?

No Yes, describe:

ROADS

Land Owner	Miles of Road	Miles per Square Mile
Non-DNR	6.8	0.1
DNR	332.8	3.7
Total	339.6	3.7

Data Source & Description: DNR State Lands Transportation (ROPA.ROAD). Data is the best estimate of the transportation routes in the state, however, should not be considered a complete inventory of these routes. Updates to this data are variable.

It is likely some road or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, however current standards for road construction address this issue by installing cross drains to deliver ditch water to stable forest floors.

11) *Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-13 below. Use the WAU or sub-basin(s) for the ROS percentage questions below.*

No Yes, approximate percent of sub-basin(s) in significant ROS zone:

Or, approximate percent of WAU:

12) *If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or sub-basin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?*

13) *Is there evidence of changes to channels associated with peak flows in the WAU and sub-basin(s)?*

No Yes, describe observations in the WAU and in the sub-basin(s):

The Upper Clearwater WAU shows evidence of slope failures which caused a shift in stream channel. Also, some stream segments show cutting and scouring which can be attributed to the absence of LWD during peak flow events. Refer to B.3.a.8.

14) *Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.*

This proposal should not measurably change the timing, duration, or amount of water in a peak flow event. Unit size and buffering will minimize this proposal's impact to peak flow.

15) *Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or downslope of the proposed activity that could be affected by changes in surface water amounts, quality, or movements as a result of this proposal?*

No Yes, possible impacts:

16) *Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any*

protection measures addressing possible peak flow/flooding impacts.

Road maintenance and construction activities will minimize environmental impacts by using cross drains to release ditch water onto stable forest floors where much of the energy can be dissipated prior to reaching stream channels. Maintaining large RMZ's on streams that maintain bank stability, hydrologic functions and provides recruitment of LWD. See B.1.h, B.3.a.1.c and A.13 for additional 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.

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.

N/A

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

No

Yes, describe:

a. *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.

Storm water will be collected by roadside ditches. Ditch-outs and culvert cross-drains will divert storm water onto stable forest floor. This water will percolate through the soil and ultimately flow into streams which drain the area.

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

No

Yes, describe:

a. *Note protection measures, if any.*

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

No.

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-16, B-3-b-3-a, and B-3-c-2-a.)

4. Plants

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

deciduous tree:

alder, maple, aspen, cottonwood, western larch, birch, other:

evergreen tree:

Douglas fir, grand fir, Pacific silver fir, ponderosa pine, lodgepole pine, western hemlock, mountain hemlock, Englemann spruce, Sitka spruce, red cedar, yellow cedar, other:

shrubs:

huckleberry, salmonberry, salal, other: Vine Maple

grass

pasture

crop or grain

wet soil plants:

cattail, buttercup, bullrush, skunk cabbage, devil's

club,

other:

water plants:

water lily, eelgrass, milfoil, other:

other types of vegetation:

plant communities of concern:

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

Approximately 3,000 mbf of 42 to 72-year-old mixed-conifer timber and a small amount of hardwoods will be harvested with this proposal.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See color landscape/WAU and adjacency maps on the DNR website:

<http://www.dnr.wa.gov/sepa>

(Click on the DNR region under the Topic "Current SEPA Project Actions - Timber Sales.")

Unit 1: is bordered by the north and west by 42 year old state timber. It is bordered by the east by 23 year old state timber and by 33 year old state timber to the south

Unit 2: is bordered by the north with 44 year old state timber and 72 year old timber to the east. It is bordered to the south by 44 year old state timber and to the west by 59 year old state timber.

Unit 3: is bordered to the north by 72 year old state timber and to the east by 25 year old timber. It is bordered by 49 year old state timber to the south and 40 year old state timber to the west.

Unit 4: is bordered by the north to 32 year old state timber. It is bordered by the east by 4 year old state timber, to the south by 25 year old state timber, and to the west by 58 year old state timber.

Unit 5: is bordered by the north with 4 year old state timber. It is bordered to the south by 24 year old state timber and to the east and west by 58 year old state timber.

Unit 6: is bordered to the north and east by 4 year old state timber. It is bordered by 25 year old state timber to the south and 58 year old state timber to the east and west.

2) *Retention tree plan:*

Unit 1: This unit has four leave tree areas totaling 2 acres and containing 402 clumped trees. There are 38 individual leave trees scattered throughout the unit.

Unit 2: This unit has two leave tree areas totaling 1 acre and containing 72 clumped trees. There are 16 individual leave trees scattered throughout the unit.

Unit 3: This unit has one leave tree area totaling 1 acre and containing 75 clumped trees. There are 8 individual leave trees scattered throughout the unit.

Unit 4: This unit has 8 individual leave trees scattered throughout the unit.

Unit 5: This unit has one leave tree area totaling less than 0.25 acres and containing 24 clumped trees. There are also 8 individual leave trees scattered throughout the unit.

Unit 6: This unit has one leave tree area totaling less than 0.25 acres and containing 24 clumped trees.

- c. List threatened and endangered *plant* species known to be on or near the site.
None found in database search.
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

All units in this proposal will be replanted with a mix of Douglas-fir and Sitka spruce within one growing season upon expiration of the contract. Other native conifer and deciduous species may regenerate naturally on the site. Native grass seed will also be used on areas of exposed mineral soil during road building operations. See A.7 (a.b.c.d.) and B.4.b.(2), above.

- e. List all noxious weeds and invasive species known to be on or near the site.
Scotch Broom, Himalayan black berry.

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: hawk, heron, eagle, songbirds, pigeon, other: raven

mammals: deer, bear, elk, beaver, other:

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

unique habitats: talus slopes, caves, cliffs, oak woodlands,
balds, mineral springs

*** Eagles have been observed in flight in this vicinity. There are no known nest sites within 660 feet of the harvest proposal.**

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

There is a mapped occupied murrelet site 0.6 miles from unit 1, 4 and 6.

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

Pacific flyway Other migration route: *Explain if any boxes checked:*
This site is part of the Pacific flyway but is not used extensively for resting or feeding by waterfowl.

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

1)

Species/Habitat: Spotted Owl - The DNR mitigates for the potential of significant adverse environmental impacts to northern spotted owls in the OESF by implementing the HCP strategy. This strategy established threshold percentages for

spotted owl habitat on DNR-managed lands for Landscape Planning Units (LPU). Each LPU is managed to achieve and maintain at least 20% Old Forest Habitat and at least 40% of Old and Young Forest (or Structural) Habitat types taken together according to a schedule of habitat enhancement and harvest activities developed within the Forest Land Plan (FLP). Forest Land Planning has been initiated but not implemented. The sale area is considered non-habitat according to the OESF HCP definitions for NSO habitat. Currently the Upper Clearwater WAU is 29.50% NSO habitat.

Species/Habitat: Marbled Murrelet - The entire proposal area was evaluated for habitat protection or other marbled murrelet conservation opportunities. The proposal itself was identified as non-habitat by the OESF marbled murrelet habitat model.

Species /Habitat: Riparian and Wetland – Interior core buffers have been applied to type 3, 4, and unstable 5 waters. Equipment limitation zones are on all typed streams, as described in B.3.a.1)b). Riparian buffers are designed to protect the unstable portions of the stream banks, and help to protect waters from siltation and increased temperature by providing shade and cover. Buffers also allow the natural occurrence of woody debris that provides pools and eddies for fish habitat along stream banks. Furthermore, these buffers will develop old-forest characteristics that, in combination with the owl and murrelet strategies, will help support old-forest dependent wildlife

Species /Habitat: Upland –The Fancy Nancy timber sale will temporarily create open environments that provide valuable forage for deer and elk and habitat for a variety of wildlife species associated with early-seral environments.

- e. List any invasive animal species known to be on or near the site.
None

6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Does not apply.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
Does not apply
- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
Does not apply.

7. Environmental health

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

- 1) Describe any known or possible contamination at the site from present or past uses.
None.
- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.
None.
- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.
None.
- 4) Describe special emergency services that might be required.
Fire suppression, hazardous waste cleanup, emergency medical services. In the event of a lubricant spill or if past contamination is discovered, the Contractor will contact DNR and the Department of Ecology and follow proper cleanup requirements.
- 5) Proposed measures to reduce or control environmental health hazards, if any:
The timber sale contract requires purchaser to minimize risk of fire and does not allow for disposal of any kind of waste on any State lands. Pump trucks and/or pump trailers will be required on site during fire season. Hazardous waste cleanup materials will be required on site.

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.
Noise from chainsaws, heavy equipment and log truck traffic while the sale is active.
- 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?

Commercial Forest Land.

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.)

No.

- 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?
- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversized equipment access, the application of pesticides, tilling, and harvesting? If so, how:
No.
- c. Describe any structures on the site.
No
- d. Will any structures be demolished? If so, what?
N/A
- e. What is the current zoning classification of the site?
Commercial Forest Land
- f. What is the current comprehensive plan designation of the site?
Commercial Forest Land
- g. If applicable, what is the current shoreline master program designation of the site?
N/A
- 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:
N/A
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The design of this project is consistent with current comprehensive plans and procedures pertaining to DNR's Habitat Conservation Plan, and the State Forest Practices Act.
- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:
See 8.1 above

9. Housing

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

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
N/A
- c. Proposed measures to reduce or control housing impacts, if any:
N/A

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?
N/A
- b. What views in the immediate vicinity would be altered or obstructed?
- 1) *Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista?*
- No Yes, viewing location:
- 2) *Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)?*
- No Yes, scenic corridor name:
- 3) *How will this proposal affect any views described in 1) or 2) above?*
N/A
- c. Proposed measures to reduce or control aesthetic impacts, if any:
N/A

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?
Dispersed informal recreation in the form of hunting, hiking, fishing, berry picking, sightseeing, etc

- b. Would the proposed project displace any existing recreational uses? If so, describe.
No
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None

13. Historic and cultural preservation

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe.
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.
No
- 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.
A check of the Department of Archaeology and Historic Preservation (DAHP) database and TRAX using a Planning and Tracking Special Concerns report shows no known cultural resources on or near the site. A check of the cultural resources layer on the State Upland viewing tool shows no cultural resources on or near the site. During timber sale preparation, trained foresters found nothing on or near the site to indicate any potential cultural resource.
- 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.
None

14. Transportation

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
US Highway 101
 - 1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*
This proposal will have no additional impacts on the overall transportation system in the area.
- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No

- 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, approximately 300 feet of new construction and 24,265 feet of pre-haul maintenance are proposed to meet the needs of the sale. Upon completion of harvest approximately 645 feet of roads will be deactivated.

- 1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*

This proposal will have 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 nonpassenger vehicles).

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

Approximately 10-15 log truck trips per day through peak harvest times. Peak harvest times are morning through early afternoon. Estimates are based on harvest traffic of similar sales.

- 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:

New roads will be constructed in compliance with HCP and Forest Practice requirements and will divert storm water onto stable forest floor. To avoid erosion and impacts to water quality, soils exposed during culvert installation will be grass seeded and covered with hay.

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 **Brett McGinley**

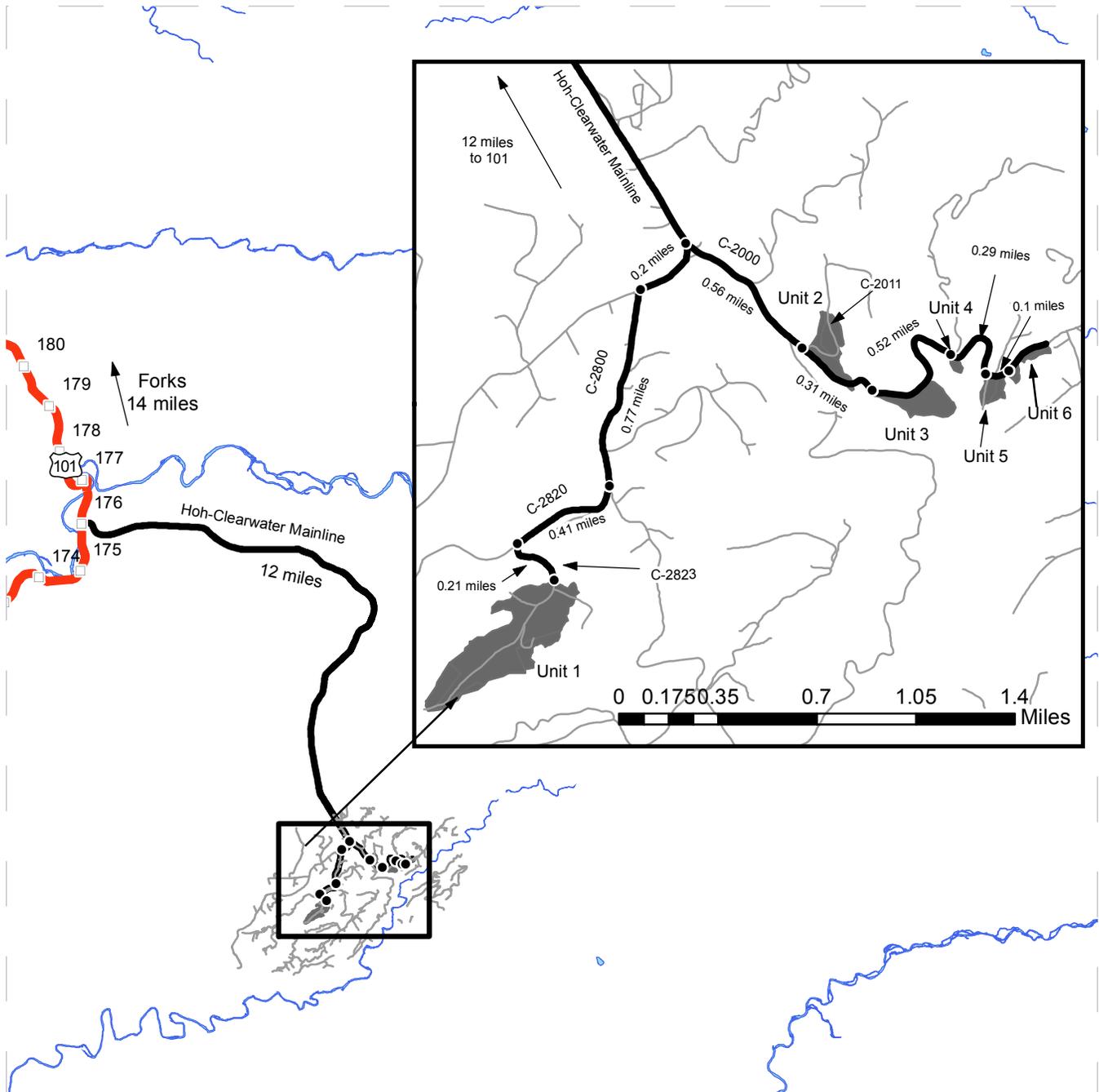
Position and Agency/Organization **Unit Forester**

Date Submitted: 8/30/2016

DRIVING MAP

SALE NAME: FANCY NANCY
AGREEMENT#: 30-094534
TOWNSHIP(S): T25R11W
TRUST(S): Common School and Indemnity(3)

REGION: Olympic Region
COUNTY(S): JEFFERSON
ELEVATION RANGE: 635'-972'



	Timber Sale Unit
	Highways
	Haul Route
	Other Route
	Milepost Markers
	Distance Indicator

DRIVING DIRECTIONS:

Unit 1: From Forks, drive south for 14 miles on Highway 101. Turn Left onto the Hoh-Clearwater Mainline and follow for 12.3 miles. Turn left onto the C-2800 and follow for south for 0.77 miles. Turn right onto to the C-2820 for 0.41 miles. Turn left onto the C-2823 and follow for 0.21 miles to the edge of the unit.

Unit 2: From Forks, drive south for 14 miles on Highway 101. Turn Left onto the Hoh-Clearwater Mainline and follow for 12 miles. Turn left onto the C-2000 and continue for 0.56 miles to the C-2011. The unit is on the left and the C-2011 cuts through the center of the unit.

Unit 3: From Unit 2, continue east on the C-2000 for 0.31 miles and the start of Unit 3 will be on the right.

Unit 4: From the start of Unit 3, follow the C-2000 east for 0.52 miles and the start of unit 4 is on the left.

Unit 5: From the start of Unit 4, continue down the C-2000 for 0.29 miles to the start of Unit 5.

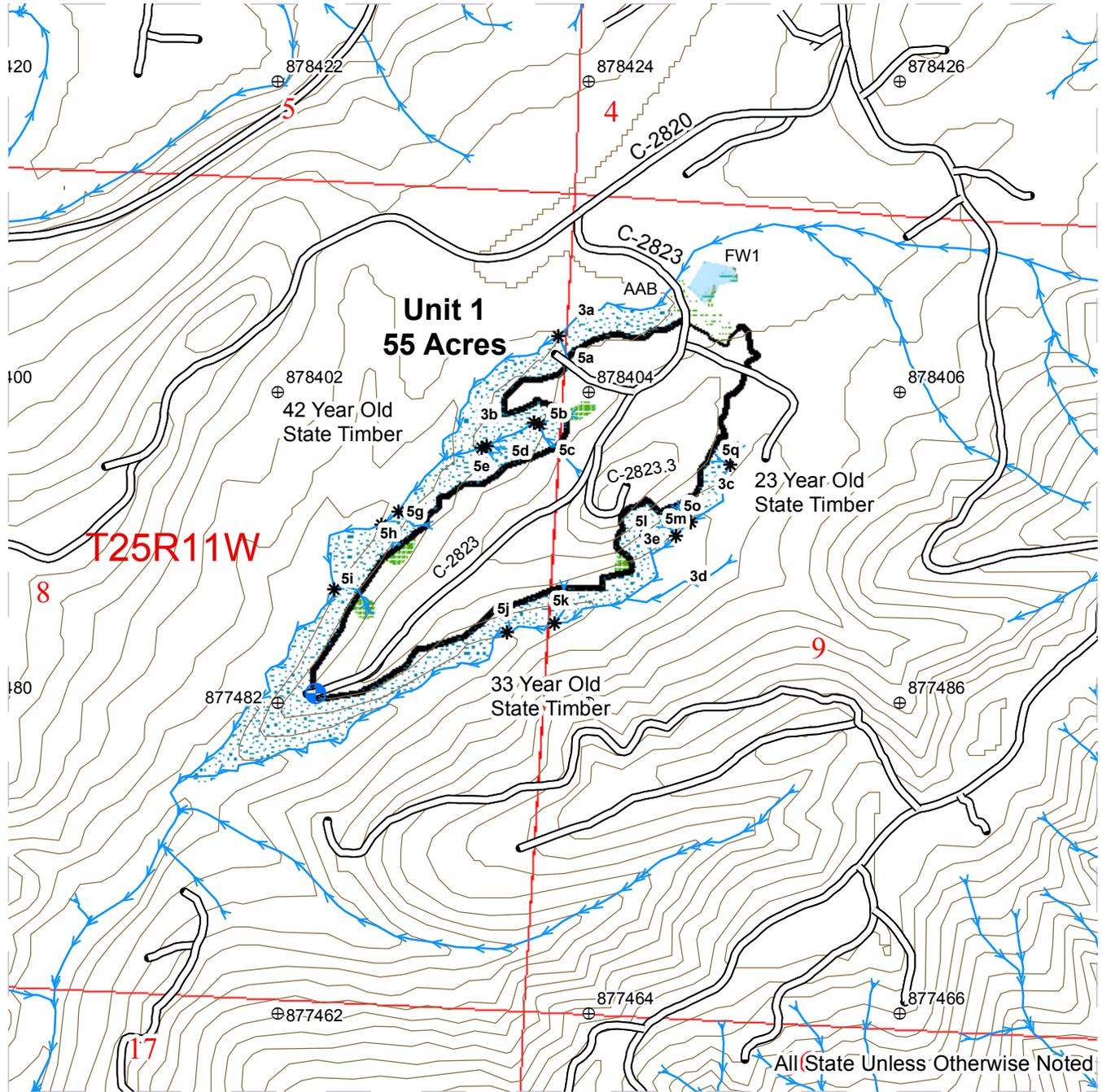
Unit 6: From the start of Unit 5, continue down the C-2000 for 0.1 miles to the edge of Unit 6.



FOREST PRACTICES ACTIVITY MAP

SALE NAME: FANCY NANCY
 APPLICATION #: None

COUNTY(S): JEFFERSON
 TOWNSHIP(S): T25R11W



⊕ Tics - 2000' Interval	— Existing Road	Riparian Management Zone
* Stream Type Break	==== Construction	Wetland Management Zone
Landing	Forested Wetland	Sections
— 40 ft. Contours	Leave Tree Area	Townships
Streams	Timber Sale Unit	DNR Managed Lands

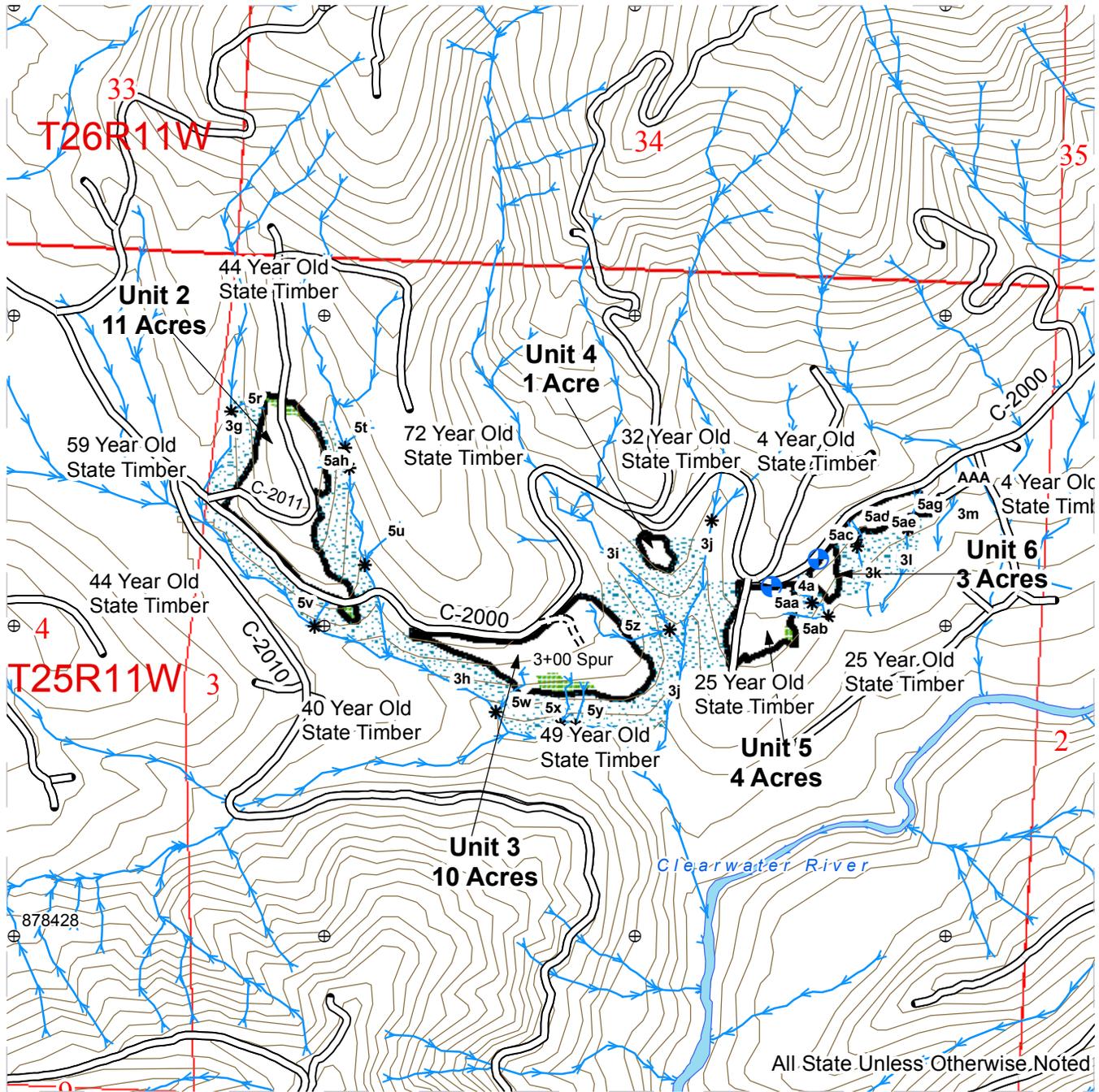
0 500 1,000 2,000 3,000 Feet



FOREST PRACTICES ACTIVITY MAP

SALE NAME: FANCY NANCY
 APPLICATION #: None

COUNTY(S): JEFFERSON
 TOWNSHIP(S): T25R11W



All State Unless Otherwise Noted

⊕ Tics - 2000' Interval	— Existing Road	Riparian Management Zone
* Stream Type Break	==== Construction	Wetland Management Zone
Landing	Forested Wetland	Sections
— 40 ft. Contours	Leave Tree Area	Townships
Streams	Timber Sale Unit	DNR Managed Lands

