

STATE FOREST LAND
ENVIRONMENTAL CHECKLIST

No 2812220

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *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> under "SEPA Center." 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.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. *All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.*

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: 32 VOLUNTEERS VDT

Agreement #: 30-087257

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

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

DNR Northwest Region
919 North Township Street
Sedro-Woolley, WA 98284
360-856-3500

Contact Person: Laurie Bergvall
Telephone: 360-856-3500

4. Date checklist prepared: October 5, 2011

5. Agency requesting checklist: Department of Natural Resources

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

a. *Auction Date:* March 28, 2012

b. *Planned contract end date (but may be extended):* September 30, 2013

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:* Treatment of openings greater than 1/4 acre will be assessed after operations.
- b. *Regeneration Method:* Hand plant openings with conifer seedlings, and natural regeneration of western hemlock and red alder.
- c. *Vegetation Management:* Treatment will be assessed in 3-5 years.
- d. *Thinning:* Treatment will be assessed in 10-15 years.

Roads:

The FP-ML and BO-ML roads will be used for future management activities.

Rock Pits and/or Sale: The FP-10 and BO-16 pits may be utilized for future management activities. Other borrow pits may be located as road construction proceeds. Onsite rock may be used for road construction, if rock sources are discovered along haul routes or within the sale area.

Other: None.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- 305 (b) – listed water body in WAU: temp sediment completed TMDL (total maximum daily load):
- Landscape plan:
- Watershed analysis:
- Interdisciplinary team (ID Team) report: Available at DNR Northwest Region office.
- Road design plan: Available at DNR Northwest Region office.
- Wildlife report:
- Geotechnical report: Available at DNR Northwest Region office.
- Other specialist report(s):
- Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
- Rock pit plan: Available at DNR Northwest Region office.
- Other: State Soil Survey, 1992; EIS for Policy for Sustainable Forests, June 2006; Habitat Conservation Plan (HCP) & Environmental Impact Statement, September 1997; HCP Riparian Forest Strategy, July 2006.
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.
10. List any government approvals or permits that will be needed for your proposal, if known.
- HPA Burning permit Shoreline permit Incidental take permit FPA # _____ Other:
11. Give brief, complete description of our 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 specific information on project description.)

a. Complete proposal description:

This proposal is located in a northern spotted owl Nesting, Roosting, and Foraging (NRF) management area, in stands that don't currently meet minimum NRF habitat conditions. The overall objective of this proposal is to accelerate the creation of NRF habitat for the Northern Spotted Owl with a partial cut timber harvest.

Timber Sale Area: Net Proposal Acres: 58.7
 Planned R/W Acres: 6.6
 Corridor Acres: 7.7
 Gross Proposal Acres: 73

Total # of Units: 1 unit
Estimated volume: 1,394 MBF
Type of harvest: Variable Density Thinning for Nesting, Roosting, Foraging (NRF)
Prescription: Take: red alder, bigleaf maple, and understory conifer.

Logging system: Cable and ground-based yarding.
Rock pits: The FP-10 and BO-16 rock pits to be developed on site.
Roads: See Table in A.11.c.
Landings: Road surfaces are available for landings.

- b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.
- Pre-harvest stand description:** This proposal is in the Westside western hemlock vegetation zone, comprised of stands that were established in the late 1920's. Species composition and stand characteristics vary throughout the proposal. The stands were naturally regenerated, and they are composed of a mix of western hemlock, western redcedar and Douglas-fir. There are also pockets of hardwood stands dominated by red alder and bigleaf maple. The quadratic mean diameter is 16 inches. Basal area is 326 square feet per acre and Curtis relative density is 81. Average tree height is 89 feet. Vegetation includes salal, Oregon grape, sword fern, huckleberry, and salmonberry.

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

Type of Activity	How many	Length (feet) (Estimated)	Acres (Subgrade) (Estimated)	Fish Barrier Removals (#)	Steepest Side Slope Road Crosses
Construction ¹		0	N/A		N/A
Reconstruction ²		0		0	N/A
Abandonment ³		0	N/A		N/A
Temporary construction ⁴		4,790	2.1		90
Bridge Install/Replace	0	0			
Culvert Install/Replace (fish)	0				
Culvert Install/Replace (no fish)	27*				

*All culverts to be installed (this includes both typed stream crossings and relief culverts).

12. Location of 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 timber sale map available at DNR region office, and/or color landscape/WAU map on the DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

a. Legal description:
**Sections 5 and 9, Township 32 North, Range 9 East, W.M. Private access will be acquired in Section 5.
 Section 16, Township 32 North, Range 8 East, W.M.**

b. Distance and direction from nearest town (include road names):

Travel 26 miles east of Arlington on Highway 530 to the BO-ML Road. Turn north on the BO-ML Road and drive 4.2 miles to Unit #1.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website <http://www.dnr.wa.gov> under "SEPA Center.")

WAU/ Sub-basin Name	WAU Acres	Proposal Acres
UPPER NF STILLY	32,757.7	73
Sub-basin 1	1,253	73

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> under "SEPA Center" for a broader landscape perspective.)

The following table reports timber harvest activity in the Upper North Fork Stillaguamish WAU within the past seven years on both DNR managed lands and non-DNR lands. The data was compiled from the Department's database on approved forest practice permits. This table is based on the best available information as of October 12, 2011.

Harvest Type	Acres on DNR Land	Acres on Non-DNR Land	Acres on All Lands
Even-Age	0	1	1
Uneven-Age	64	46	110

Future forest management activities in the WAU(s) will include road building, rock pit expansion, silvicultural work, and timber harvesting. Activities occurring on DNR managed land will follow Forest Practices Rules, Habitat Conservation Plan (HCP) guidelines, Riparian Forest Restoration Strategy, and the Policy for Sustainable Forests. All policies are designed to minimize environmental impacts. Future forest management activities on privately managed, non-DNR lands will be subject to Forest Practice Rules.

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).

The Upper North Fork Stillaguamish WAU ranges from the alluvial flood plains of the North Fork Stillaguamish River (beginning at approximately 500 feet elevation), north to mountain peaks of up to 5,011 feet elevation. The transition from terrace to foothill to mountains is fairly rapid with a large portion of the WAU being comprised of hilly and mountainous terrain. Ownership is 78% USFS, 11% DNR, and 10% private. Rainfall ranges from 60-110 inches per year, averaging 83 inches. Timber types vary from hardwoods on the Stillaguamish flood plain, second growth mixed conifer throughout the majority of the WAU, to some old-growth conifer in the National Forest portions of the WAU (primarily at higher elevations). Approximately 27% of the WAU is in the rain-on-snow zone, and 47% of the WAU is in the snow-dominated zone.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s). The proposed activity area fits the description of the WAU with the proposal in mid-elevation range.

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

90%

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 prime farmland. 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 or Soil Complex Name	% Slope	Acres	Mass Wasting Potential	Erosion Potential
8113	TOKUL-OGARTY-ROCK OUTCROP-COMPLEX	25-65	67.1	Medium	Medium
8112	TOKUL-OGARTY-ROCK OUTCROP-COMPLEX	0-25	5.9	Insignificant	Low

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

- 1) *Surface indications:*
Surface indications of unstable soils include pistol-butted trees, hummocky topography, and scarps.
- 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 small inner gorge and bedrock hollow features within the sub-basin. Both exhibit deep seated and shallow landslide characteristics. There are also small deep-seated landslides along river bends of the North Fork Stillaguamish River.
- 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:
Associated management activity:
None known.
- 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:
None known.
- 5) *Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.*
This proposal is a thinning of understory timber, taking about 30% of the existing stand. Over-story will remain. Sale boundary location was adjusted along streams where necessary to ensure inner gorge topography and other areas of potential slope instability were bounded out of the sale.

Roads: A planned road extending past station 39+08 of the SG-27 Road was eliminated by deciding to downhill yard the ground north and above the SG-27 Road. Roads on steeper side slopes will be full bench constructed.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
Approx. acreage new roads: 2.1 Approx. acreage new landings: 1.5 Fill source: Native fill or rock.

Road construction will utilize standard cut and fill methodology, full bench construction with end haul or side cast to obtain grade and alignment. Native soil and rock will be excavated from the road prism and used for fill in the sub-grade and over cross drains and stream crossings. End haul material will be placed in designated waste areas in accordance with the engineer's road plan.

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

Road construction will expose bare soil. Road plan requirements include the use of grass seed or other revegetation methods to protect exposed soils from 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 1 percent of the site will be covered with permanent new rock covered (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.)

All roads will be constructed to meet or exceed Forest Practice standards and the Habitat Conservation Plan guidelines. Appropriate drainage devices including proper culvert size and placement, drain dips, water bars and ditching, will be used as necessary to reduce surface erosion. In areas adjacent to constructed roads where soil disturbances have occurred, straw mulch, grass seed or some other appropriate measure will be used to prevent sediments from being transported. See also engineer's road plan for this timber sale.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust from truck traffic, rock mining, crushing or hauling, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

No emissions are anticipated other than minor amounts of equipment exhaust and road dust created by truck traffic. If slash is burned, it will be burned in adherence to the State's Smoke Management Program.

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

No.

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

If slash is burned, it will be burned in adherence to the State's Smoke Management Program.

3. Water

a. Surface:

- 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.)

- o Downstream water bodies:
North Fork Stillaguamish 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)
Un-named Streams	4	11	100 feet
Un-named Streams	5	13	none

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

- Sale boundary location was adjusted along streams where necessary to ensure inner gorge topography and other areas of potential slope instability were bounded out of the sale.
- No-harvest stream buffers were expanded to include any minor slope instability.
- The NRF thinning prescription will be applied up to the 100 foot RMZ buffers.
- Ditchwater will be diverted through relief culverts prior to stream crossing to keep sediment out of stream. Exposed soils will be revegetated.

2) Will the project require any work over, in, or adjacent to (within 200 feet) to 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 harvest will not occur within 100 feet of any type 4 streams except at road crossings. Ground-based harvest activities will be limited to times of relatively dry soil conditions on slopes under 35%.

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. **No material will be placed in, or dredged from, surface water or wetlands during the course of this proposal.**

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:

When necessary to protect water quality, or as required by HPA, stream flow may be temporarily diverted around construction area during fish passage culvert installations.

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?

The sub-basins contain soils that are susceptible to surface erosion and/or mass wasting according to the state soil survey. The soil survey data for the majority of soils on the harvest site indicate medium potential for mass wasting and a medium potential for surface erosion (See B.1.c above). Slopes in the proposal area are subject to local surface erosion where surface soils are disturbed. Some soil disturbance is anticipated in conjunction with yarding and road construction activities. Surface erosion control/prevention measures discussed in B.1.h. would minimize or prevent delivery to surface waters. There is little potential for eroded material to enter surface waters as a result of activities associated with this proposal.

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:

At the WAU level, there is evidence of accelerated aggradations of channels at the base of hill slopes and channel scouring at the upper reaches of streams. These changes are associated with channelized debris flows. These events have lead to local changes within the channel. There is not any evidence of significant channel movements.

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

No Yes, explain:

The proposed harvest activity should have little effect on stream and water quality.

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

Upper North Fork Stillaguamish WAU has 3 road miles per square mile.

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:

All roads will be constructed to meet or exceed Forest Practice standards. Appropriate drainage devices will be installed as necessary.

- 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 WAU in significant ROS zone.
 Approximate percent of sub-basin(s):
This proposal is partially in SROS. Upper Northfork Stillaguamish WAU Sub-basin 1: Due to the fact that less than 33% of this sub-basin is within the SROS, there is no requirement for DNR to manage for hydrologic maturity in this sub-basin.
- 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?
The percentage of sub-basin 1 of the Upper North Fork Stillaguamish WAU in the significant ROS zone rated as hydrologically mature for all ownerships is 100%.
- 13) Is there evidence of changes to channels associated with peak flows in the WAU or sub-basin(s)?
 No Yes, describe observations:
There are indications of stream channel changes and it is hard to distinguish between peak flows events and/or other debris flows.
- 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 is a partial cut with a small amount of the proposal area being located in the significant rain on snow zone; therefore, it is not anticipated that this proposal will have an impact on peak flows.
- 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:
As a result of the protective measures cited in B.3.a.2, it is unlikely downstream water resources will be affected.
- 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.
This thinning project should have minimal influence on peak flow. The project will retain trees on site (see B.4.b.2), which will assist in the continued infiltration of water during storm events.

b. Ground Water:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.
This proposal should have minimal influence on peak flow. The project will retain trees on site (see B.4.b.2), which will assist in the continued infiltration of water during storm events.
- 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.
Insignificant amounts of oil and lubricants could be inadvertently spilled as a result of heavy equipment use. No lubricants will be disposed of on site.
- 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.
Please refer to B.1.h., B.3.a.1.b., B.3.a.1.c., and B.3.a.2.

c. Water Runoff (including storm water):

- 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.
Runoff from the road surfaces will be collected in ditches and diverted to stable areas on the forest floor through the uses of ditches, culverts, and energy dissipaters. This water should not flow into surface waters.
- 2) Could waste materials enter ground or surface waters? If so, generally describe.
It is not anticipated that waste material will enter ground or surface water as a result of this proposal.
 a) Note protection measures, if any.
Please refer to B.3.c.1.

- d. Proposed measures to reduce or control surface, ground, and runoff water 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.)
Constructed ditches, cross-drain culverts, drain dips, and water bars will be used to control runoff. Straw, grass seeding, or other appropriate methods may be used on any soil exposed on cut and fill slopes during the course of this proposal in order to prevent sediment movement. Roads and landings will be crowned to avoid water accumulation. Falling and yarding away from all seasonal streams will be applied where feasible. All activities associated with this proposal will meet or exceed Forest Practices standards and will follow the Habitat Conservation Plan.

4. Plants

- a. Check or circle 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: sword fern
grass
pasture
crop or grain
wet soil plants: cattail, buttercup, bullrush, skunk cabbage, devil's club, other:
water plants: water lily, celgrass, 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.)
This variable density thinning will remove all red alder, bigleaf maple 6-18 inches dbh, western hemlock 6-14 inches dbh, and Douglas-fir 6-15 inches dbh. Non-prescription trees may be cut within 12 feet of yarding corridors to facilitate operability.
- 1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: <http://www.dnr.wa.gov> under "SEPA Center.")
Timber is similar in species and structural diversity adjacent to the proposal on Federal forest land. Young stands on private land are planted with Douglas-fir with in-growth of western redcedar, western hemlock, red alder and bigleaf maple.
North: USFS - 73 years old.
West: State - 82 year old timber.
South: Private - 22 year old young stands, State timber between 13-83 years old.
East: Private - 22 years old.
- 2) Retention tree plan:
Upland thinning operations will remove Douglas-fir and western hemlock generally 6-14 inches dbh, bigleaf maple 6-18 inches and all red alder. The target residual stands will be variable in nature but will have an average stem count of 118 trees per acre; an average diameter of 19 inches dbh; approximate basal area of 236; and a (Curtis RD) relative density of 54. Small gaps and skips will be present.
- c. List threatened or endangered plant species known to be on or near the site.
None known.
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
Natural regeneration of western hemlock and red alder are expected. Openings created by the thinning that are greater than 1/4 acre will be planted with Douglas- fir and shade tolerant western redcedar conifer seedlings.

5. Animal

- a. Circle or check any birds animals or unique habitats which have been observed on or near the site or are known to be on or near the site:
birds: hawk, heron, eagle, songbirds, pigeon, other:
mammals: deer, bear, elk, beaver, other: coyote
fish: bass, salmon, trout, herring, shellfish, other:
unique habitats: talus slopes, caves, cliffs, oak woodlands, balds, mineral springs
- b. List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).
None.
- c. Is the site part of a migration route? If so, explain.
Pacific flyway Other migration route: Explain if any boxes checked.
All of Washington State is considered part of the Pacific flyway. No impacts are anticipated as a result of this proposal.
- d. Proposed measures to preserve or enhance wildlife, if any:
This proposal is expected to increase the structural diversity of the residual stands by thinning the existing stands, creating openings within the canopy, which will then allow natural regeneration to establish a multi-layer canopy. All existing down logs will be left and all existing snags will be left wherever safety and legal considerations allow.
- 1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.
Species /Habitat: Cliff Protection Measures: None-not significant for wildlife use.

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.
There is minimal hazard due to heavy equipment operations. There is a slight chance of hydraulic or oil spills from the heavy equipment that will be operating on the site. There is a potential fire hazard if operating in moderate fire weather conditions during summer months. The timber sale contract contains language that addresses hazardous materials spill prevention; hazardous material spill containment, control and cleanup; hazardous material release reporting.
- 1) Describe special emergency services that might be required.
Wild land fire suppression services might be required.
 - 2) Proposed measures to reduce or control environmental health hazards, if any:
Safe operation of all equipment will be encouraged. Industrial restrictions/precaution levels regarding forest fire protection will be enforced. The timber purchaser will be required to have fire suppression equipment on site during the restricted fire season while harvest activity is going on.
- b. Noise
- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?
Noise from log trucks and heavy equipment will be present while operating during daylight hours.
 - 2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site during the course of operations. Noise from log hauling will be present along the haul routes during the course of operations.
Noise from road construction and harvest activity will be present in the immediate vicinity of this proposal during the course of operations. Noise from log hauling will be present along the haul routes during the course of operations.
 - 3) Proposed measures to reduce or control noise impacts, if any:
None. Noise associated with harvest and road construction activity will not be audible anywhere but in the immediate vicinity of the proposal. Noise from log hauling is a historic activity in the area and should not be present above customary levels.

8. **Land and Shoreline Use**

- a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)
Forest Management.
- b. Has the site been used for agriculture? If so, describe.
No.
- c. Describe any structures on the site.
Does not apply.
- d. Will any structures be demolished? If so, what?
Does not apply.
- e. What is the current zoning classification of the site?
Industrial Forestry.
- f. What is the current comprehensive plan designation of the site?
Industrial Forestry.
- g. If applicable, what is the current shoreline master program designation of the site?
Does not apply.
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.
Does not apply.
- i. Approximately how many people would reside or work in the completed project?
Does not apply.
- j. Approximately how many people would the completed project displace?
Does not apply.
- 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:
Does not apply.

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:
Does not apply.

10. **Aesthetics**

- a. What is the tallest height of any proposed structure(s), not including antennas, what is the principle 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, developed recreation site, or a scenic vista?*
 No Yes, viewing location:
The proposal is visible from portions along Highway 530 west of Darrington.
 - 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:
Highway 530.
 - 3) *How will this proposal affect any views described in 1) or 2) above?*
This proposal will be consistent with activities of the past in this area. Since this is a partial cut harvest significant visual impacts are not expected.
- 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?
Does not apply.
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
Does not apply.
- c. What existing off-site sources of light or glare may affect your proposal?
Does not apply.
- d. Proposed measures to reduce or control light and glare impacts, if any:
Does not apply.

12. **Recreation**

- a. What designated and informal recreational opportunities are in the immediate vicinity?
Informal recreational opportunities exist in the vicinity. These include hiking, mountain biking, hunting, ORV use, berry picking, and mushroom picking.
- b. Would the proposed project displace any existing recreational uses? If so, describe:
The only displacement would be in the immediate vicinity of the proposal and would only occur during harvest operations. No long term impacts to recreation are foreseen.
- 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 places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
There are no known cultural resources in the immediate vicinity of the proposal area.
- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.
None.
- c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)
None.

14. **Transportation**

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

1) *Is it likely that this proposal will contribute to an existing safety, noise, dust, maintenance, or other transportation impact problem(s)?*
There is no indication that this proposal will contribute to such a problem. As the proposal is located in a rural area, traffic is minimal. All public roads accessing the area are paved, so use of these roads should not contribute to dust or maintenance problems. Log truck traffic is consistent with the existing transportation patterns.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
No.
- c. How many parking spaces would the completed project have? How many would the project eliminate?
Does not apply.
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

1) *How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?*
Apart from log hauling during the course of operations, this proposal will have no impact on the overall transportation system in the surrounding area.

- e. Will the project 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? If known, indicate when peak volumes would occur.
For management purposes, 0.04 trips per day (approximately once a month), for the first 5-10 years after the completion of the proposal.
- g. Proposed measures to reduce or control transportation impacts, if any:
Safe operation of vehicles will be encouraged.

15. Public Services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.
Does not apply.
- b. Proposed measures to reduce or control direct impacts on public services, if any.
Does not apply.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
Does not apply.
- 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.
Does not apply.

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.

Completed by: Ch. Powell MRS II Date: 10/20/11
Title

HCP SUMMARY/CHECKLIST

Name of Proposed Activity: 32 Volunteers VDT Agreement# 30-087257 FPA# T32N R8E, Sec. 16
 Location: T32N R9E (E; W; W.M.) Sec.5, 9 Planning Unit: North Puget Sound
 (Attach Map if one has been prepared for the proposal)

HCP STRATEGY/ ELEMENT	HCP THRESHOLD	CONSIDER IN THESE PLANNING UNITS	STRATEGY DOES NOT APPLY (Element does not exist on proposal NOR within threshold distance)	STRATEGY APPLIES* (Protection, Avoidance, Mitigation measures implemented; OR, thresholds met)
Northern Spotted Owl	Different thresholds and strategies apply depending on Planning Unit. Evaluate proposal for potential impact.	WOE	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Bald Eagle	HCP requires compliance with WAC 222-16-080 and WAC 232-12-292.	WOE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grey Wolf	Proposed activities within 8 miles of a class 1 gray wolf observation within the past 5 years require HCP evaluation.	WOE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Grizzly Bear	The HCP requires compliance with WAC 222-16-080.	WE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Oregon Silverspot Butterfly	Proposed activities within 0.25 miles of an Oregon silverspot butterfly occurrence require HCP evaluation.	WOE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Columbian White-tailed Deer	Evaluate proposal for potential impact.	WOE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Marbled Murrelet	Different thresholds and strategies apply depending on Planning Unit.	WO	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lynx	Evaluate proposal for potential impact.	WE	<input checked="" type="checkbox"/>	<input type="checkbox"/>
RMZ	Proposed activities within or adjacent to streams require HCP evaluation.	WO	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetlands	Proposed activities within or adjacent to wetlands require HCP evaluation.	WO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rain on Snow	Proposed activities in the rain-on-snow zone require HCP evaluation and analysis.	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Slope Stability	Proposed activity must be in compliance with WAC 222-16-050 (1)(d).	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Large, Structurally Unique Trees	5 live trees and 3 snags per acre leave tree requirement for regeneration harvests.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Talus	Proposed activities located within forested talus or within 100 ft. of non-forested talus require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Caves	Proposed activities within 0.25 mi. of a cave require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cliffs	All cliffs greater than 25 feet tall and below 5000 feet elevation require HCP evaluation.	W	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Roads	Roadwork proposed in conjunction with this proposal requires HCP evaluation.	WO	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Oak Woodlands	Evaluate potential for impact.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Balds	Evaluate potential for impact.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Mineral Springs	Proposed activities within 200 feet of a mineral spring require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Common Loon	Proposed activities within 500 feet of a common loon nest require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Harlequin Duck	Proposed activities within 165 feet of a harlequin duck nest require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Northern Goshawk	Proposed activities within 0.55 miles of a northern goshawk nest site located in a NRF management area require HCP evaluation. Outside NRF management areas, trees or snags that are known to contain active goshawk nests will not be harvested.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
California Wolverine	Proposed activities within 0.5 miles of a known active California wolverine den site located in a spotted owl NRF management area require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pacific Fisher	Proposed activities within 0.5 miles of a known active pacific fisher den site located in a spotted owl NRF management area require HCP evaluation.	WO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pileated Woodpecker	Live trees or snags known to be used by pileated woodpeckers for nesting shall not be harvested.	WO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Vaux's Swift	Live trees or snags known to be used by Vaux's swifts as night roosts shall not be harvested.	WO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bats	Live trees or snags known to be used by myotis bat species as communal roosts or maternity colonies shall not be harvested.	WO	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Western Pond Turtle	Proposed activities within 0.25 miles of a known occurrence of a western pond turtle require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Purple Martin	Trees or snags known to contain active purple martin nests will not be harvested.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Western Bluebird	Trees or snags known to contain active western bluebird nests will not be harvested.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sandhill Crane	Proposed activities within 0.25 miles of a known active nesting area of a sandhill crane require HCP evaluation.	W	<input checked="" type="checkbox"/>	<input type="checkbox"/>

W=Westside HCP Planning Units O=OESF E=Eastside HCP Planning Units

SIGNATURES

Proponent Lance Cochran Title NRS 1 Date 10/20/11

Assistant Manager, State Lands *De Bull* Date 12/2/11

* It is assumed that it can be demonstrated that the activity is in compliance with the Habitat Conservation Plan through both an audit function and appropriate documentation. **Forest Practices requires documentation describing the HCP protection measures implemented be attached to the Forest Practices Application.**