

*STATE FOREST LAND*  
**SEPA ENVIRONMENTAL CHECKLIST**

***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants:***

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

*Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at <http://www.dnr.wa.gov/sepa>. These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

***Instructions for Lead Agencies:***

Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

***Use of checklist for nonproject proposals:***

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

**A. BACKGROUND**

1. Name of proposed project, if applicable:

*Timber Sale Name:* **ON THE LINE**  
*Agreement #* **30-102018**

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

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

**Cody Pagel**  
**Department of Natural Resources**  
**411 Tillicum Lane**  
**Forks, WA 98331**  
**(360) 374-2800**

4. Date checklist prepared: **02/22/2021**

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

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

a. *Auction Date:*  
**08/25/2021**

b. *Planned contract end date (but may be extended):*  
**10/31/2023**

c. *Phasing:*  
**None**

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

*No, go to question 8.*

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

a. *Site Preparation:*

**For units 1-5: Assessment for treatment will occur after completion of harvest. Site preparation including a chemical herbicide application, may be used to ensure that planting is successful at acceptable levels to meet or exceed Forest Practice standards.**

b. *Regeneration Method:*

**Units 1-5 will be hand planted with native species seedlings following harvest.**

c. *Vegetation Management:*

**A continued assessment of units to determine future vegetation management strategy will be required. Treatments will be based on vegetative competition and will ensure a free-to-grow status that complies with Forest Practice standards.**

*d. Other:*

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

**Biomass not removed during harvest may be piled near roads and landings. After the project is complete, any remaining piles may be offered for public firewood cutting, burned, or sold.**

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

303 (d) – listed water body in WAU: Lyre River

temp

sediment

completed TMDL (total maximum daily load)

Landscape plan:

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: **On The Line Timber Sale Road Plan 3/2/2021**

Wildlife report: **Sirloin Rock Pit Memo, Cave Memo**

Geotechnical report:

Other specialist report(s):

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

Rock pit plan: **Sirloin Pit and Mammoth Pit**

Other: **Geologist Field Memo, WMZ Memo, WA DNR West Side Old Growth Assessment**

**Referenced documents may be obtained at the Olympic Region office during the SEPA review 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.

**None known.**

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

FPA # \_\_\_\_\_

FPHP

Board of Natural Resources Approval

Burning permit

Shoreline permit

Existing HPA

Other:

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects

of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

*a. Complete proposal description:*

**The On The Line timber sale, agreement #30-102018, is located approximately 6 miles west of Joyce, WA. off the PA-S-1000 and PA-S-1100 road system. It is a 5-unit proposal with an associated right-of-way located in the Twin Rivers-Deep Creek and Lake Crescent Watershed Analysis Units. It encompasses approximately 158 gross acres with a cruised sale volume of 4,944 mbf. Within the proposal area, there are 32 acres of Riparian Management Zones and unstable slopes, 10 acres of wetlands and 22 acres Wetland Management Zones. There are approximately 6 acres of Leave Tree Areas (LTAs), and 1 acre of existing roads. The net harvest acreage is 87 acres. Approximately 6,355 feet of new road construction, 2,605 feet of reconstruction, and 45,800 feet of pre-haul maintenance are proposed to meet access needs into the sale area. The designated rock source will be Sirloin Pit, Mammoth Pit and commercial sources.**

Unit	Gross Proposal (Acres)	Riparian Management Zones/Unstable Slope Protection (Acres)	Wetland Management Zones (Acres)	Wetland (Acres)	Existing Roads (Acres)	Leave Tree Area (Acres)	Net Harvest (Acres)
1	95	26	2	2	0	5	62
2	6	4	1	1	0	0	1
3	46	20	6	6	1	1	18
4	3	1	1	1	0	0	1
5	7	3	0	0	0	0	4
6	1	0	0	0	0	0	1
<b>Totals</b>	<b>158</b>	<b>32</b>	<b>22</b>	<b>10</b>	<b>1</b>	<b>6</b>	<b>87</b>

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

***Pre-harvest Stand Description:***

Unit	Origin Date	Major Timber Species	MBF/acre	Slope (%)	Elevation Range (ft)
1	1934,1946	Douglas Fir	64.5	40	410-740
2	1934, 1964	Red Alder	3	10	740-750
3	1934,1937	Douglas Fir, Red Cedar, Sitka Spruce	38.5	20	630-680
4	1937	Douglas Fir	35	45	670-720
5	1938	Douglas Fir, Red Cedar, Red Alder	43.9	80	1040-1410
6	1934	Douglas Fir, Red Cedar, Western Hemlock	18	10	730-740

***Type of Harvest:***

Unit	Harvest Type (VDT/VRH/etc)	Volume to be Harvested (mbf)	Volume to be Harvested (%)	Individual Leave Trees	Clumped Leave Trees	Total Leave Trees
1	VRH	4000	95	94	427	521
2	VRH	3	95	4	7	11
3	VRH	694	95	60	86	146
4	VRH	35	95	8	0	8
5	VRH	193	95	36	0	36
6	Right-of-Way	18	100	0	0	0

***Overall Unit Objectives:***

The overall objectives for this sale includes the production of saw logs and pulp material to generate 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 leave tree retention strategy and riparian management zones. These stands will be managed to protect site productivity and maintain the integrity and water quality of adjacent streams.

**Ecological-** Promote diverse forest structure across the landscape while preserving ecological integrity and function.

**Economic-** Generate revenue for the State trust beneficiaries.

**Statute-** Comply with the DNR's HCP, the Policy for Sustainable Forests, and Forest Practice Rules and Regulations.

**Social-** Accommodate dispersed informal recreational activities on DNR managed lands and identify and protect historical and archaeological sites consistent with state/federal law.

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

Type of Activity	How Many	Length (feet) (Estimated)	Acres (Estimated)	Fish Barrier Removals (#)
Construction		6,355	3	0
Reconstruction		2,605		0
Maintenance		45,800		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Stream Culvert Install/Replace (fish)	0			0
Stream Culvert Install/Replace (no fish)	3			
Cross-Drain Install/Replace	27			

**Rock Pits: The designated rock source will be Sirloin Pit, Mammoth Pit or commercial source.**

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist (See “WAU Map(s)” and “Timber Harvest Unit Adjacency Map(s)” as referenced on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic “Current SEPA Project Actions - Timber Sales.” Proposal documents also available for review at the DNR Region Office.)

- a. Legal description: T30-0N R9-0W S06  
T30-0N R9-0W S07 (Unit 5 and Mammoth Pit)  
T30-0N R9-0W S10 (Sirloin Pit)  
T31-0N R9-0W S31  
T31-0N R9-0W S32

b. Distance and direction from nearest town: 6 miles west of Joyce, WA.

13. Cumulative Effects

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

**This proposal is located within the Twin Rivers-Deep Creek and Lake Crescent WAUs. Ownership across the WAUs includes large industrial forests, private land owners, federal lands, and Department of Natural Resources managed forests. Forested stands within the WAUs appear to be primarily second and third growth stands with some potential old growth stands, primarily on federal land. Additionally, designated Northern Spotted Owl**

**and Marbled Murrelet habitat reside within both WAUs. The number of forest practice activities shown on the WAU maps, along with observations within the WAUs indicate that the WAUs are intensively managed for timber production within the uplands.**

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

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

- **Deferring harvest from unstable slopes.**
- **Retaining Riparian Management Zones (RMZs) on typed waters. This includes a variable width interior core buffer on type 1, 2, 3, 4, unstable type 5 streams. Equipment limitation zones are required on all streams.**
- **Retaining a minimum of 8 leave tree per acre dispersed and clumped throughout VRH units.**
- **Designing, constructing, and maintaining a road system to minimize potential adverse effects on the environment.**
- **Implementing procedures pertaining to threatened and endangered species.**

**The HCP strategies for Northern 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 and age class diversity of forests across the landscape. In addition, road construction and maintenance standards will improve the quality of the existing road network and reduce impacts on the environment.**

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

**The On The Line timber sale was designed under the guidelines of the DNR's Habitat Conservation Plan (HCP). Implementation of policy and procedure relating to riparian and wetland management zones establish that the DNR Proprietary HCP Substitution Agreement for Aquatic Resources (2008) will be followed. The agreement states that no road-building shall occur within wetland buffers without mitigation. Roads constructed within wetland buffers require on-site and in-kind equal acreage mitigation located adjacent to or as near as possible to the remaining or original wetland location. Right-of-way clearing for construction of PA-S-1040 will infringe upon the WMZ associated with the wetland complex associated with units 1 & 2. As mitigation for the infringement, the buffer was widened along its southwestern edge. There will be no loss of function to the WMZ.**

**The Sirloin Rock Pit, which is situated within a marbled murrelet occupied site buffer, will be expanded as part of this proposal. Expanding an existing rock pit within an occupied**

site buffer is an allowable activity per the Marbled Murrelet Long Term Conservation Strategy, as long as expansion activities occur outside of the marbled murrelet breeding season or adhere to the limited daily operational period if they must occur within the breeding season. If pit expansion must occur between April 1<sup>st</sup> to September 23<sup>rd</sup>, work will be limited from two hours after sunrise to two hours before sunset. In compliance with our habitat conservation plan, no other special protections are required in regards to the marbled murrelet.

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

**It is not likely potential impacts from this proposal will contribute to the environmental concerns listed in question A-13-a. DNR’s HCP, the Policy for Sustainable Forests, and the Forest Practice rules substantially helps the Department to mitigate for cumulative effects related to management activities. These strategies have been incorporated in this proposal.**

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

WAU Name	Total WAU Acres	DNR-managed WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven-aged harvest in the future	Acres of proposed harvest on non-DNR-managed lands currently under active FP permits
TWIN RIVERS-DEEP CREEK	74038	8413	590	344	238
LAKE CRESCENT	51169	7921	956	96	270

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

**B. ENVIRONMENTAL ELEMENTS**

**1. Earth**

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

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

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

**WAU:** TWIN RIVERS-DEEP CREEK  
**WAU Acres:** 74038  
**Elevation Range:** 0 - 3720 ft.



<b>Mean Elevation:</b>	465 ft.
<b>Average Precipitation:</b>	61 in./year
<b>Primary Forest Vegetation Zone:</b>	Western Hemlock
<b>WAU:</b>	LAKE CRESCENT
<b>WAU Acres:</b>	51169
<b>Elevation Range:</b>	0 - 5549 ft.
<b>Mean Elevation:</b>	1564 ft.
<b>Average Precipitation:</b>	74 in./year
<b>Primary Forest Vegetation Zone:</b>	Western Hemlock

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

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

- b. What is the steepest slope on the site (approximate percent slope)?  
**80%**
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

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

State Soil Survey #	Soil Texture
7109	GRAVELLY LOAM
4347	V.GRAVELLY SANDY LOAM
0494	SLT.CLY.LOAM
8049	V.GRAVELLY SANDY LOAM
4836	MUCK

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
  - No, go to question B-1-e.
  - Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.

**Potentially unstable features in around this sale include Dormant-indistinct bedrock deep-seated landslides, bedrock hollows, inner gorges and talus field.**

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

No  Yes, describe the proposed activities:

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

**Potentially unstable features in around this sale include Dormant-indistinct bedrock deep-seated landslides, bedrock hollows, and inner gorges have all been excluded. The talus field has portions that are included within the sale but a Licensed State Lands Geologist has reviewed the area and determined that harvest will not cause and impact.**

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:* 3

*Approx. acreage new landings:* 2

*Fill Source:* Sirloin Pit, Mammoth Pit and commercial rock sources.

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

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

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

**Approximately 2% of the site will remain as gravel roads.**

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

**The hauling of forest products will not be permitted on state roads from November 1st to April 30th unless authorized in writing by the Contract Administrator. 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 floors and/or into stable natural drainages. Best management practices will be utilized as necessary in proximity to live waters. 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.

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

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

**None known.**

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

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

## 3. Water

- a. Surface Water:

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

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

*a. Downstream water bodies:*

**Streams in proximity to the sale area are unnamed tributaries to Murdock Creek, Susie Creek, Sadie Creek, Lyre River, and East Twin River, all of which drain to the Strait of Juan de Fuca.**

*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)
Wetland	Forested >1 acre	3	165'-172'
Wetland	Forested <1 acre > .25 acre	2	100'
Stream	3	6	165'-172'
Stream	4	4	105-115'
Stream	5	15	0'-50' and 30' equipment limitation zone

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

**There are six type-3 streams associated with this proposal. These streams are protected with a 165-172-foot full site index buffer based on the Douglas-fir site potential height at age 100. No harvest will occur within these buffers.**

**There are four type-4 streams associated with this project. They are protected with a 100-foot no-harvest buffer.**

**There are fifteen type-5 streams associated with this project. They are protected with leave tree areas, associated wetland buffers, or a 30-foot equipment limitation zone. Unstable portions associated with type-5 streams have been removed from harvest via timber sale boundary tags, pink flashers and flagging, and blue paint. Additionally, the type-5 stream associated with Unit 4 currently is being "pirated" into the PA-S-1050 ditch. A culvert will be installed to re-establish its flow back to its natural drainage path within Unit 4.**

**There are three wetlands greater than one acre in size associated with this proposal. They are protected with 165-172-foot full site index buffer based on the Douglas-fir site potential height at age 100.**

**There are two wetlands less than one acre and greater than one-quarter acre associated with this proposal. They are protected with 100-foot no harvest buffer.**

**Right-of-way clearing for the construction of the PA-S-1040 (Unit 6) will infringe upon the WMZs associated with two of the wetland between units 1 & 2. As mitigation for the infringement, the buffer was widened along its southern edge. There will be no loss of function to the WMZs. Consultation was conducted with a qualified expert and a memo was provided.**

**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 and replacing culverts that will divert storm water onto stable forest floor. These actions will minimize the potential for delivery of sediment to streams. Soils exposed during road construction and re-construction activities will be protected from erosion by**

**grass seeding, mulching with hay, and seasonal restrictions.**

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No

Yes (See RMZ/WMZ table above and timber sale maps which are available on the DNR website: <http://www.dnr.wa.gov/sepa>. Timber sale maps are also available at the DNR region office.)

*Description (include culverts):*

**Timber felling, bucking, yarding, and road maintenance and construction will occur within 200 feet of all the described waters above. All activities will be done in accordance with the DNR's HCP and Forest Practice rules. Timber harvest will occur within 200' of typed waters, but no closer than described above in questions B.3.a.1.b and B.3.a.1.c. Culvert work listed in A.11.C will occur within 200 feet of the described waters above.**

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

**None.**

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

No

Yes, description:

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

No

Yes, describe activity and location:

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

**It is not likely that any waste materials will be discharged into the surface water(s). However, minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the adjacent surface water(s) as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site.**

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

No

Yes, describe:

**Soils and terrain susceptible to surface erosion are generally located on slopes steeper than 70%. The potential for eroded material to enter surface water is minimized due to the erosion control measures and operational procedures outlined in B-1-h.**

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

**TWIN RIVERS-DEEP CREEK = 1.8 (mi./sq. mi.), LAKE CRESCENT = 1.4 (mi./sq. mi.)**

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

No       Yes, describe:

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

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

No       Yes, describe observations:

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

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

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

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

No       Yes, describe the water resource(s):

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

No       Yes, describe possible impacts:

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

**Restricting timber harvest and road maintenance activities during peak rain events will allow for increased resource protection. Road development and maintenance standards will minimize impacts by using cross-drains and ditch-outs to release ditch water onto stable forest floors where flow energy can dissipate prior to reach stream channels. Maintaining RMZs on streams will aid bank stability, hydrologic functions, and provide recruitment of LWD. See B.1.d.2, B.1.h, and B.3.a.1 for additional details on protections measures within this proposal.**

b. Ground Water:

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

**No water will be withdrawn or discharged.**

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

**Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site. All spills are required to be contained and cleaned-up. This proposal is expected to have no impact on ground water.**

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

No       Yes, describe:

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

No       Yes, describe possible impacts:

*Note protection measures, if any:*

c. Water runoff (including stormwater):

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

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

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

No       Yes, describe:

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

*Note protection measures, if any:*

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

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

**No changes to drainage patterns are expected.**

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

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

#### 4. Plants

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

Deciduous tree:

Alder  Aspen  Birch  Cottonwood  Maple  Western Larch

Other:



- Evergreen tree:
    - Douglas-Fir*       *Engelmann Spruce*     *Grand Fir*             *Lodgepole Pine*
    - Mountain Hemlock*    *Noble Fir*             *Pacific Silver Fir*    *Ponderosa Pine*
    - Sitka Spruce*             *Western Hemlock*     *Western Redcedar*    *Yellow Cedar*
    - Other:
  - Shrubs:
    - Huckleberry*    *Rhododendron*    *Salmonberry*    *Salal*
    - Other:
  - Ferns*
  - Grass
  - Pasture
  - Crop or Grain
    - Orchards*    *Vineyard*    *Other Permanent Crops*
  - Wet Soil Plants:
    - Bullrush*    *Buttercup*    *Cattail*    *Devil's Club*    *Skunk Cabbage*
    - Other:
  - Water plants:
    - Eelgrass*    *Milfoil*    *Water Lily*
    - Other:
  - Other types of vegetation:
  - Plant communities of concern:*
- b. What kind and amount of vegetation will be removed or altered? (*Also see answers to questions A-11-a, A-11-b and B-3-a-2.*)

**Approximately 4,944 MBF of timber 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 "WAU Map(s)" and "Timber Harvest Unit Adjacency Map(s)" on the DNR website: <http://www.dnr.wa.gov/sepa>. Click on the DNR region of this proposal under the Topic "Current SEPA Project Actions - Timber Sales." Proposal documents also available for review at the DNR Region Office.)*

**Unit 1 is bordered to the north by 27 year-old State timber, to the west by 28 year-old State timber, to the south by 56 year-old State timber/utility Right-of-Way, and to the west by 86 year-old State timber.**

**Unit 2 is bordered to the north, east and west by 86 year-old State timber and to the south by a Utility Right-of-Way.**

**Unit 3 is bordered to the north by 86 year-old State timber, to the east by 87 year-old State timber, to the south and west by 83 year-old State timber.**

**Unit 4 is completely surrounded by 83 year-old State timber.**

**Unit 5 is completely surrounded by 82 year-old State timber.**

**Unit 6 is completely bordered by 86 year-old State timber.**

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

**None found in corporate database.**

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

**Measures include retaining existing stands within bounded out areas throughout the proposal. Also retaining individual leave trees and leave tree clumps within harvest units, including structurally unique and/or of the largest diameter class. Specifically, trees larger than 60 inches in diameter or greater will remain on-site. Replanting with native conifer species in the VRH units will also occur following harvest. Other native conifer and deciduous species may regenerate naturally on-site.**

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

**Scotch broom, Himalayan blackberry, St. Johnswort, and Holly**

## 5. Animals

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

birds:

eagle  hawk  heron  owls  songbirds

other:

mammals:

bear  beaver  coyote  cougar  deer  elk

other:

fish:

bass  herring  salmon  shellfish  trout

other:

*amphibians/reptiles:*

frog  lizard  salamander  snake  turtle

other:

*unique habitats:*

balds  caves  cliffs  mineral springs  oak woodlands  talus slopes

other:

**Eagles were observed in flight, no nests are known within 660' of the sale area**

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

TSU Number	Common Name	Federal Listing Status	State Listing Status
ON THE LINE U5	Northern Spotted Owl	Threatened	Endangered
ON THE LINE U4	Marbled murrelet	Threatened	Endangered

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

*Pacific flyway*       *Other migration route:*

*Explain:*

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

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

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

Species /Habitat: **Wetland and Riparian**

Protection Measures: **Buffers have been applied to all Type 3, 4 and unstable 5 waters, and Forested Wetlands, as well as equipment limitation zones on all typed waters and Forested wetlands, as described in B.3.a.1)b). Buffers are designed to protect the unstable portions of the stream banks, protect waters and wetlands from siltation, and decrease water temperatures 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.**

**Right-of-way clearing for the construction of the PA-S-1040 (Unit 6) will infringe upon the WMZs associated with two of the wetland between units 1 & 2. “On site and in kind” mitigation has been identified to compensate for the loss of buffer acreage and function, as required by DNR’s HCP for any new road construction in WMZs. See B.3.a.1)c) and the memo provided by the Region Biologist for further details.**

Species /Habitat: **Upland**

Protection Measures: **Harvest will not occur in areas with moderate or high risk of slope failure or delivery to a public resource. Wind-firm, dominant, and structurally unique trees were targeted for retention. A minimum of eight trees per acre were retained individually and in clumps to provide habitat structures for wildlife species within VRH units. Timber removal will temporarily create open environments that provide valuable foraging and potential habitat for a variety of wildlife species associated with early-stage forest environments.**

Species /Habitat: **Marbled Murrelet**

Protection Measures: **The proposal does not occur within marbled murrelet special habitat areas, occupied sites, or marbled murrelet habitat (P-stage) that has been designated for metering. Previously modeled long term forest cover (LTFC) is being updated as a result of field verification and no harvest will occur within verified LTFC.**

**The Sirloin Rock Pit, which is situated within a marbled murrelet occupied site buffer, will be expanded as part of this proposal. Expanding an existing rock pit within an occupied site buffer is an allowable activity per the Marbled Murrelet Long Term Conservation Strategy, as long as expansion activities occur outside of the marbled murrelet breeding season or adhere to the limited daily operational period if they must occur within the breeding season. If pit expansion must occur between April 1<sup>st</sup> to September 23<sup>rd</sup>, work will be limited from two hours after sunrise to two hours before sunset. In compliance with our habitat conservation plan, no other special protections are required in regards to the marbled murrelet. Refer to the memo provided by the Region Biologist for further details.**

Species /Habitat: **Northern Spotted Owl**

Protection Measures: **Harvest units fall within Boundary Creek, Fairholm, and East Twin River status one owl circles. No activity will occur in Spotted owl best 70 acres.**

Species /Habitat: **Caves**

Protection Measures: **A rocky feature in the vicinity of Unit 5 contains several interstitial spaces that function as shallow caves. The Region Biologist examined the caves and classified them as “low value” due to their simple structure and lack of water. Rodent use was the only wildlife evidence noted, though the caves are potentially suitable as bat roosts or den sites for other mammals. The rocky feature containing the caves has been excluded from the harvest area. Please refer to the memo prepared by the Region Biologist for further details.**

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

**None known**

## **6. Energy and natural resources**

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

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

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

**No.**

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

**None.**

## **7. Environmental health**

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

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

**None known.**

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

**None known.**

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

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

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

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

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

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

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

b. Noise

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

**None.**

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

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

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

**None.**

**8. Land and shoreline use**

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

**Current use of site and adjacent land types: Commercial Forestry**

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

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

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

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

**No.**

- c. Describe any structures on the site.

**None.**

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

**No.**

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

**Commercial Forest**

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

**Commercial Forest**

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

**Not applicable.**

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

**No.**

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

**None.**

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

**None.**

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

**Does not apply.**

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

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

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

**None.**

## **9. Housing**

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

**Does not apply.**

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

**Does not apply.**

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

**None.**

## 10. Aesthetics

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

**Does not apply.**

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

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

No       Yes, name of the location, transportation route or scenic corridor:  
**Sadie Creek Trail System and Hwy 112.**

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

**Portions of timber harvest and road construction will be visible from the Sadie Creek trail system and Hwy 112. There will be a slight increase of traffic from these activities on roads utilized for recreational purposes.**

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

**The VRH portions of the timber sale will be replanted with native species following harvest. Leave trees will provide visual breaks and distribution of harvest units within the landscape will reduce the aesthetic impact of the view shed.**

## 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?

**There are formal recreation in the form of the Sadie Creek trail system and the Sadie Creek campground in the immediate vicinity.**

**There is also dispersed informal recreation in the form of hiking, hunting, fishing, berry picking, and sightseeing. Logging road are also used for ATV/motorcycles, mountain bike riding, and horseback riding.**

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

**There may be some disruptions to recreational use during periods of harvesting and hauling. Specifically, hauling on the PA-S-1200 which is also utilized for access to both the Sadie Creek campground and Sadie Creek trail system. All other existing roads are utilized as part of the Sadie Creek trail system.**

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

**Measures will include posting signs notifying users of the ongoing timber sale activities including cutting, yarding and hauling.**

## **13. Historic and cultural preservation**

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

**No**

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material

evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

**No evidence of Tribal or historic use or occupation has been identified within the timber harvest boundaries.**

**A State Lands Cultural Resource Technician and Archaeologist have both been consulted. Additionally, the Elwha , Jamestown S'klallam, and Makah tribes were also contacted.**

- 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 Historical Preservation (DAHP) database, historic USGS map on available GIS layer, and Land Resource Manager (LRM) Special Concerns Report was used to identify cultural resources in the proposed project area. Field review was done by field staff, a Cultural Resource Technician, and a State Lands Archaeologist. Additionally, the Elwha, Jamestown S'klallam, and Makah tribes were contacted.**

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

**The sale has been designed to avoid impacts to any cultural or historically significant resources.**

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

#### **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.

**Hwy 112**

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

**No. Nearest transit spot is approximately 6 miles away.**

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

**None.**

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

**Yes, see A-11-c. These road improvements will occur on Washington State DNR roads.**

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

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

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

**No.**

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

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

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

**No.**

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

**None.**

## **15. Public services**

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

**No.**

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

**None.**

16. **Utilities**

a. Check utilities currently available at the site:

- electricity     natural gas     water     refuse service     telephone     sanitary sewer  
 septic system     other:

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: *Cody Pagel*

Name of signee **Cody Pagel**

Position and Agency/Organization **Unit Coordinator**

Date Submitted: 4/23/2021