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: **BLUEGRASS**
   Agreement # **30-100058**

2. Name of applicant: **Washington 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: Tim Stapleton

4. Date checklist prepared: **11/18/2019**

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

6. Proposed timing or schedule (including phasing, if applicable):
   a. *Auction Date:*
   08/26/2020

   b. *Planned contract end date (but may be extended):*
   03/31/2023

   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:*
   Roads: The LF-ML, SF-ML, SF-03, SF-10, SF-14, and SF-15 roads will be used for future management activities.

   Rock Pits: The 7 UPP, and Hoglund gravel pits will be used for future management activities.

   a. Site Preparation: **Harvest areas may be treated with herbicides prior to planting. Assessment for treatment will occur after completion of harvest.**

   b. Regeneration Method: **Hand plant conifer seedlings within two years after completion of harvest. The reforestation method is tentatively scheduled for planting seedlings, with the possibility of future FPA amendment to allow for natural regeneration. An onsite survey will be conducted to determine the suitability for natural regeneration.**

c. Vegetation Management: **Treatment to be assessed in 3-5 years. Competing vegetation may be treated by manual cutting and/or herbicide. Thinning treatment to be assessed in 10 to 15 years for pre-commercial thinning. A commercial thinning is possible in 25 to 45 years.**

d. Other: **Road maintenance assessments will be conducted and may include periodic ditch and culvert cleanout, and grading as necessary. Onsite rock may be used for road construction, if rock sources are discovered along haul routes or within the sale area.**

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*:

☐ *temp*

☐ *sediment*

☒ *completed TMDL (total maximum daily load)* **French Boulder WAU: 2 Segments of N Fork Stillaguamish River and 1 segment of Squire Creek.**

☐ *Landscape plan:*

☐ *Watershed analysis:*

☐ *Interdisciplinary team (ID Team) report:*

☒ *Road design plan:* **dated 11/15/2019**

☒ *Wildlife report:* **dated 12/06/2019**

☐ *Geotechnical report:*

☐ *Appendix D. slope stability informational form:*

☐ *Other specialist report(s):*

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

☒ *Rock pit plan:*

☒ *Other:* **State Soil Survey, 1992; Policy for Sustainable Forests, December 2006; Final Habitat Conservation Plan (HCP) & Environment Impact Statement, September 1997; Riparian Forest Restoration Strategy, April 2006.**

Referenced documents may be obtained at the region office responsible for this proposal.

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 proposal is a variable retention harvest (VRH), expected to produce a total of 5,684 MBF of timber. All RMZ areas will be non-harvest, as they already meet DNR riparian desired future conditions (RDFC) targets, and have been previously thinned. All harvest is on State managed trust lands. The harvest removals may occur via ground-based, cable assisted and cable yarding systems. The proposal is surrounded by State managed land and small private ownerships. Portions of the state land in this area are bisected by utility right-of-ways and highway 530.

Approximately 220 acres were considered for this proposal; this has been reduced to approximately 153.7 net acres due to riparian management zones, wetland management zones, wildlife management guidelines, channel migration zones, trespass from adjacent landowners, and patches of old growth remnants retained under DNR retention tree policy. All of this proposal is in either the French Boulder WAU or the Middle Sauk WAU. The sale is not in rain-on-snow.

Rock pit will be utilized with this proposal. Rock pit name is listed in A.7.
Road work will be completed as part of this proposal, as listed in A.11.c

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:
The pre-harvest condition is a second-growth stand, originating between 1930 and 1956, via natural regeneration methods. Unit 1 was thinned in 2015 as a part of the 7 Upp VDT, and Units 2 and 3 were thinned in 2008 as a part of the Sir Scotty VDT. The stand is a mix of Douglas-fir, and western hemlock with some western redcedar and a few western white pine intermixed. Red alder and bigleaf maple are also present in a couple of areas within the stands. Site productivity is mostly site II ground, with timber growth being lower on drier upper terraces with site III ground, in Unit 3. Unit 2 contains scattered old growth remnants, left from previous harvest and subsequent fire activity, and likely due to poor growth of these individuals on the edge of the adjacent drier terrace.

Overall Unit Objectives:
- **The primary objective for this FMU is to generate revenue for trust lands as well as to maximize profits and minimize costs.**
- **Protect water quality, maintain site productivity, minimize impact to soils and maintain/restore wildlife habitat.**
- **This proposal meets or exceeds all guidelines set forth in the DNR Habitat Conservation Plan (HCP), Policy for Sustainable Forests, and Forest Practices Rules and Regulations.**

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*		**3,375**	**1.55**	
Reconstruction		**0**		**0**
Pre-Haul Maintenance		**15,865**		
Abandonment		**408**	**0.19**	**0**
Temporary construction		**5,006**	**2.30**	
Bridge Install/Replace	**0**	**0**		
Culvert Install/Replace (fish)	**0**			
Culvert Install/Replace (no fish)	**0**			

***Of the length listed for Construction in the above table, a portion(s) of the length listed may or may not be built as forest road that is constructed and intended for use during the life of an approved forest practices application/notification.**

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:*
Includes unit harvest area, rock pits and road work.
Sections 10 and 11 of Township 32, Range 8 East, W.M.
Sections 15 and 16 of Township 32, Range 9 East, W.M.

b. Distance and direction from nearest town (see the driving map listed on the DNR website for further information): **The proposal is located approximately 1 mile west of Darrington, 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).*
Small shallow slope failures are known to exist at higher elevations in the WAUs, associated with over-steepened slopes and inner gorge stream channels. Dynamic water courses and streams with broad river valleys are common in lower elevations of the WAUs. The potential for natural delivery of sediment to typed waters is present, especially during peak flow events and as water courses erode or avulse. The marbled murrelet has the potential to use suitable habitat within the WAU, and occupied sites are known. There are also known salmon bearing streams, areas set aside for the northern spotted owl and areas of bald eagle use, within the WAUs associated with this proposal

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

Federally listed threatened and endangered species, and species that are in danger of being listed in the future, as well as uncommon habitat types found on forest lands in western Washington. HCP riparian buffers intended to protect salmon and trout habitat were applied to this proposal, and will be applied to all future sales in the vicinity. The HCP identifies large, structurally unique trees and snags as uncommon habitats that need to be protected. An average of 8 trees per acre will be left in the proposed harvest area. These trees will function for future snag and large structurally unique tree recruitment.

c. *Briefly describe any specific mitigation measures proposed, in addition to the mitigation provided by plans and programs listed under question A-13-b.*
• Retaining Riparian Management Zones (RMZs) to protect water quality, stream bank integrity, stream temperatures, and provide down woody debris. RMZs will develop older riparian forest characteristics that, in combination with other strategies, will help support older riparian forest dependent wildlife and aquatic species.
• Evaluating the proposal for potential slope instability, and excluding areas that exhibited indicators of potentially unstable slopes.
• Retaining a minimum of 8 trees per acre (greater than 10 inches diameter at breast height) clumped and scattered throughout the units. This strategy will provide legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination, these features will provide elements of older forest habitat characteristics within the new plantation.
• Analyzing, designing, and constructing roads to minimize effects on the environment.
• No tailholds will be allowed within and no timber will be yarded across any Forest Practices rule-identified landforms.
• Cross-drains and ditch-outs will be utilized to minimize the potential for mass wasting and slope failures associated with poor drainage by dispersing water onto stable forest floor.
• Skid trails may be water barred post harvesting activities, if necessary to avoid concentrating surface water runoff.

d. Based on the answers in questions A-13-a through A-13-c, is it likely potential impacts from this proposal could contribute to any environmental concerns listed in question A-13-a?
No.

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

WAU Name	Total WAU Acres	DNR-owned WAU Acres	Acres of DNR proposed even-aged harvest in the future	Acres of DNR proposed uneven-aged harvest in the future	Acres of proposed harvest on non-DNR-managed lands currently under active FP permits
FRENCH-BOULDER	45,134	6,769	163	1,141	193
MIDDLE SAUK	24,437	7,051	205	67	177

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:	FRENCH-BOULDER
WAU Acres:	45,134
Elevation Range:	282 - 6840 ft.
Mean Elevation:	2,333 ft.
Average Precipitation:	83 in./year
Primary Forest Vegetation Zone:	Western Hemlock

WAU:	MIDDLE SAUK
WAU Acres:	24,437
Elevation Range:	367 - 5710 ft.
Mean Elevation:	1,352 ft.
Average Precipitation:	76 in./year
Primary Forest Vegetation Zone:	Western Hemlock

2. *Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).*
This proposal is a representative example of the WAUs at the same elevation and aspect.

b. What is the steepest slope on the site (approximate percent slope)?
70%

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

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

State Soil Survey #	Soil Texture
6206	F.SANDY.LOAM
9136	GRAVELLY LOAM
4344	F.SANDY.LOAM/LOAMY SAND
5233	F.SANDY.LOAM/SILT LOAM
1997	GRAVELLY SANDY LOAM

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

☐ *No, go to question B-1-e.*
☒ *Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.*
There are two CMZ erosion hazard areas that are near the proposal. One is located along French Creek, and the other is located along Squire Creek.

The statewide landslide inventory (LSI) screening tool indicates no presence of polygons mapped as landslides within the proposed harvest unit boundaries. This landslide database is maintained by the Washington State Department of Natural Resources, Forest Practices Division. The LSI includes landslides mapped during many different projects including large-scale geologic mapping, watershed analyses, landscape planning, and landslide hazard zonation, in addition to other case studies and mapping efforts. A large majority of landslides identified by these projects are mapped by remote review with minimal field verification. In addition, dormant and ancient deep-seated landslides are mapped in many projects included in the LSI. A large number of the remotely identified landslides and deep-seated features have been mapped with a questionable, probable, or unknown certainty. As a result, the LSI database is meant to be used as a screening tool and field verification is a necessary step in confirming the absence, presence, and extent of mapped features, as well as their actual level of activity/instability.

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.*
   No timber harvest or road work will occur on potentially unstable slopes with the potential to deliver debris to surface waters or other public resources. Roads were designed to minimize ground-based yarding distances to an average of 400 feet or less and to access cable landing locations for areas requiring cable yarding. The majority of road construction is on previously abandoned road prisms, minimizing disturbance of natural soils.

   Sale boundary was located far enough away from streams in such a manner as to

leave enough forest cover to incorporate the average erosion setback, calculated per Forest Practices board manual section 2 instructions, in addition to the DNR HCP buffer along CMZ areas of the affected water courses.

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: **1.55**
Approx. acreage new landings: **2.0**
Fill Source: **Native fill or rock from existing rock pits described in A.12.a**

Road construction will utilize standard cut and fill methodology. Native soil and rock will be excavated from the road prism and used for fill in the sub-grade.

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

Minor erosion may occur from freshly exposed soils along road cut slopes and embankment slopes. Erosion could result from road and landing construction during periods of heavy rainfall or as a result of yarding during periods of saturation.

Additionally, erosion could result if ditches and culverts are not properly maintained during and after the harvest operation. Road use during unfavorable weather conditions may contribute to an increased potential for surface 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):*
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.)*
For road work, rock haul and log haul, appropriate drainage devices including proper culvert size and placement, drain dips, water bars, and ditching will be used as necessary to reduce surface erosion on roads. Energy dissipaters will be installed with culverts to reduce erosion. Relief pipes will be strategically placed to minimize the amount of road ditch water that enters surface waters. Slopes that are exposed of vegetative cover during road work activities will be revegetated or straw mulched to reduce erosion and sediment-laden runoff. There are no stream crossings on either existing or planned roads.

Storm patrols may be conducted on roads to identify and address potential erosion problems.

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: **North Fork of the 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)
French Creek	**1**	**1**	**180+**
Squire Creek	**1**	**1**	**175+**
Unnamed	**5**	**1**	**30-ft ELZ**
Wetland greater than 0.25 acres and less than 1.0 acres in size	**Forested**	**2**	**100**

c. List any additional RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures and wind buffers.
RMZ/WMZ buffers as listed in B.3.a.1.b. as well as the proposed measures to reduce or control erosion described in B.1.h provide protection measures for the surface waters in the vicinity of the proposal area. No stream crossings are present on existing or proposed roads.

RMZs are no-harvest buffers. No wind buffers were applied to the type 1 streams as

it was deemed unnecessary for this proposal. The proposal area has already had management that has not resulted in abundant wind-throw. For much of Squire Creek there is also additional forest cover left due to bald eagle roosting in the vicinity. Buffer widths for Squire Creek and French Creek are greater than distances in above table where erosion hazard areas exist, which is all of the portion of French Creek the sale is adjacent to. In these locations additional buffer was left, anticipating continued erosion of the bank from fluvial processes would require a larger buffer to ensure continued forest cover protection for the water courses.

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.)* ***(Note: Timber Sale maps are DRAFT at the point of submission of this SEPA.)***

This project includes no culvert installations in streams. There are no stream crossings on existing or proposed roads. Timber harvest will occur at the distances shown in the table in B.3.a.1.b.

Description (include culverts): **There are no typed water crossings in the proposal. VRH harvest will take place adjacent to the no-harvest RMZs.**

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)?*

FRENCH-BOULDER = 1.3 (mi./sq. mi.), MIDDLE SAUK = 3.3 (mi./sq. mi.)

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

☒ *No* ☐ *Yes, describe:*
While it is likely some roads or road ditches within the WAU intercept sub-surface flow and deliver surface water to streams, none were identified within the scope of this project.

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 minor changes and aggradation to the channels of some streams. These changes can most likely be attributed to past mass wasting and peak flow events. Debris flows or torrents have scoured some channels down to bedrock in steeper gradient streams and may have historically resulted in small course changes in some low gradient channel segments.

Peak flow periods contribute to erosion hazard areas in low gradient streams in the WAU, and avulsion of stream channels within some alluvial fans at the transition from steep to low gradient stream reaches.

11) *Describe any anticipated contributions to peak flows resulting from this proposal's activities which could impact areas <u>downstream or downslope of the proposal area.</u>*
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 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, <u>downstream or downslope of the proposed activity?</u>*

☐ *No* ☒ *Yes, describe the water resource(s):* **All streams in the proposal area are tributary to the North Fork Stillaguamish River. French Creek and Squire**

Creek are also larger shorelines of the State. The Whitehorse Pond Hatchery is also within the same catchment as the proposal. The nearest unit upstream of the hatchery is about 5 miles upstream, along Squire Creek. Because of the protective measures cited in B.3.a.1.c and B.3.a.2 significant changes in water amount, quality or movement should not occur.

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.*
None.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.
No water will be withdrawn or discharged.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.
Minor amounts of oil, fuel, and other lubricants may inadvertently be discharged to the ground as a result of heavy equipment use or mechanical failure. No lubricants will be disposed of on-site. All spills are required to be contained and cleaned-up. This proposal is expected to have no impact on ground water.

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

☐ *No* ☒ *Yes, describe:* **See water resources listed in B.3.a.12**

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: **Does not apply.**

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:*
No waste material is anticipated to enter any water as a result of this proposal.

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: **Western White Pine**
☒ 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).*
As described in A.11, the overstory vegetation will be removed, with the exception of an average of eight trees per acre of 10 inches dbh or greater. This will ensure that a portion of the live trees that are best suited to the site, and /or exhibits desirable wildlife habitat characteristics will be left on site. Most of the current shrubs and herbaceous plants will be disturbed to varying degrees during the timber removal process of 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.)*
The adjacent areas' timber types range from young, uniform conifer stands, approximately 5 years of age to mature timber similar to the proposed removal area as described in A.11.b.

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:
The site will be revegetated after harvest and some vegetation will be maintained throughout the proposal. See green tree retention plan in A.13.b, and regeneration method in A.7.b.

e. List all noxious weeds and invasive species known to be on or near the site.
The DNR corporate databases indicate no known noxious weeds or invasive species. However, it is has been observed that Himalayan blackberry, scotch broom, Himalayan knotweed, butterfly bush, and holly have been found on or near the site. Many of these plants are found in nearby utility right of ways or along roads.

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: **crow, pileated woodpecker**
mammals:
☐ bear ☐beaver ☐ *coyote* ☐ *cougar* ☒ deer ☐ elk
☒ other: **Douglas squirrel**
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: **Bald Eagle Communal Roost, Spotted Owl NRF Management Area**

b. List any threatened and endangered species known to be on or near the site (*include federal- and state-listed species)*.
None known.

c. Is the site part of a migration route? If so, explain.
☒*Pacific flyway* ☐*Other migration route:*
Explain: **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:

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

Species /Habitat: **Mature Forest Components and unique landscape features**
Protection Measures: **Retention tree plan as outlined in A.13.b.**

Species /Habitat: **Bald Eagle Communal Roost**
Protection Measures: **Placement of proposal boundaries to avoid harvest within 660 feet of identified roost area.**

Species /Habitat: **Spotted Owl NRF Management Area**
Protection Measures: **All three units are within Northern Spotted Owl Nesting Roosting Foraging areas but these stands have not been prioritized for habitat enhancement (Next Best) and therefore are available for Variable Retention Harvest.**

List any invasive animal species known to be on or near the site.
No invasive animal species are known to be on or near the site.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.
Petroleum fuel (diesel or gasoline) will be used for heavy equipment during active road building, timber harvest operations, and for transportation. No energy sources will be needed following project completion.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:
None.

7. Environmental health

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

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. This typically occurs between 4 a.m. and 4 p.m. on weekdays.

3) Proposed measures to reduce or control noise impacts, if any:
None.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. *(Site includes the complete proposal, e.g. rock pits and access roads.)*
The entire proposal site is designated for timber production, while adjacent lands are a mix of timber production, utility easement, State highway, residential and agricultural.

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? **Forest Land.**

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?
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:* **Highway 530.**

2) *How will this proposal affect any views described above?*
This proposal will resemble previous timber harvests in the area and background view will change from a stand of mature timber to a view of a recent harvest with mature trees remaining scattered throughout the units.

c. Proposed measures to reduce or control aesthetic impacts, if any:
Timber harvesting is a normal occurrence in the vicinity of the proposal, and recent timber harvests are visible throughout the area. Within and around the proposal area, un-harvested stands, stream buffers, and leave tree clumps will remain to reduce the visual impact. These residual stands will break up the view of the harvested area considerably, and will help maintain the aesthetic quality of the area. Units 1 and 3, directly visible from Highway 530 have a scattered leave tree strategy in order to reduce visual impacts even further. Additionally, the proposal area will be revegetated.

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

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.
A review of the DNR corporate databases was done, which indicated multiple archaeology sites and GLO Trails within a mile of the proposal area. Multiple DAHP historic properties were listed as being within 1,000 feet of the proposal as well.

The items of interest indicated in the DNR corporate databases, which were reviewed by an agency Cultural Resource Technician are not within the proposal area.

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.
None known outside of sites identified in B.13.a.

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.
Historic GLO maps, USGS maps and DAHP GIS layers were reviewed by an agency Cultural Resource Technician.

Outreach was conducted with representatives of the Affected Indian Tribes and the Town of Darrington in November of 2019 in order to provide more comprehensive information concerning this proposal. No concerns have been raised as of the submittal of this document.

Field observations for cultural resources were a part of the field work done with the proposal. None were found.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.
If a presently-unknown cultural resource is discovered during project operations, DNR will comply with the March 2010 Cultural Resources Inadvertent Discovery Guidance.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.
Please see WAU and adjacency maps on the DNR website under "SEPA". There are no public streets or highways that serve the site. There will be no addition of public roads to access the site as a result of this proposal.

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 1 mile away, in Darrington, WA.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?
None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).
Yes, see A-11-c.

1) *How does this proposal impact the overall transportation system/circulation in the surrounding area and any existing safety problem(s), if at all?*
This project will have minimal to no additional impacts on the overall transportation system in the area.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and non-passenger vehicles). What data or transportation models were used to make these estimates?
Approximately 10 to 15 truck trips per day while the operation is active. Peak volumes would occur during the yarding and loading activities between 4:00 a.m. and 4:00 p.m. of the operating period. The completed project will generate less than one vehicular trip per day. Estimates are based on the observed harvest traffic of past projects.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.
No.

h. Proposed measures to reduce or control transportation impacts, if any:
None.

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.
No.

b. Proposed measures to reduce or control direct impacts on public services, if any.
None.

16. **Utilities**

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

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
None.

C. SIGNATURE

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

Signature: _____

Name of signee Kody A Beesley

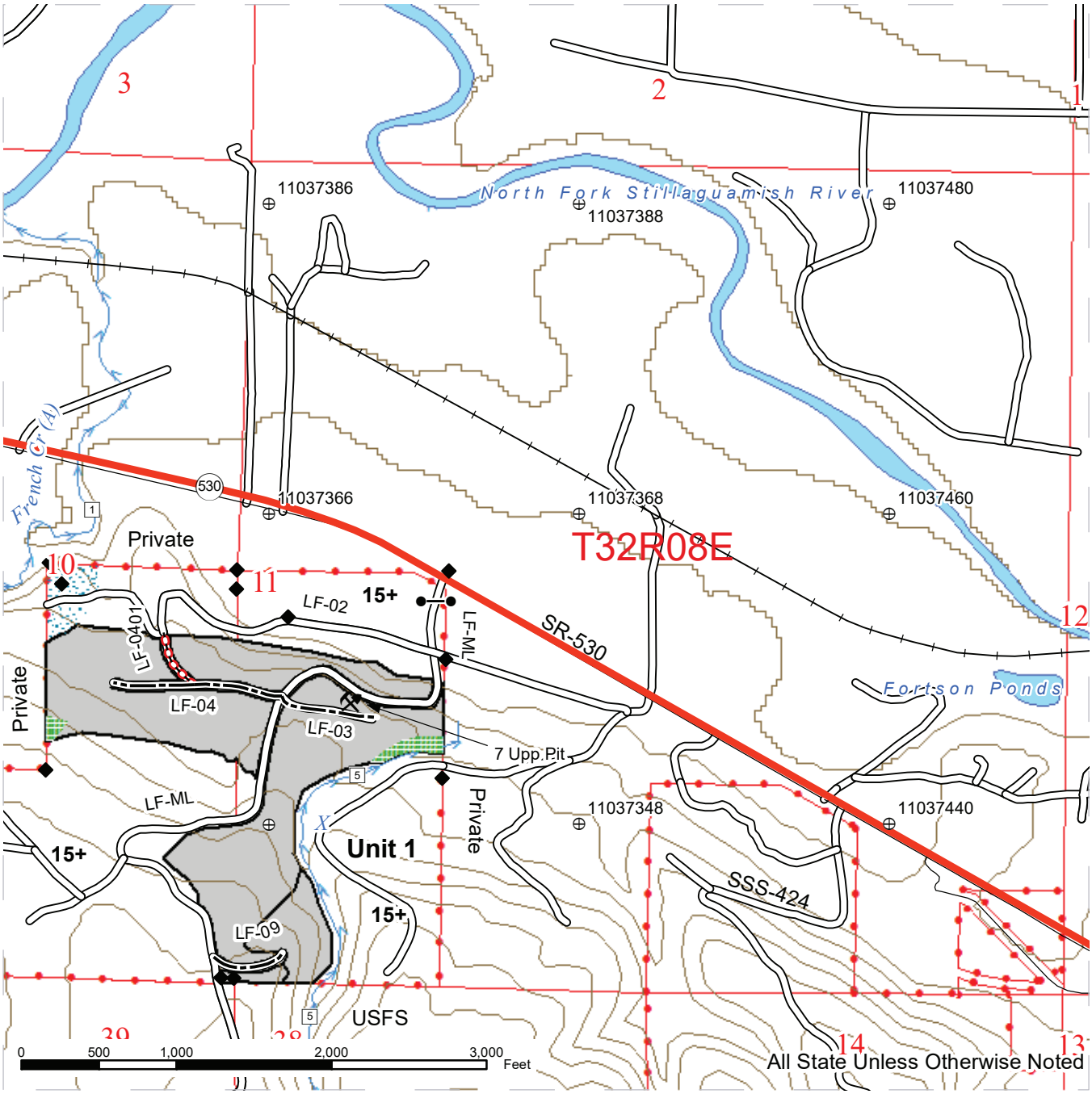
Position and Agency/Organization Natural Resource Specialist 2

Date Submitted: _____

FOREST PRACTICES ACTIVITY MAP

SALE NAME: BLUEGRASS
APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
TOWNSHIP(S): T32R8E



- Sale Area
- Leave Tree Area
- No-harvest RMZ
- Open Water
- Existing Roads
- Temporary Construction
- Required Abandonment
- Streams
- Stream Type
- Stream Type Break
- Found Survey Monuments

N

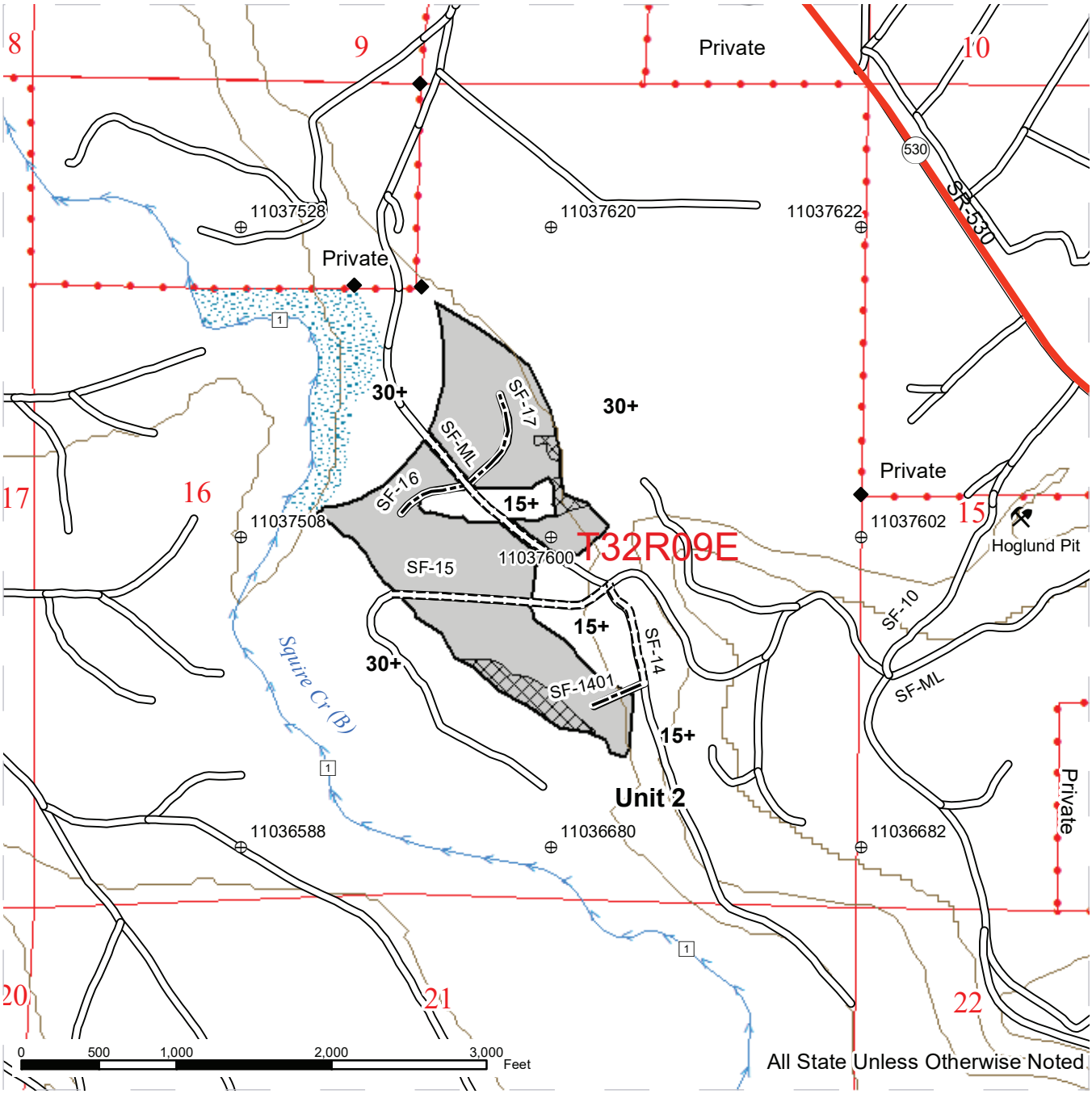
Prepared By: kbly490

Modification Date: anss490 1/7/2020

FOREST PRACTICES ACTIVITY MAP

SALE NAME: BLUEGRASS
APPLICATION #: TBD by FP Staff

COUNTY(S): Snohomish
TOWNSHIP(S): T32R9E



- Sale Area
- Non-Tradeable Leave Tree Area
- No-harvest RMZ
- New Construction
- Temporary Construction
- Streams
- Stream Type
- Stream Type Break
- Found Survey Monuments

N

Prepared By: kbly490

Modification Date: anss490 1/7/2020

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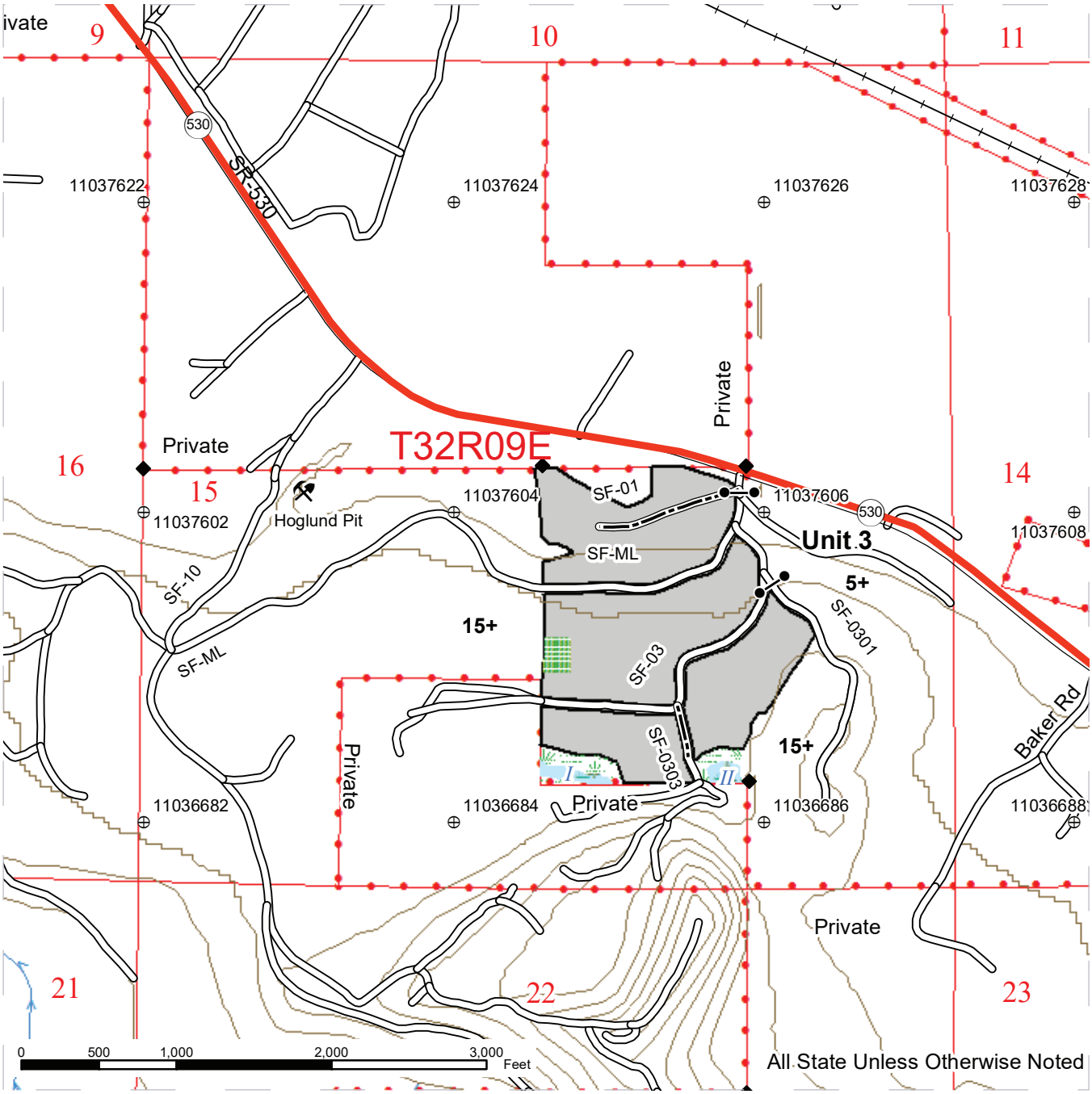

Sale Area	Stream Type
Leave Tree Area	Stream Type Break
Forested Wetland	Found Survey Monuments
No-harvest WMZ	
Existing Roads	
Temporary Construction	
Streams	

N

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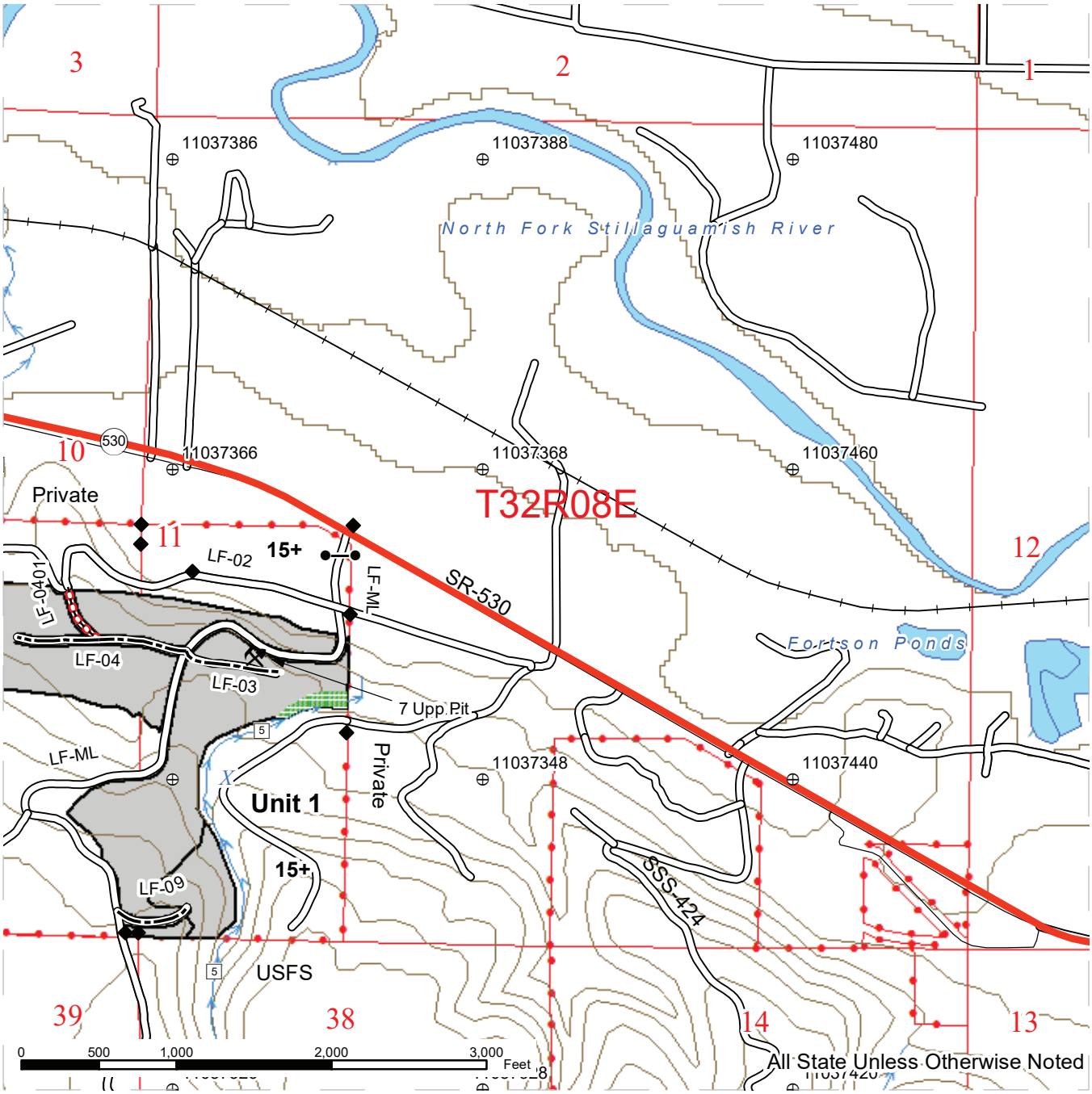

Sale Area	Streams
Leave Tree Area	Stream Type
No-harvest RMZ	Stream Type Break
Open Water	Found Survey Monuments
Existing Roads	
Temporary Construction	
Required Abandonment	

N

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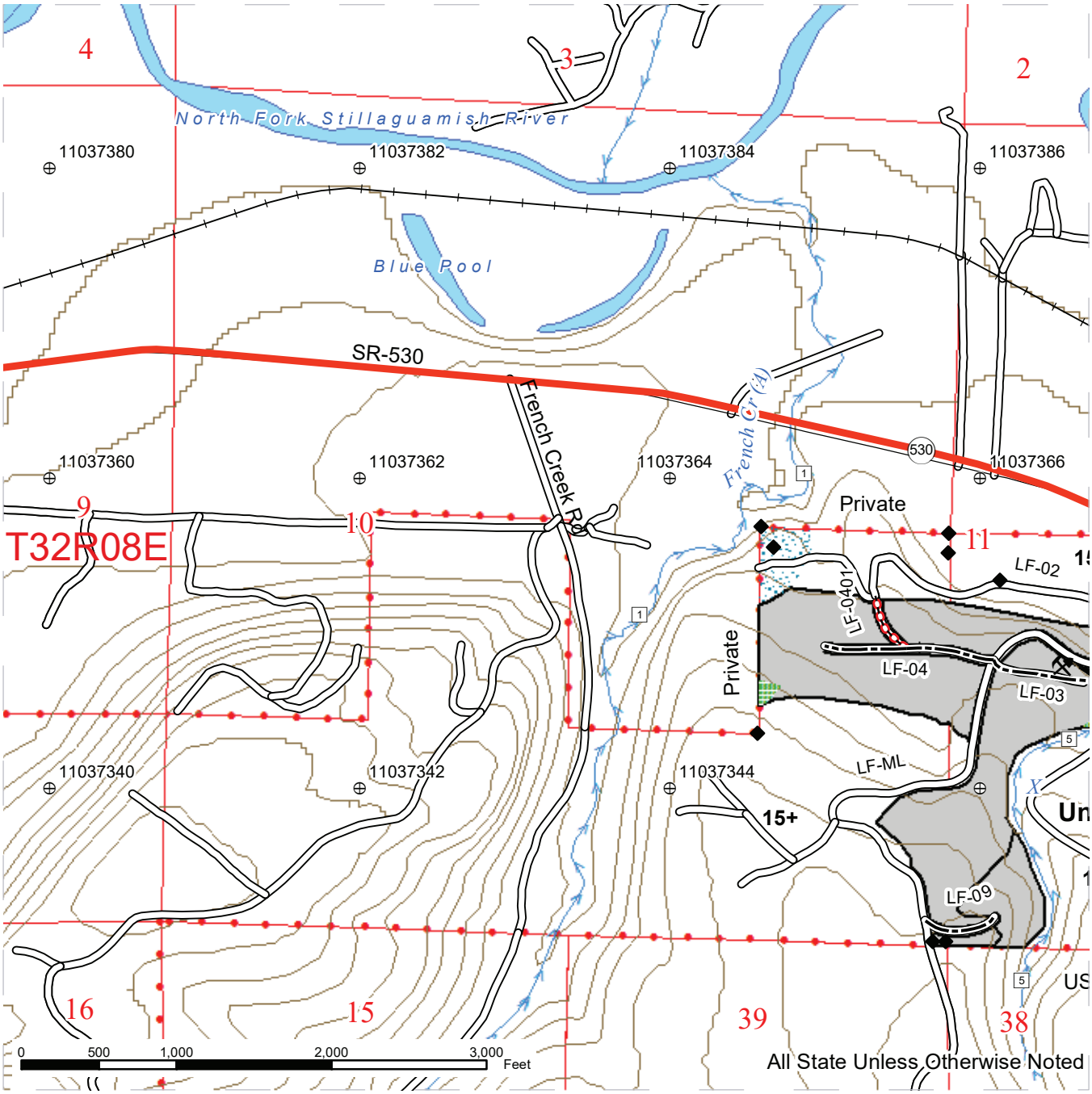

- Sale Area
- Leave Tree Area
- No-harvest RMZ
- Open Water
- Existing Roads
- Temporary Construction
- Required Abandonment
- Streams
- Stream Type
- Stream Type Break
- Found Survey Monuments

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