

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: **SARUS**
Agreement # **30-104686**

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: Laurie Bergvall

4. Date checklist prepared: **07/31/2023**

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

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

a. *Auction Date:*
04/24/2024

b. *Planned contract end date (but may be extended):*
03/31/2026

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: **VRH harvest units may be treated with herbicides prior to planting. Assessment for treatment will occur after completion of harvest.**

b. Regeneration Method: **Conifer seedlings will be hand planted within two years after completion of harvest.**

c. Vegetation Management: **Treatment to be assessed in 3-5 years. Competing vegetation may be treated by manual cutting and/or herbicide.**

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

Roads: The CN-ML, CN-20, CN-2006, CN-36, CN-47, CN-4702, CN-54, LK-ML, LK-14, and LK-27 roads will be used for future management activities.

Rock Pits: The Acquisition, Foothill and Crane Creek hardrock pits will be used for future management activities. 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: Two segments of Pilchuck Creek have completed TMDL reports on the 303 (d) list.

temp

sediment

completed TMDL (total maximum daily load)

Landscape plan:

Watershed analysis:

Interdisciplinary team (ID Team) report:

Road design plan: Available at Northwest Region Office

Wildlife report:

Geotechnical report:

Other specialist report(s):

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

Rock pit plan: Available at Northwest Region Office

Other:

The following analyses, policies, procedures, documents, and data layers directly pertain to or were reviewed as part of this proposal:

- **DNR Policies and Implementation**
 - **Policy for Sustainable Forests (PSF; 2006a)**
 - **Final Environmental Impact Statement on the Policy for Sustainable Forests (2006b)**
 - **Alternatives for the Establishment of a Sustainable Harvest Level for Forested State Trust Lands in Western Washington Final Environmental Impact Statement (2019)**
 - **Silvicultural Rotational Prescriptions**
 - **Land Resource Manager Reports and associated maps**
- **DNR Trust Lands Habitat Conservation Plan and Supplemental Information**
 - **Final Habitat Conservation Plan (HCP; 1997)**
 - **Final (Merged) Environmental Impact Statement for the Habitat Conservation Plan (1998)**
 - **Long-Term Conservation Strategy for the Marbled Murrelet Final Environmental Impact Statement (2019)**
 - **Final State Trust Lands Habitat Conservation Plan Amendment: Marbled Murrelet Long-term Conservation Strategy**
 - **Riparian Forest Restoration Strategy (RFRS; 2006)**
 - **Spotted Owl Habitat Layer**
 - **Marbled Murrelet Habitat Layer**
 - **WAU Rain-On-Snow GIS Layer and Reports**

- **Forest Practices Regulations and Compliance**
 - **Forest Practices Board Manual**
 - **Forest Practices Activity Maps**
 - **Trust Lands HCP Addendum and Checklist**
- **Supporting Data for Unstable Slopes Review**
 - **State Lands Geologist Remote Review (SLGRR)**
 - **Landslide Remote Identification Model (LRIM) tool**
 - **Forest Practices Statewide Landslide Inventory (LSI) screening tool**
- **Supporting Data for Cultural Resources Review**
 - **Historical Aerial Photographs**
 - **USGS and GLO maps**
 - **Department of Archaeology and Historic Preservation database for architectural and archaeological resources and reports (WISAARD)**
- **Additional Supporting Data for Policy Compliance**
 - **Weighted Old Growth Habitat Index (WOGHI)**
 - **State Soil Survey, 1992**

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:

This is a variable retention harvest (VRH), comprised of 119.2 net acres, with an estimated total harvest volume of 3,616 MBF of timber. Approximately 265 acres were considered for this proposal; this has been reduced to 127.1 gross acres due to operational feasibility, wildlife habitat, slope stability concerns and wetland and stream buffers. The resulting timber sale area consists of approximately 119.2 net harvest acres after deducting leave tree areas and existing roads.

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: Pre-harvest Stand Description:

- Stands originate between 1961 and 1975.
- Composed primarily of Douglas-fir, western hemlock, and red alder.
- Harvest types include variable retention harvest. Variable Retention Harvest is an even-aged harvest with a component of retention structures such as large and old live trees, snags and logs to provide for continuity in structure, function, and composition between forest generations.

Overall Unit Objectives:

- To generate revenue for the State trust beneficiaries from the production and sale of sustainably produced, climate friendly wood products.
- To support healthy forest ecosystems, protect water quality, maintain site productivity, and maintain wildlife habitat while providing sustainable, economic, ecological and social benefits from these forested trust lands.

This proposal meets or exceeds all guidelines set forth in the DNR Habitat Conservation Plan (HCP), Riparian Forest Restoration Strategy, 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 (Subgrade) (Estimated)	Fish Barrier Removals (#)	Steepest Side Slope Road Crosses
Construction		3,726	1.5		30%
Reconstruction		6,206		0	30%
Abandonment		3,129	NA	0	NA
Temporary construction		3,601	1.5		30%
Prehaul Maintenance		11,081			
Bridge Install/Replace	0				
Culvert Install/Replace (fish)	4*				
Culvert Install/Replace (no fish)	30				

*Three of the fish culvert installations are temporary, seasonal culverts.

**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, then abandoned.

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 harvest areas, road work, rock pits and pre-haul maintenance.**
- **Sections 24 and 26 of Township 33 North, Range 05 East, Willamette Meridian.**
 - **Sections 17, 19, 20, 21, 28, 29 and 30 of Township 33 North, Range 06 East, Willamette Meridian.**

- b. *Distance and direction from nearest town:*

This proposal is located approximately 21 miles, by road, east of Mount Vernon, 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 may temporarily affect elements of the environment to varying degrees including Geology, Surface water movement/quantity/quality, Soils, Air quality, Noise, Aesthetic, Plants and Animals, and Recreation. However, no cumulative change in the environment is expected from the combination of past and future activities with this proposal.

DNR analyzed carbon sequestration and carbon emissions from projected land management activities within its final environmental impact (FEIS) statement for the 2015-2024 Sustainable Harvest Calculation and the FEIS for the 2019 HCP Long-Term Conservation Strategy for the Marbled Murrelet. At the western Washington scale, land management activities on DNR-managed lands, sequester more carbon than emitted. Individual activities, such as this proposal, are likely to emit some greenhouse gases, including CO₂, however at the landscape scale, DNR’s sustainably managed lands sequester more carbon than emit, including this proposal. Evaluating carbon sequestration at the western Washington scale is appropriate because a determination of net carbon emissions must consider both the carbon sequestered and the carbon emissions from management within the same analysis area (western Washington).

Recognizing the climate and carbon benefits of working forests in Washington’s Climate Commitment Act (RCW 70A.45.005), the legislature found that Washington should maintain and enhance the state’s ability to continue to sequester carbon through natural and working lands and forest products. Further, “Washington’s existing forest products sector, including public and private working forests and the harvesting, transportation, and manufacturing sectors that enable working forests to remain on the land and the state to be a global supplier of forest products, is, according to a University of Washington study analyzing the global warming mitigating role of wood products from Washington’s private forests, an industrial sector that currently operates as a significant net sequesterer of carbon. This value, which is only provided through the maintenance of an intact and

synergistic industrial sector, is an integral component of the state's contribution to the global climate response and efforts to mitigate carbon emissions (RCW 70A.45.090).”

The legislature further finds that the 2019 Intergovernmental Panel on Climate Change (IPCC) report identifies several measures where sustainable forest management and forest products may be utilized to maintain and enhance carbon sequestration. These include increasing the carbon sequestration potential of forests and forest products by maintaining and expanding the forestland base, reducing emissions from land conversion to non-forest uses, increasing forest resiliency to reduce the risk of carbon releases from disturbances such as wildfire, pest infestation, and disease, and applying sustainable forest management techniques to maintain or enhance forest carbon stocks and forest carbon sinks, including through the transference of carbon to wood products.

DNR is legally required (RCW 79.10.320) to periodically calculate a sustainable harvest level and manages state trust lands sustainably. DNR has also maintained (statewide) a forest management certificate to the Sustainable Forestry Initiative standard since 2006. Thus, managing state trust lands sustainably, DNR sequesters more carbon than emits while conducting land management activities such as this proposal.

DNR manages state trust lands for numerous objectives including a trust fiduciary – revenue producing objective. The timber that DNR harvests, is used to produce climate smart forest products. This objective is documented in multiple environmental impact statements that have informed the Board of Natural Resources’ decisions and is consistent with the IPCC which states that “Meeting society’s needs for timber through intensive management of a smaller forest area creates opportunities for enhanced forest protection and conservation in other areas, thus contributing to climate change mitigation.”

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 as well as past and future activities either meet or surpass Forest Practices Rules by complying with the commitments of the HCP and as such protecting water quality and mitigating environmental impacts.

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 VRH areas of the proposal. These trees will function for future wildlife snag and large structurally unique tree recruitment.

Development of older forests is an expected outcome of the 1997 Trust Lands Habitat Conservation Plan (HCP), and a policy objective stated in DNR's Policy for Sustainable Forests. Landscape assessments made in May 2021, demonstrate that through implementation of the HCP and other Policies and laws, older forest targets will be met in conservation areas over time. These conservation areas include identified long-term forest cover under the marbled murrelet long-term conservation strategy, riparian areas, areas conserved under the multispecies conservation strategy, potentially unstable slopes, spotted owl nest patches, and spotted owl habitat that must be maintained to comply with the northern spotted owl conservation strategy (within NRF and South Puget Planning Unit dispersal management areas). The North Puget HCP Planning Unit will meet at least 10% older forest within conservation areas by 2070.

This proposal meets all requirements of the Marbled Murrelet Long-Term Conservation Strategy.

Green Tree Retention Plan: An average of 8 trees per acre will be left in clumped and scattered arrangement that are distributed across the proposal area. These leave trees include all tree species currently found in the proposal area. The clumps were located around features that will contribute to the maintenance of biological diversity such as snags, down logs, large wind firm conifer trees, and wildlife trees.

Regeneration methods described in A.7.b.

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.

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 stand.

Analyzing, designing, and constructing roads to minimize effects on the environment. 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. Equipment trails may be water barred post harvesting activities, if necessary to avoid concentrating surface water runoff.

Evaluating the proposal for potential slope instability, and excluding areas that exhibited indicators of potentially unstable slopes.

Remote and field reviews were conducted to ensure that all identified potentially unstable slopes that were interpreted as having potential to adversely impact public resources or

public safety, were excluded from the harvest areas.

Rule-identified landforms with interpreted delivery potential, were excluded from harvest.

No tailholds will be allowed within and no timber will be yarded across any identified Forest Practices rule-identified landforms.

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 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
LAKE CAVANAUGH	29,882	18,054	950	512	1,118

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:	<u>LAKE CAVANAUGH</u>
WAU Acres:	<u>29,882</u>
Elevation Range:	<u>410 – 3,936 ft.</u>
Mean Elevation:	<u>1,602 ft.</u>
Average Precipitation:	<u>60 in./year</u>
Primary Forest Vegetation Zone:	<u>Western Hemlock</u>

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)?
The steepest percent slope on the site is 86%. The average steepest sustained slope is approximately 76%.
- 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
5601	GRAVELLY SILT LOAM
7438	V.GRAVELLY SILT LOAM
1948	GRAVELLY SILT LOAM
0422	V.GRAVELLY SANDY LOAM
0143	GRAVELLY LOAM

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

No, go to question B-1-e.

Yes, briefly describe potentially unstable slopes or landforms in or around the area of the proposal site. For further information, see question A-8 for related slope stability documents and question A-10 for the FPA number(s) associated with this proposal.

The 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.

Potentially unstable landforms (RILs) around the proposed harvest include inner gorges and bedrock hollows. CMZs were delineated for two type fish streams adjacent to the proposed harvest area. These landforms were identified through office and field review by a state lands licensed engineering geologist.

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

No Yes, describe the proposed activities:

There is evidence of slope failures in the Lake Cavanaugh WAU. These slope failures are generally associated with stream reaches in steep draws that have formed by cutting through the adjacent rock and soils.

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

A state lands licensed engineering geologist conducted office and field reviews of this proposal and the surrounding areas. Any known areas of potentially unstable slopes with potential to deliver to a public resource have been excluded from the proposed management area. In addition, roads are located on gentle terrain.

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

Approx. acreage new roads: 2.0

Approx. acreage new landings: 1.0

Fill Source: Native fill or rock

Road construction will utilize standard cut and fill methodology to obtain grade and alignment. Native soil and rock will be excavated from the road prism and used for fill in the sub-grade and over cross drains and stream crossings.

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. Road construction will expose bare soil. Road plan requirements include the use of grass seed or other revegetation methods to protect exposed soils from erosion.

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

Less than 3 percent of the site will be covered with permanent new rock covered (gravel) roads.

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

Inner gorge and bedrock hollow landforms have been excluded from harvest with timber sale boundary tags.

The two CMZs are excluded from harvest with timber sale boundary tagged, site index buffers.

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

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.

Harvest operations and the removal of timber will result in minor amounts of CO₂ emissions from the direct proposal site. See A.13.a. for details regarding completed analyses of carbon emissions and sequestration on DNR-managed lands in western Washington.

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.

Carbon dioxide emissions associated with harvested wood products are analyzed in Alternatives for the Establishment of a Sustainable Harvest Level Final Environmental Impact Statement (2019) and the Long-Term Conservation Strategy for the Marbled Murrelet Final Environmental Impact Statement (2019).

- 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.

Following harvest, native tree species will be planted on site at a level higher than existed prior to harvest resulting in regeneration of the forest stand and initiating carbon sequestration through forest stand growth.

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: **Pilchuck Creek**

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)
Crane Creek	3	1	174 Feet
Unnamed Stream	3	6	148 Feet
Unnamed Stream	3	1	152 Feet
Unnamed Stream	3	1	153 Feet
Unnamed Stream	3	4	162 Feet
Unnamed Stream	3	1	165 Feet
Unnamed Stream	3	1	188 Feet
Unnamed Stream	4	7	100 Feet
Unnamed Stream	5	59	NA
Wetlands (greater than 0.25 acres, less than 1.0 acres)	Forested	1	100 Feet
Wetlands (≥ 1 acre)	Forested	1	148 Feet
Wetlands (≥ 1 acre)	Forested	1	153 Feet
Wetlands (≥ 1 acre)	Forested	1	185 Feet
Wetland (≥ 5 acre)	Open Water	1	165 Feet
Wetland (≥ 5 acre)	Open Water	1	153 Feet

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

All RMZ and WMZ buffers listed in B.3.a.1.b. will be no harvest buffers. Downhill cable yarding corridors will be required through a Type 4 stream RMZ and potentially through a Type 3 stream RMZ, depending on the operators yarding corridors. Wind buffers were deemed unnecessary for this proposal based on historic integrity of nearby RMZ and WMZs.

Temporary culverts will be installed in two type fish streams. All activities associated with the installation, timber haul and removal of these culverts must occur between June 16 and September 30.

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.

All existing roads through RMZs will have management practices applied during hauling to ensure that excessive ditch water and runoff will not enter or otherwise adversely affect water quality or RMZ function. New road construction was located to avoid crossing typed waters. Ditchwater will be diverted through relief culverts prior to stream crossing to keep sediment out of stream. Exposed soils will be grass seeded.

Timber haul and ground based operations will not be permitted from November 1 to March 31 unless authorized by the Contract Administrator.

- 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 time of this submission.**

Description (include culverts):

Ditchwater will be diverted through relief culverts prior to stream crossing to keep sediment out of stream. Exposed soils will be grass seeded.

- 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:

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

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

No Yes, describe 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)?*

LAKE CAVANAUGH = 3.9 (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 work 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 WAU(s). 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 WAU(s); 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):

The streams adjacent to the proposal area are tributary to Pilchuck 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.

As stated in B.3.a.12, this proposal is not expected to cause a significant increase in peak flows. In order to minimize the risk of road failures during peak flow events, culverts and ditches will be maintained so that they remain functional. Storm patrols will be conducted as necessary on existing and newly constructed roads to identify and address potential erosion problems.

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:*

Pilchuck Creek is located downstream from the proposal. Areas of slope instability with delivery potential identified in the field by a Licensed Engineering Geologist have been excluded from the proposal.

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:

All areas of slope instability have been excluded from the harvest area.

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).*)

Second-growth conifer and hardwoods will be removed using a VRH prescription across the entire proposal. Some immature trees or snags may need to be felled for safety or operational reasons. Understory vegetation will be disturbed by logging or road building activities. These stands will retain snags, dominant and co-dominant and/or structurally unique trees via clumps and scattered leave trees to increase horizontal and vertical diversity over the landscape, modeling natural biological legacies that often follow natural disturbances, such as wildfire, wind and flooding. This in combination with landscape level stand retention will provide for continuity in structure, function, and composition between forest generations.

- 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, 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 proposal area will be revegetated after harvest. 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 corporate database indicates no known noxious weeds or invasive species. However, Himalayan blackberry, Scot’s broom, bull thistle, or Canadian thistle may be found on or near the site.

5. Animals

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

birds:

eagle hawk heron owls songbirds

other:

mammals:

bear beaver coyote cougar deer elk

other:

fish:

bass herring salmon shellfish trout

other:

amphibians/reptiles:

frog lizard salamander snake turtle

other:

unique habitats:

balds caves cliffs mineral springs oak woodlands talus slopes

other:

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

TSU Number	Common Name	Federal Listing Status	State Listing Status
SARUS 1A	Marbled murrelet	Threatened	Endangered

Occupied marbled murrelet site located approximately 1/4 mile southeast of Unit 1A.

- 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:

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

Species /Habitat: **Marbled Murrelet**

Protection Measures: **The sale overlaps areas that our predictive model indicates are “Possible” Long-term Forest Cover (LTFC) in the Marbled Murrelet Long-term Conservation Strategy (LTCS). LTFC are the combination of land that provide marbled murrelet conservation throughout the landscape through other forest retention measures associated with the 1997 HCP (e.g. riparian management, unstable slopes, old growth, northern spotted owl), as well as natural areas, gene pool reserves, and marbled murrelet specific conservation as outlined in the MM LTCS. “Possible” suggests that some feature which would require retention of forest cover (e.g. stream, unstable slope) might exist in those areas, but requires field verification to confirm the actual existence and map the specific location of such features. Following “verification”, LTFC is maintained as applicable. This proposal excludes all verified LTFC and associated habitat and is consistent with the requirements of the MM LTCS.**

Species /Habitat: **Aquatic Species / Riparian Habitat**

Protection Measures: **Stream protection measures listed in B.3.a.1.b., B.3.a.2., and c; soil protection measures in B.1.h.; slope stability protection in B.1.d.2; and peak flows protection in B.3.a.13. Riparian buffers are designed to maintain the functions of riparian ecosystem processes that influence the quality of salmonid freshwater habitat. Water temperature, stream bank integrity, sediment load, detrital nutrient load, and the delivery of large woody debris were the principal considerations used for designing the riparian buffer widths.**

Species /Habitat: **Mature Forest Components**

Protection Measures: **Retention tree plan described in B.4.d, A.13.b.**

- e. 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.
- 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: Forest management.

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?

Industrial Forest-Natural Resource Lands.

- 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:*
 - 2) *How will this proposal affect any views described above?*
This proposal is consistent with the management of the area. See B.10.c. below.
- 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, RMZs, WMZs 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. 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 include hunting, hiking, mountain biking, 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.
None known.
- 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.
- 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 DNR cultural resource technician conducted an office and field review of the proposed sale area.

The following tribes were consulted on 08/02/2023, The Tulalip Tribes, Swinomish Indian Tribal Community, Lummi Nation, Snoqualmie Indian Tribe and the Stillaguamish Tribe of Indians. As of the date of submission for this document, no concerns about the proposal have been raised from these contacts.

- 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 presently-unknown skeletal remains, cultural resources, or both become known during project operations, DNR will comply with the Discovery of Skeletal Remains or Cultural Resources 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.
The site is served by Lake Cavanaugh Road in rural Skagit County. There will be no addition of public roads to access the site as a result of this proposal. Please see WAU and adjacency maps on the DNR website under "SEPA".
- 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 stop is approximately 16 miles away.
- c. 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.
- d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
No.
- e. 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.
- f. 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.
- g. 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 Jack Armstrong

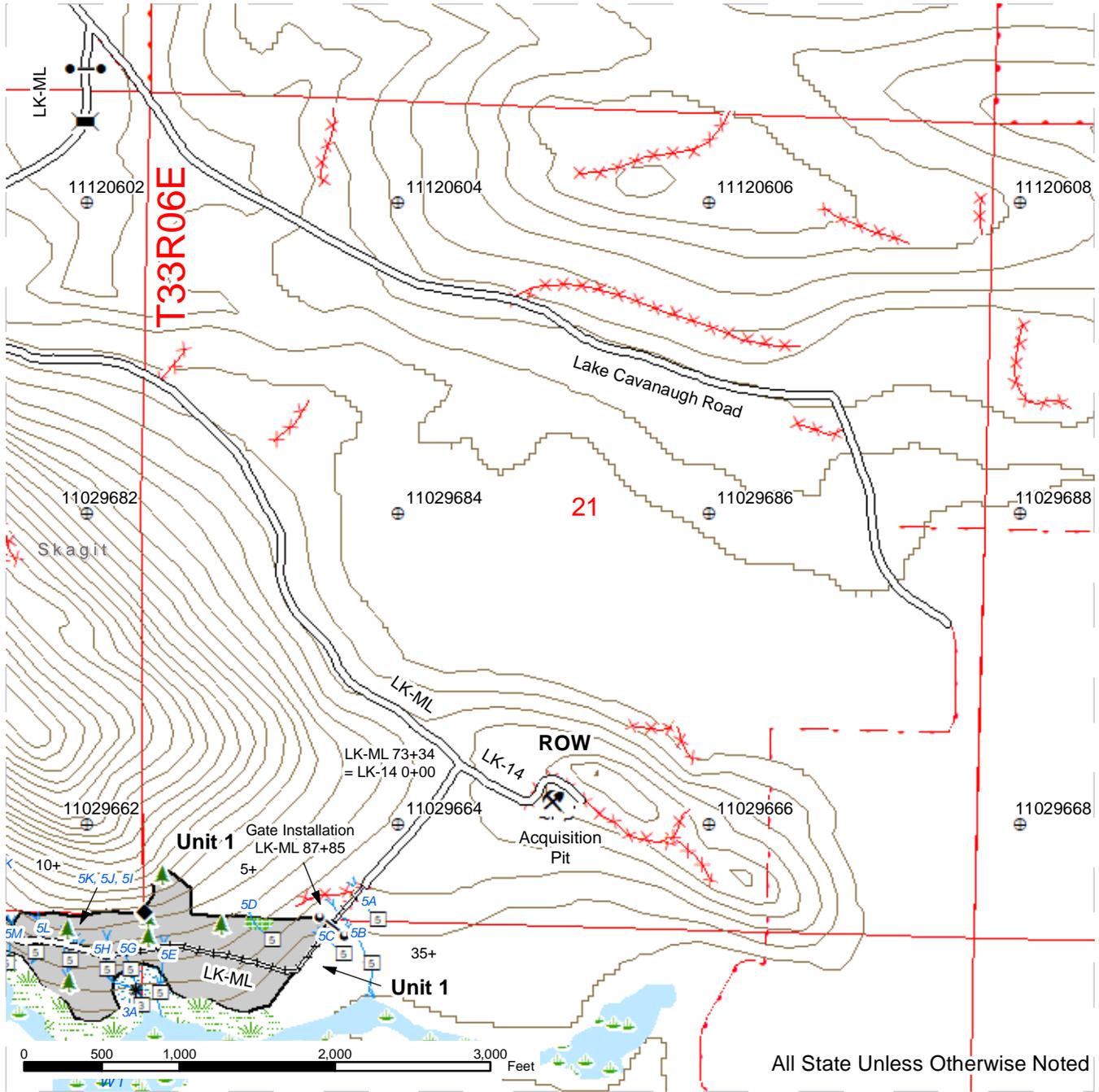
Position and Agency/Organization Forester, WADNR

Date Submitted: _____

FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R6E



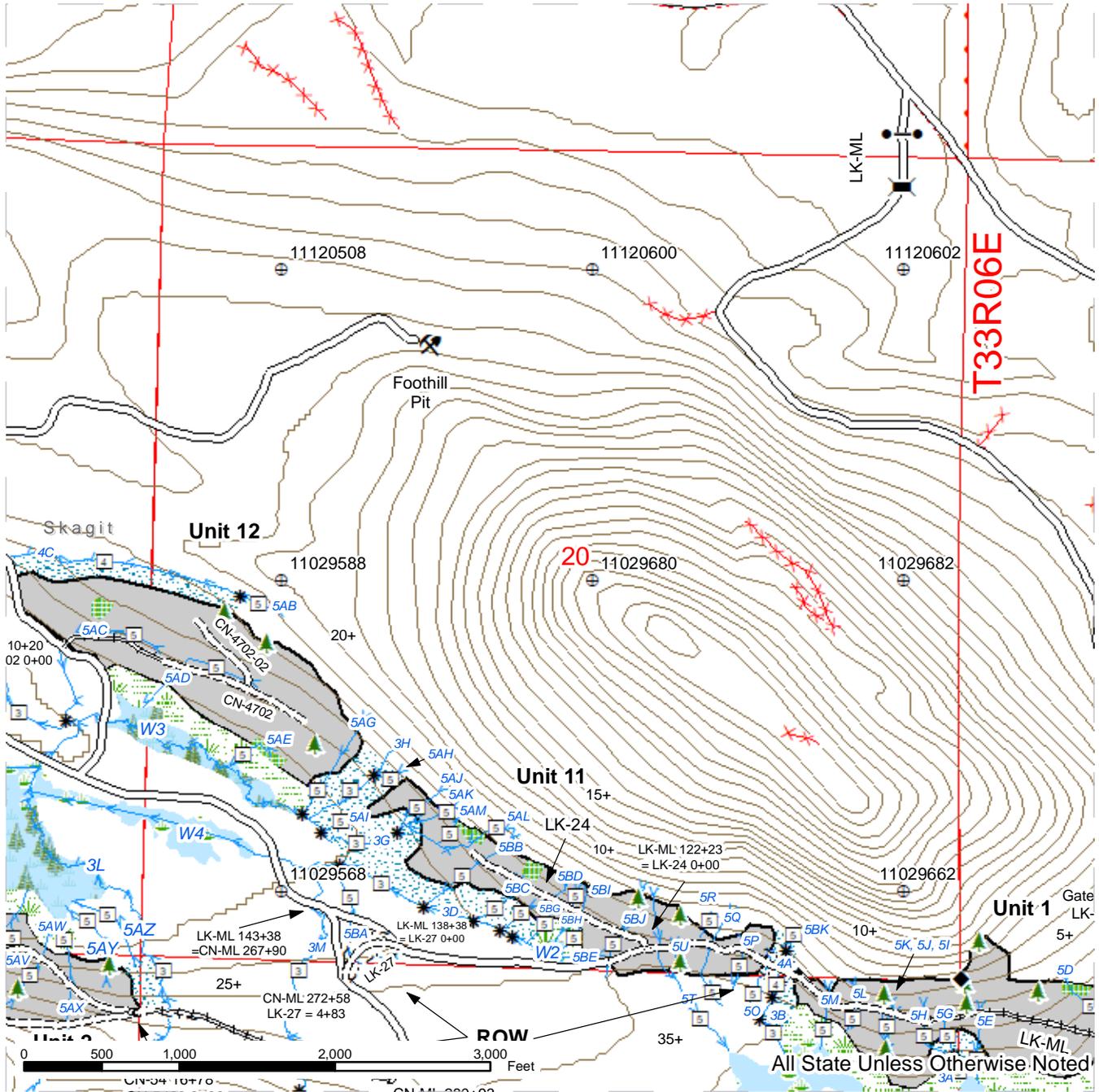
All State Unless Otherwise Noted

Sale Area	New Construction	Leave Tree Area <1/4-acre
DNR Managed Lands	Construction = Reconstruction	Survey Monument
Wetlands - Non-forested	Existing Abandon/Orphan Road	Gate (F1-3)
Leave Tree Area	Streams	Gate Installation
Riparian Mgt Zone	Right of Way Tags	Rock Pit
Wetland Mgt Zone	Contours 40-foot	Tics - 200' Interval
Existing Roads	Bridge	

FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R06E

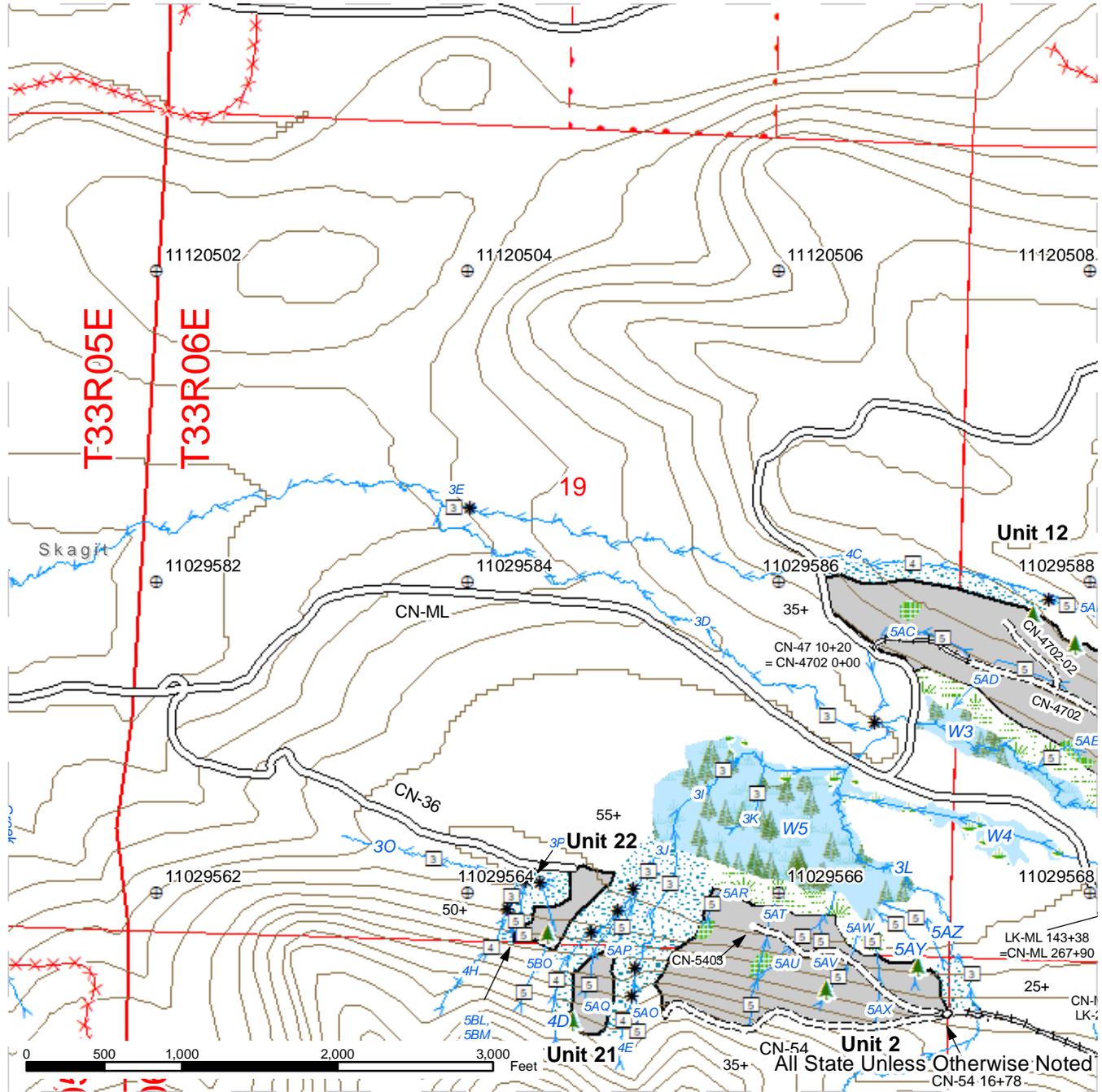


Sale Area	Existing Roads	Bridge
DNR Managed Lands	New Construction	Leave Tree Area <1/4-acre
Wetlands - Non-forested	Construction = Reconstruction	Survey Monument
Leave Tree Area	Existing Abandon/Orphan Road	Gate (F1-3)
Riparian Mgt Zone	Streams	Rock Pit
Forested Wetland	Right of Way Tags	Tics - 2000' Interval
Wetland Mgt Zone	Contours 40-foot	

FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R6E

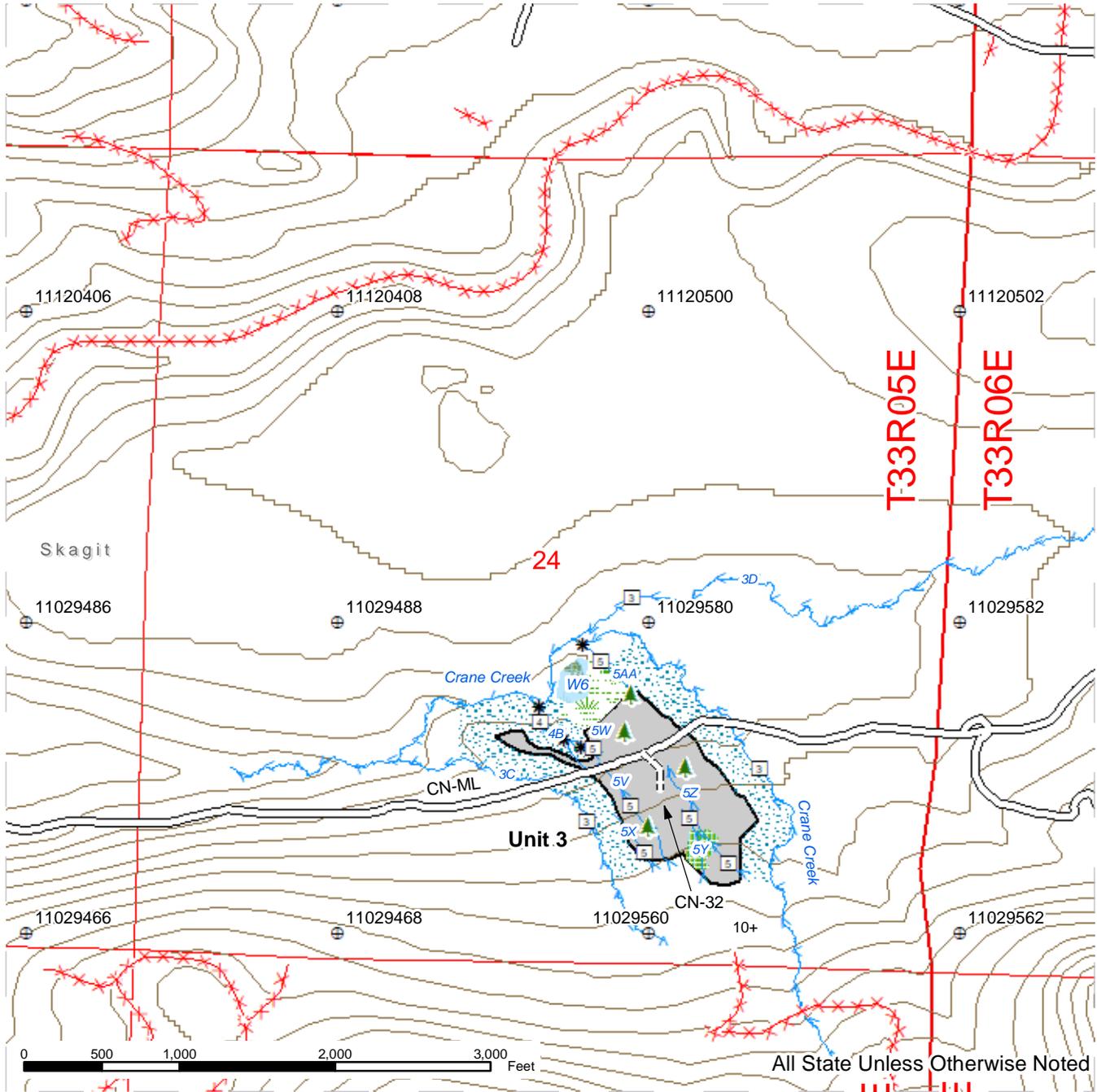


Sale Area	Wetland Mgt Zone	Right of Way Tags
DNR Managed Lands	Existing Roads	Contours 40-foot
Wetlands - Non-forested	New Construction	Leave Tree Area <1/4-acre
Leave Tree Area	Construction = Reconstruction	Tics - 2000' Interval
Riparian Mgt Zone	Existing Abandon/Orphan Road	
Forested Wetland	Streams	

FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R6E



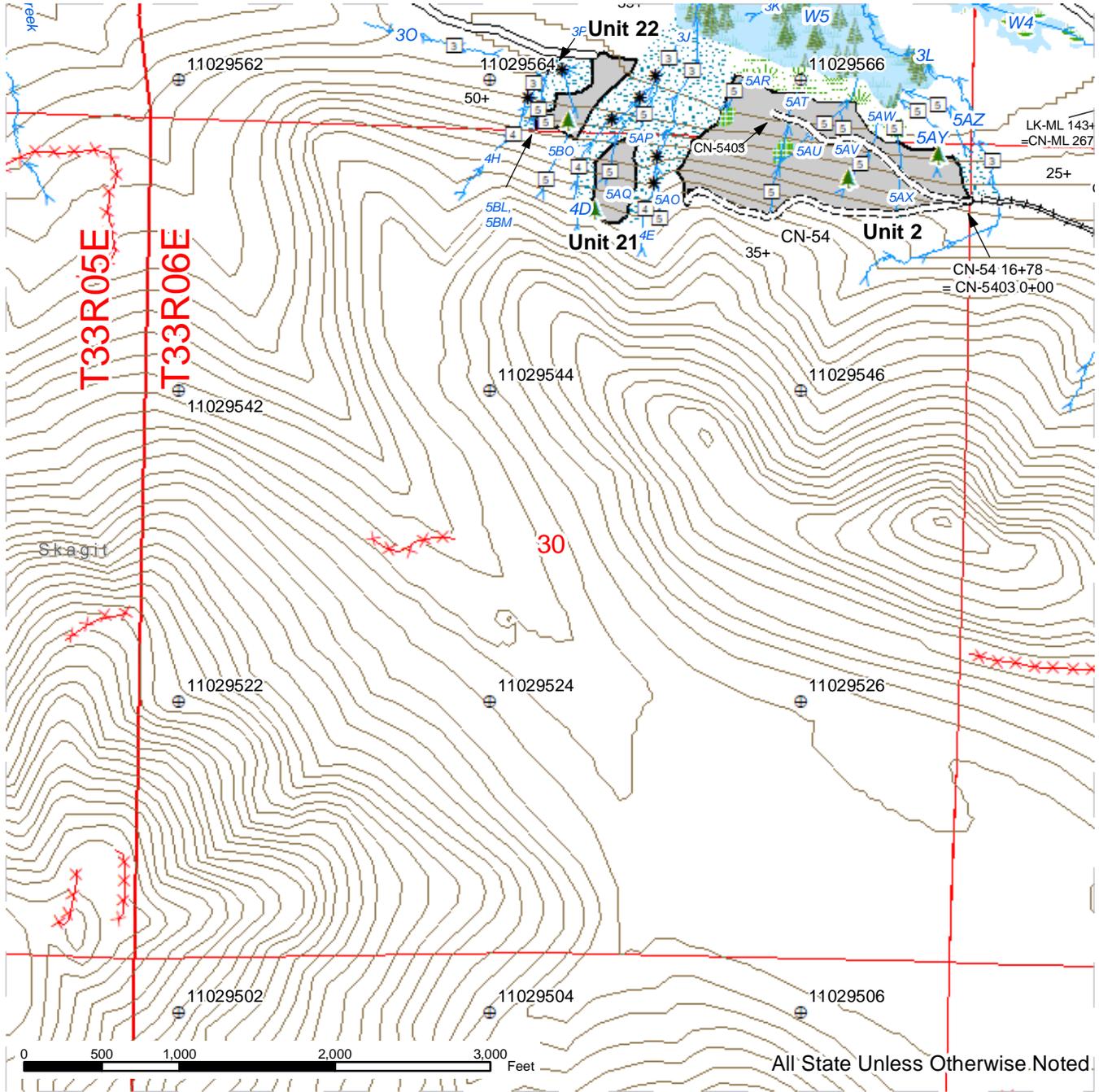
Sale Area	New Construction
DNR Managed Lands	Existing Abandon/Orphan Road
Leave Tree Area	Streams
Riparian Mgt Zone	Contours 40-foot
Forested Wetland	Leave Tree Area <1/4-acre
Wetland Mgt Zone	Tics - 2000' Interval
Existing Roads	



FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R6E



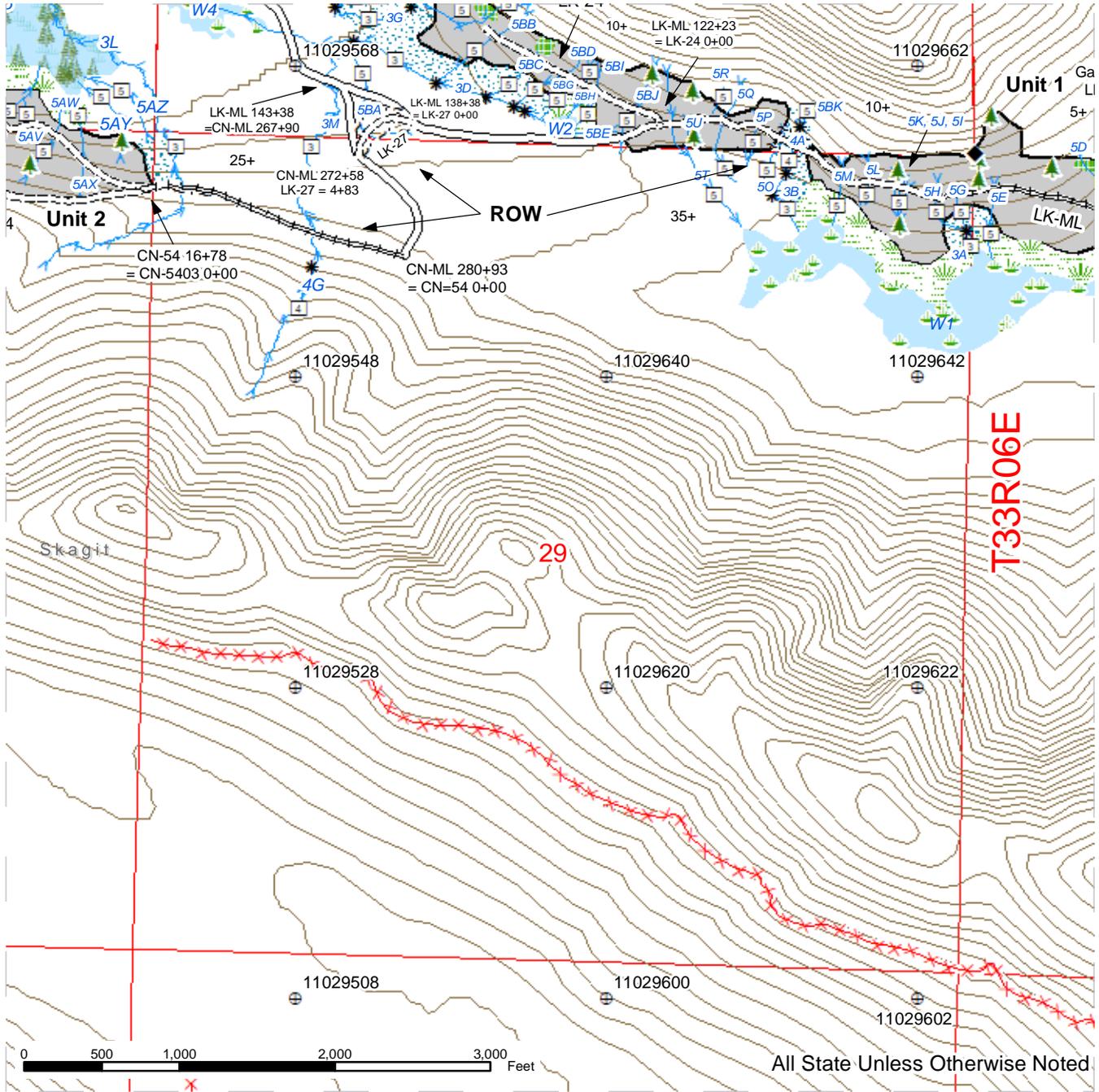
Sale Area	Wetland Mgt Zone	Right of Way Tags
DNR Managed Lands	Existing Roads	Contours 40-foot
Wetlands - Non-forested	New Construction	Leave Tree Area <1/4-acre
Leave Tree Area	Construction = Reconstruction	Tics - 2000' Interval
Riparian Mgt Zone	Existing Abandon/Orphan Road	Streams
Forested Wetland		



FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R06E



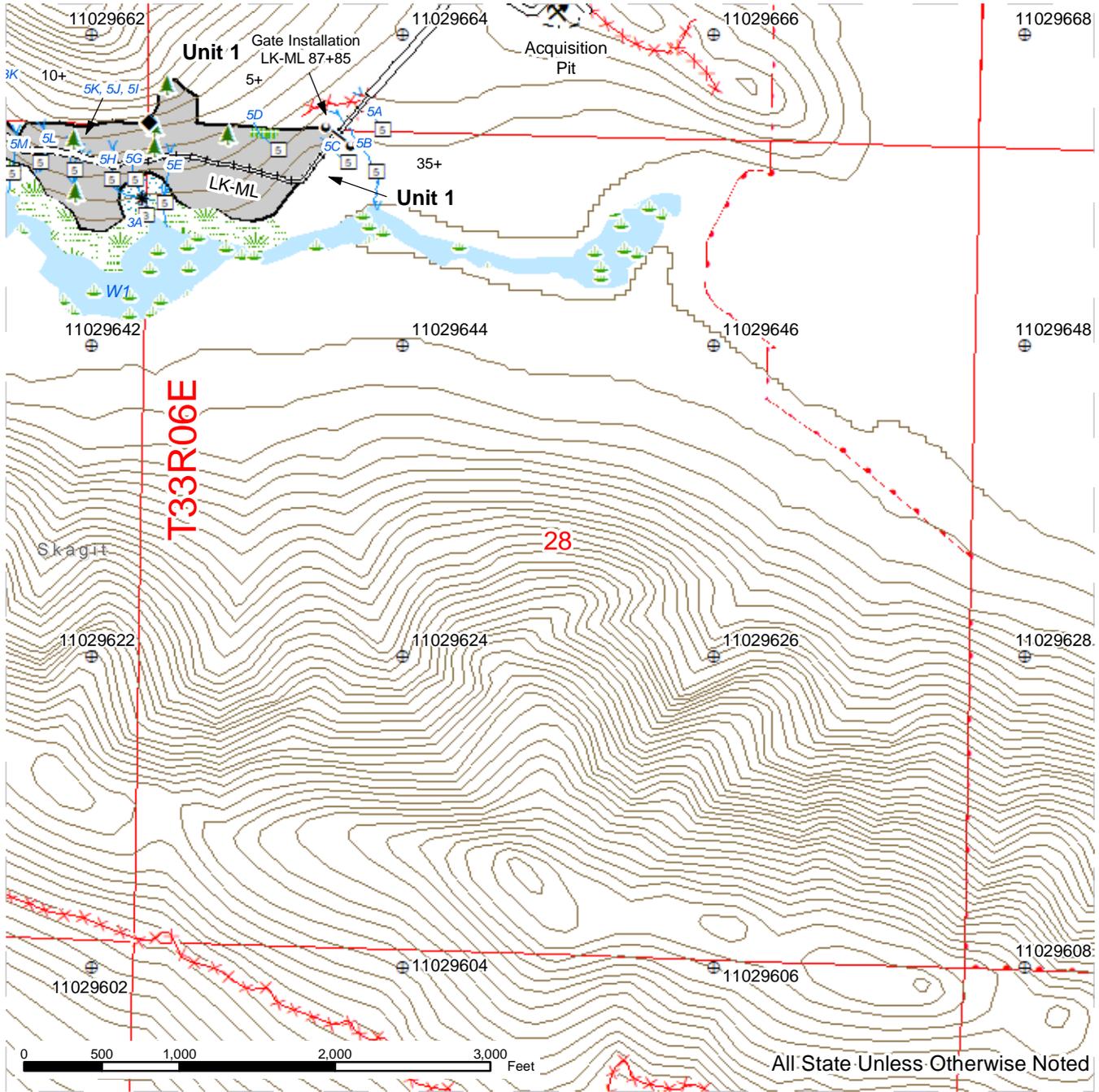
Sale Area	Wetland Mgt Zone	Right of Way Tags
DNR Managed Lands	Existing Roads	Contours 40-foot
Wetlands - Non-forested	New Construction	Leave Tree Area <1/4-acre
Leave Tree Area	Construction = Reconstruction	Survey Monument
Riparian Mgt Zone	Existing Abandon/Orphan Road	Tics - 2000' Interval
Forested Wetland	Streams	



FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
 APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
 TOWNSHIP(S): T33R6E



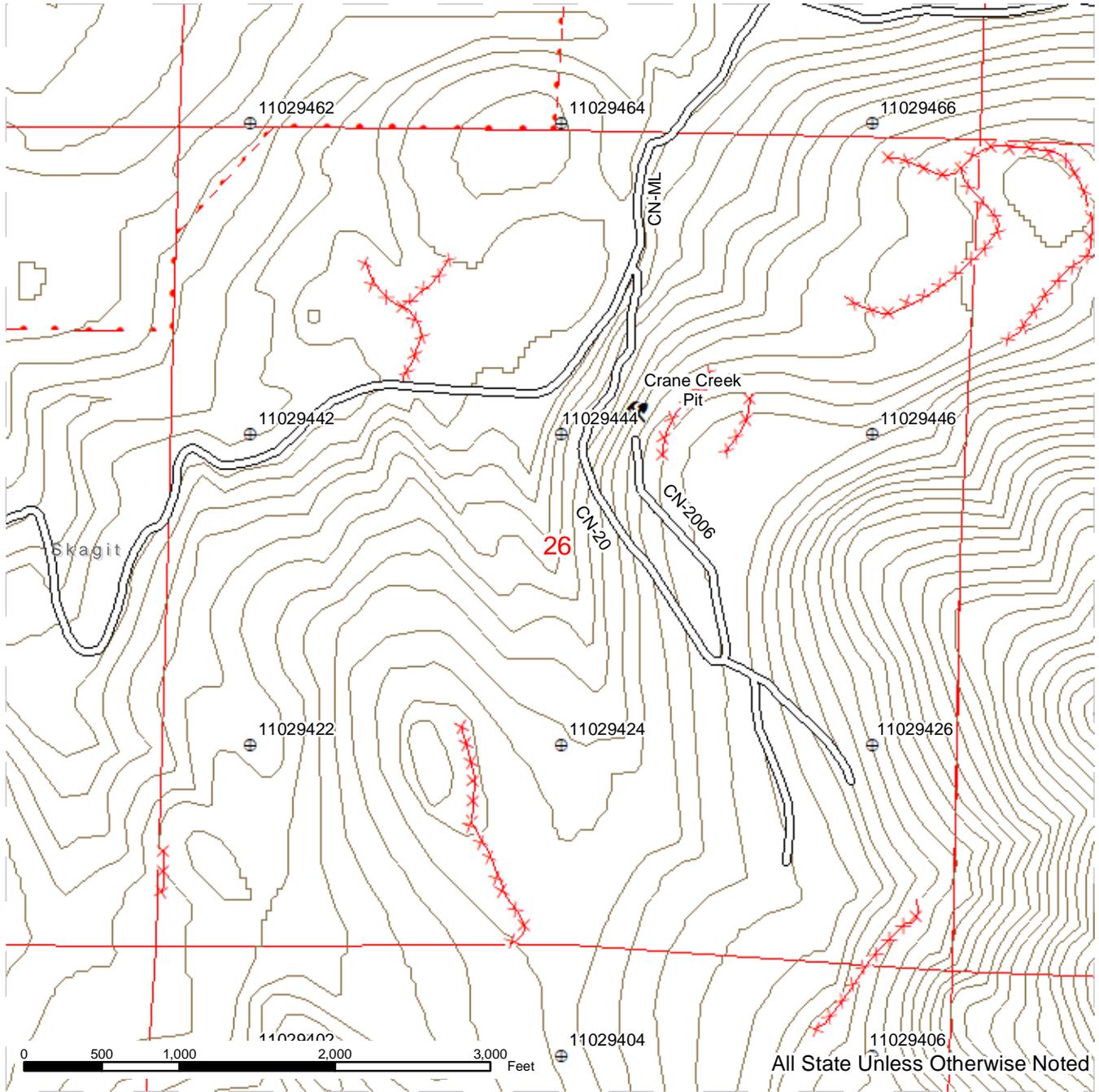
All State Unless Otherwise Noted

Sale Area	New Construction	Survey Monument
DNR Managed Lands	Construction = Reconstruction	Gate Installation
Wetlands - Non-forested	Existing Abandon/Orphan Road	Rock Pit
Leave Tree Area	Streams	Tics - 2000' Interval
Riparian Mgt Zone	Right of Way Tags	
Wetland Mgt Zone	Contours 40-foot	
Existing Roads	Leave Tree Area <1/4-acre	

FOREST PRACTICES ACTIVITY MAP

SALE NAME: SARUS
APPLICATION #: TBD by FP Staff

COUNTY(S): Skagit
TOWNSHIP(S): T33R6E



- DNR Managed Lands
- Existing Roads
- Existing Abandon/Orphan Road
- Contours 40-foot
- Rock Pit
- Tics - 2000' Interval