SEPA[1] Environmental Checklist

FPA/N No. 2423981 | Nisqually Forest Health Thinning
I have reviewed this SEPA checklist and provided boxed comments. 6/24/2024 CKF
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Forest Practices Program Coordinator
Dept. of Natural Resources - SPS Region

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.

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

Please adjust the format of this template as needed. 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.

[1] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Checklist-guidance

A.Background

Find help answering background questions[2]

1. **Name of proposed project, if applicable:**

   Nisqually State Park Forest Health Thinning

2. **Name of applicant:**

   Washington State Parks and Recreation Commission

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

   Name: David Cass –Agency Forester

   Phone: 360-386-2990

   Email: david.cass@parks.wa.gov

4. **Date checklist prepared:**

   05/22/2024

5. **Agency requesting checklist:**

   Washington Department of Natural Resources (DNR)

   FPA/N 2423981 is available on Forest Practices Application Review System (FPARS)

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

   Harvesting to take place between early fall of 2024 and summer 2025.

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

   Yes. Post-harvest monitoring and evaluation activities will occur for at least 3-years following harvest. These efforts may result in follow up slash abatement activities, road and infrastructure repair, erosion control, reseeding, replanting, and noxious weed control.

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

   The following reports were used in the development of project plans:

   LYRA Biological. 2006. Rare Plant and Vegetation Survey of Nisqually-Mashel State Park. Prepared for Washington State Parks and Recreation Commission. December 2006.

   Ettl, G.J. and D. Emmons. 2008. Nisqually-Mashel State Park Forest Health Plan. Center for Sustainable Forestry at Pack Forest, University of Washington.

   Stcherbinine, S. and J. Jenks. 2020. Cultural Resources Survey for the Washington State Parks and Recreation Commission's Nisqually State Park – New Full-Service Park Development Project, Pierce County, Washington. Short report 1355. Archeological and Historical Services, Eastern Washington University. May 2020.

[2] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-A-Background

Additionally, a silvicultural prescription was written for the project by the project consultant, Resilient Forestry LLC.

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.**

   Yes. Nisqually State Park is undergoing phased development to become a new full service park which includes construction of buildings, roads, trails, and other infrastructure. The development phases are being treated separately from this proposed forest health thinning and are undergoing their own permitting and approval processes.

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

    Forest Practice Permit from DNR. Washington State Parks and Recreation Commission approval of the sale of timber from this project.

    FPA/N 2423981 is available for viewing in FPARS. CKF

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.)**

    The Nisqually Forest Health Thinning 2024 is a commercial timber harvest that will take place across 209.4 acres of Nisqually State Park between fall 2024 and summer 2025. Four separate treatment units have been identified: Mountain Highway, Unit 34, Unit 29, and Unit 16. All of these units will undergo variable density thinning that promotes forest resilience, stewardship of natural resources, and park aesthetics totaling acres. The Mountain Highway treatment unit is 72.5 acres, and is comprised of stands 4, 20, 22, and 28. Unit 34 is a 86.7-acre stand located in the southern part of the park just north of the Nisqually River. Unit 29 and Unit 16 are both located along Mashell Prairie Road and are 26.3 and 24.0 acres, respectively.

    All of the units are Douglas-fir dominant stands with minor hardwood components. There is minimal regeneration in the stands, with most regeneration concentration in medium to large openings. Mountain Highway, Unit 34, and Unit 29 have wetlands in or along the boundaries that are buffered 50'. The Nisqually River runs throughout the state park, but all harvest activities have been buffered at least 200 ft from bankfull width. There are no other streams throughout the harvest areas. Soils are moderately to excessively well drained, although there are some areas of standing water. It would be best to harvest in the dry season to reduce soil damage.

    FPA/N Unit 1 = Unit 34; FPA/N Unit 2 = Unit 16; FPA/N Unit 3 = Unit 29; FPA/N Unit 4 = Mountain Highway Unit; FPA/N 2423981 indicates a total of 209.5 acres. CKF

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.

These harvest units are located in Nisqually State Park in Eatonville, WA, which is a part of Pierce County. The address of the park is:

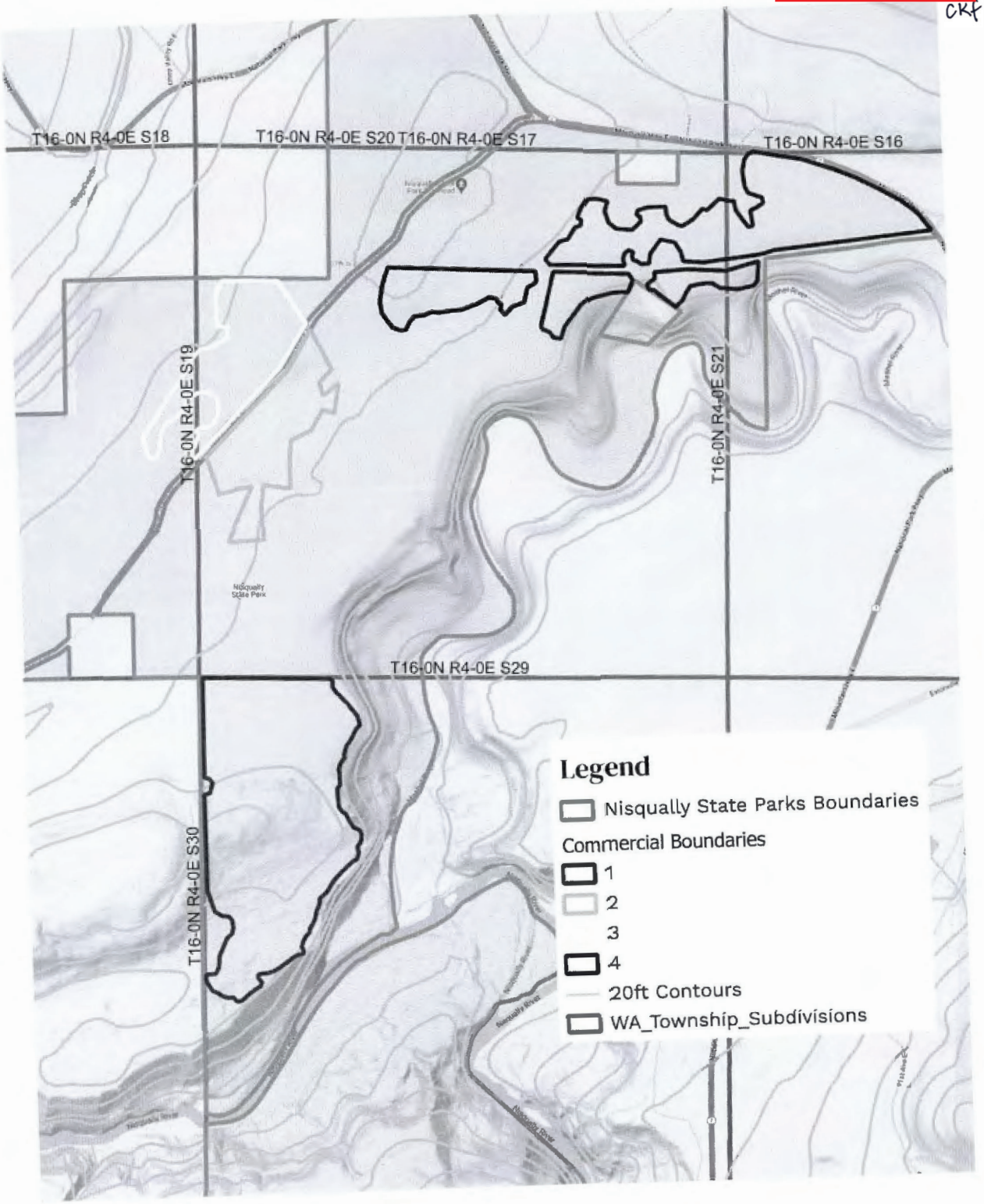
Nisqually State Park
Mashel Prairie Rd,
Eatonville, WA 98328

A legal description of the units and map follows:

FPA ID	Stand ID	Acres	Section	Township	Range	Parcel Number
1	**Unit 34**	86.7	S29	T16-0N	R4-0E	0416292002, 0416293000
4	**Mountain Highway Units**	72.5	S20, S16, S17, S21	T16-0N	R4-0E	0416201006, 0416201007, 0416202007
2	**Unit 16**	24.0	S20	T16-0N	R4-0E	0416202007
3	**Unit 29**	26.3	S19	T16-0N	R4-0E	0416194008, 0416202008

See map on final pages.

CKF



B.Environmental Elements

1. Earth

Find help answering earth questions[3]

a. General description of the site:

The treatments units are generally flat with some small hills and gentle slopes. Portions of the Mountain Highway Unit and Unit 34 border the steep valley down to the Mashel River.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

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

The steepest area on the project is within Unit 34. There is a small hill which has a slope of 30% at its steepest point, however most of the slopes range from 0-5%.

FPA/N 2423981 indicates steepest slope being harvested is 15%. CKF

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.

Map Unit Symbol	3B	3C	19B	19C	19F
Map Unit Name	Barneston gravelly ashy coarse sandy loam, 0 to 8 percent slopes	Barneston gravelly ashy coarse sandy loam, 8 to 15 percent slopes	Kapowsin gravelly ashy loam, 0 to 6 percent slopes	Kapowsin gravelly ashy loam, 6 to 15 percent slopes	Kapowsin gravelly loam, 50 to 70 percent slopes
Acres	46.5	58.2	72	29.6	3.2
Percent Acres	22.20%	27.80%	34.40%	14.10%	1.60%
Hydrological Soil Group	A	A	B	B	C
Drainage Class	Somewhat excessively drained	Somewhat excessively drained	Moderately well drained	Moderately well drained	Moderately well drained
Suitability for Log Landings	Well suited	Moderately suited	Moderately suited	Moderately suited	Poorly suited
Compaction Potential	Low	Low	High	High	High
Site Index	118	118	123	123	123
Windthrow Hazard	Low	Low	High	Medium	Medium
Erosion Rating	Slight	Slight	Slight	Slight	Moderate
Unit 2	12.6 acres		11.3 acres		
Unit 3	24.7 acres		1.6 acres		

[3] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-earth

Unit 1	2.5 acres		51.4 acres	29.6 acres	3.2 acres
Unit 4	6.7 acres	58.2 acres	7.6 acres		

The harvest area is defined by three soil types: Barneston gravelly ashy coarse sandy loam, Kapowsin gravelly ashy loam, Kapowsin gravelly loam of various slope percents. All soils have site indexes that put them into site class II.

The Barneston gravelly ashy coarse sandy loam soil has two slope categories, 0-8% (9.7 acres) and 8-15% Both are in hydrologic group A. These soils have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission. Both slope ranges are rated as having moderately well drained, low windthrow hazard, and a slight erosion rating. The 0-8% slopes are rated as well suited for log landings and 8-15% slopes are moderately well suited for log landings

The Kapowsin gravelly ashy loam has three slope percent ranges in the harvest area: 0-6%, 6-15%, and 30-65%. All three soil types are within the hydraulic grouping B. This soil has a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. It is rated as having a high windthrow hazard. The erosion rating for both 0-6% and 6-15% slopes are both slight, and both are moderately suited for log landings. The 30-65% slope areas have a medium window hazard rating and a moderate erosion rating.

The Kapowsin gravelly loam has a slope of 50 to 70%. It is within the hydrological soil group C. Soils have a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission. It is rated as moderately well drained and is poorly suited for log landings.

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

There is no history or indication of unstable soils within the treatment units. The steep slopes of the Mashel River channel in the vicinity of the project are shown on the DNR's landslide hazard map to have moderate to high susceptibility to shallow landslides and the outer meander bends are rule identified landforms in forest practice rules. The slope break for this valley is buffered from the harvest unit boundary by at least one crown width. A Washington Geologic Service inventoried landslide occurs near the northeast boundary of Unit 34. There is a cut road bench across the feature at about mid-slope that appears unchanged since it was constructed. This landform is buffered from the harvest boundary by 50 feet from the top of slope. There is a second landslide area shown on the Department of Natural Resources forest practice regulation landslide layer within the Mountain Highway unit along the northern boundary and overlapping HWY 7. This feature occurs entirely on flat to gentle sloping ground with no moving

water, seeps, or provision for drainage. It is not a rule-identified landform and is thought to be a mapping error.

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.**

No new permanent road construction is planned for this project. Only temporary road spurs off existing logging roads will be graded and then abandoned after project completion. Existing logging roads in the park will require prehaul maintenance in some areas including: brushing, grading, and application of crushed rock.

FPA/N 2423981 indicates. 2.364.7 feet of new road construction and 11.485.8 feet of road abandonment by June 2026 CKF

f. **Could erosion occur because of clearing, construction, or use? If so, generally describe.**

Yes, erosion is possible with any logging operations. Most of the erosion would be the result of haul routes, temporary roads, and spur roads. Existing roads are being used to reduce the negative impacts of erosion. All temp roads and spur roads will be closed by installing undriveable water bars and ripping to help with revegetation. Slash will be dispersed along skid trails to reduce soil damage and erosion during logging operations.

Landings are also locations that can contribute to erosion. Landing locations have been selected in dry, open areas to reduce soil compaction or in areas where there are naturally occurring gaps or where gaps will be installed. Replanting will take place when the project is complete to help restore landing locations.

g. **About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

None

h. **Proposed measures to reduce or control erosion, or other impacts to the earth, if any.**

- non-drivable water bars
- ripping the road surface to promote re-vegetation
- covering temp roads with large pieces of slash to discourage use.
- Reseeding and replanting in landings, skid trails, natural openings, and created gaps.

2. Air

Find help answering air questions[4]

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.**

- Fuel dispensing or storage

[4] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-Air

- Tree painting using aerosol paints
- Log transportation with heavy trucks
- Harvesting with heavy equipment
- Small engine emissions
- Passenger vehicle emissions

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

No

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

Original equipment manufactured exhaust systems on equipment and vehicles.

3. Water

Find help answering water questions[5]

a. Surface:

Find help answering surface water questions[6]

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.

The Nisqually and Mashel Rivers and Ohop Creek run through and adjacent to the park. However, all units are at least 200' away from bankfull width of any typed water bodies. One unknown stream type that is shown to go through Units 2, 3, and 4 on the DNR watercourses layer. Field verifications showed that this stream is not present.

There are 31.6 acres of forested wetlands in or near the harvest area. Areas near the wetlands or where wet with standing water were buffered 50'. Additional protections of wetland and riparian management zones will be taken pending review by DNR Forest Practices.

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 work will be done within 200 ft of typed waters.

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[5] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water

[6] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Surface-water

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.**

   Not applicable.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   Not applicable.

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

   No.

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

   No.

b. **Ground:**
   Find help answering ground water questions[7]

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 a general description, purpose, and approximate quantities if known.**

   No.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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.**

   Not applicable.

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.**

   There will be soil disturbance from the logging operations. Though some sediments may flow into ditches alongside nearby public roads these ditches are from any typed waters or landscape features that would drain them into moving water. Forested wetlands in and adjacent to the units are buffered from harvest generally by 50 feet and are expected to have minimal impacts from runoff.

[7] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-3-Water/Environmental-elements-Groundwater

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

No. Minimal waste material is generated by this project. In the unanticipated even of a spill hydrocarbons, like hydraulic oil, motor oil, gasoline, and diesel fuel may contaminate soils, but are not expected to reach surface or groundwater. Spills will be cleaned up and/or reported according to Washington Department of Ecology guidance and regulations.

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

No. Some rutting occurs during logging operations with localized impacts on drainage, but no major changes to drainage patterns in the area are anticipated.

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

Abidance with forest practice rules and permit stipulations, contract harvest agreement restrictions on road damage and soil damage, weather restrictions, and best management practices are all used to reduce impacts of erosion and sedimentation into surface water and long-term alterations of drainage and soil productivity.

4. Plants

Find help answering plants questions

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

☒ **deciduous tree: alder, maple, aspen, other**

☒ **evergreen tree: fir, cedar, pine, other**

☒ **shrubs**

☒ **grass**

☐ **pasture**

☐ **crop or grain**

☐ **orchards, vineyards, or other permanent crops.**

☒ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**

☐ **water plants: water lily, eelgrass, milfoil, other**

☒ **other types of vegetation**

b. **What kind and amount of vegetation will be removed or altered?**

This project will be a variable density thinning of Douglas-fir and black cottonwood. Incidental cutting and damage to non-timber vegetation onsite will also occur.

Unit	Total Acres	Harvest Volume (mbf/ac)
1	86.7	10.4
2	24.0	7
3	26.3	5.9
4	72.5	5.1

FPA/N 2423981 indicates approximately 1,595 mbf of timber to be removed.
CKF

Gaps will also be installed which will remove all Doulgas-fir and cottonwood within the areas. These will be replanted with other native tree species, such as western redcedar, western white pine, bigleaf maple, lodgepole pine, Sitka spruce, and western hemlock to increase diversity within the stands.

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

Although no rare plant species have been documented within Nisqually State Park, some state and federal threatened or endangered plant species have been documented to be near the Park. Most have known populations (current or historic) within 5 miles of the site, and all have been observed within Pierce County (LYRA Biological 2006.)

- *Arenaria paludicola (marsh sandwort) - Federally Endangered; State Potentially Extirpated*
- *Aster borealis (northern bog aster) - State Threatened*
- *Euonymus occidentalis (western burning bush) - State Threatened*
- *Isoetes nuttallii (Nuttall's quillwort) - State Sensitive*
- *Lathyrus torreyi (Torrey's peavine) - Federal Species of Concern; State Threatened*
- *Polystichum californicum (California swordfern) - State Threatened*

Washington Natural Heritage Program recommends avoidance of ground disturbance within the Acaea elata var. elate population. CKF

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

Replanting will take place as noted in section 4b.

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

English ivy, Himalayan blackberry, and herb Robert were observed throughout the stands with high densities in some areas. Scotch broom was noted along road ways. Other invasive plants occur with varying density throughout the park.

5. Animals

Find help answering animal questions[8]

a. **List any birds and other animals that have been observed on or near the site or are known to be on or near the site.**

[8] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-5-Animals

Birds: Common birds for the area include hawks, herons, eagles, songbirds.

Mammals: Evidence of deer, bear and elk were all present. Little brown bats, Yuma myotis, and Townsend's Big-eared bat are also known to be throughout this area based on Priority Habitats and Species maps. Cougar, bobcat, porcupine and other common mammals are all assumed to occur.

Fish: Bass, trout, salmon, and shellfish are found in the Nisqually River.

b. List any threatened and endangered species known to be on or near the site.

The Nisqually River supports threatened species such as fall Chinook salmon, late-timed chum, pink and coho salmon, coastal cutthroat trout, winter steelhead and bull trout. The Mashel River valley is within 50 miles of saltwater and has many mature and old-growth trees. It is suitable habitat for marbled murrelet; however, no known nesting sites occur in the area. A Pacific Seabird Group protocol survey for marbled murrelet was performed in the park where there was suitable habitat around a proposed lookout trail. No detections were made during two seasons of survey (2020 and 2021) leading to a conclusion of probable absence from the site. FPRAM review confirms no conflicts with T&E animal species. CKF

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

No. Washington State is considered part of the Pacific flyway, but no impacts are expected as a result of this proposal. CKF

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

Many of the objectives of this forest health work are also designed to enhance wildlife habitat. Skips and gaps that are being implemented throughout the harvest create diversity and to offer cover for wildlife during harvest. Harvest operations will emphasize leaving and releasing the best quality trees for increased growth. The resulting forest will have increased plant species diversity, will be managed for the spread of invasive and exotic plant species, and will increase vertical and horizontal structural diversity that will favor greater wildlife diversity and improve the quality of many habitats.

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

None known.

6. Energy and natural resources

Find help answering energy and natural resource questions[9]

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.

Harvesting equipment will be powered by either gasoline or diesel fuel.

[9] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-6-Energy-natural-resou

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

Health Find help with answering environmental health questions[10]

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

Minor potential for spilling and exposure to fuel or lubricants. Exposure to equipment exhaust by operators. Equipment or vehicle fires are extremely unlikely. Chances of igniting a wildfire are extremely low, especially when the proper precautions are taken for handling fuel.

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

   The Mountain Highway Unit abuts the former Eatonville Landfill cleanup site, which is an inholding owned by Weyerhaeuser. The site is undergoing cleanup through Department of Ecology and is well defined and not directly impacted by harvest operations.

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

   None.

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

   Gasoline and diesel will be used on this project.

4. **Describe special emergency services that might be required.**

   If a fire were to ignite, the Pierce County Fire Department may be required to come put it out. Department of Ecology may be required for spill response. Police, EMT, and other emergency services may respond to an accident or incident during operations.

5. **Proposed measures to reduce or control environmental health hazards, if any.**

[10] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-7-Environmental-health

Proper storage and handling of flammable materials. Not driving equipment through dry brush/grass.

If contamination is suspected, the proponent must contact the Department of Ecology. CKF

b. **Noise**

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

   Logging requires the use of equipment which produces loud noises. Log trucks may also contribute to increased noise pollution in the vicinity.

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)?**

   Harvest operations. Logging transportation.

   Operations will mostly take place during daylight hours and most likely only during weekdays.

3. **Proposed measures to reduce or control noise impacts, if any:**

   Original equipment muffling devices on equipment and vehicles.

8. Land and shoreline use

Find help answering land and shoreline use questions[11]

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.**

   The harvest areas fall into the boundaries of Nisqually State Park. Adjacent to the park, land is owned by the Nisqually Tribe, Nisqually Land Trust, UW Pack Forest, or by private ownership. Only two private homes occur within 500 feet of the harvest unit boundaries.

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 because 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?**

   The park is primarily former industrial timber land, but has not been actively managed for timber production since the early 1990's and by its prior owner. No conversion to other land uses will result from this project.

   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?**

[11] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-8-Land-shoreline-use

None of the surrounding ownership should be affected by harvest operations. All hauling, landings, and traffic associated will take place on Nisqually State Park ownership.

c. **Describe any structures on the site.**

There is a newly constructed maintenance building and a CXT vault restroom constructed in 2016 within the park off Mashel Prairie Road. That is currently the only structure within Nisqually State Park.

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

No.

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

The current Pierce County zoning classification for the property is Park & Recreation.

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

Pierce County 2019 Land Use Designation for the site is Agricultural Resource Land.

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.**

Not applicable.

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

Not applicable.

m. **Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:**

Replanting trees after harvesting.

9. Housing

Find help answering housing questions[12]

[12] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-9-Housing

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

None.

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

None.

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

Not applicable.

10. Aesthetics

Find help answering aesthetics questions[13]

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

Not applicable.

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

Not applicable.

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

Not applicable.

11. Light and glare

Find help answering light and glare questions[14]

a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

None. Harvesting will happen mostly during daylight hours. Some area lighting by logging equipment may be used in pre-dawn hours.

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?**

No.

d. **Proposed measures to reduce or control light and glare impacts, if any:**

Not applicable.

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[13] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-10-Aesthetics

[14] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-11-Light-glare

12. Recreation

Find help answering recreation questions

a. **What designated and informal recreational opportunities are in the immediate vicinity?**

Nisqually State Parks has recreational trails throughout the entire park.

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

Yes. Trails throughout the harvest units will need to be closed during operations. It may be necessary to cross trails to access some of the harvest. Trails will be rehabilitated where they are consistent with the trail development plans for the state park.

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

Trails will be closed during operations to ensure users safety but will be reopened after the harvest. Trail crossings will be minimized and will be crossed at a perpendicular to limit damage. Damage to the trails will be fixed after the harvest where the trail is intended to be rebuilt. Logging roads are also used as trails and will be repaired using best management practices such as installing water bars, grading, fixing drainage issues, and applying crushed rock, or planting with native vegetation.

13. Historic and cultural preservation

Find help answering historic and cultural preservation questions[15]

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

No ◇— FPRAM review confirms no conflicts with historical sites or resources. CKf

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.**

Yes.

Stcherbinine, S. and J. Jenks. 2020. Cultural Resources Survey for the Washington State Parks and Recreation Commission's Nisqually State Park – New Full-Service Park Development Project, Pierce County, Washington. Short report 1355. Archeological and Historical Services, Eastern Washington University. May 2020.

◇— FPRAM review and consultation with DAHP confirmed no conflicts with proposal. CKf

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.

[15] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p

Reviews of past FPA/SEPA, the Department of Archaeology and Historic Preservation's (DAHP's) online database (WISAARD), and internal WSPRC spatial data and project records. Archaeological survey and DAHP/Tribal review and consultation were completed in 2020. Sensitive cultural resource sites and appropriate buffers are all excluded from harvest activities.

c. **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.**

All sensitive cultural resource sites and appropriate buffers are all excluded from harvest activities as dictated by WSPRC archaeologists.

14. Transportation

Find help with answering transportation questions[16]

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.**

Mashel Prairie Rd and Mountain Highway East are the only public roads that will be impacted by the harvest. Neither of these roads will be altered, but could experience increased traffic due to to logging trucks. All public highways will be accessed through existing road approaches.

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

No.

c. **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).**

Existing logging roads on the property will receive prehaul maintenance including: brushing, grading, and application of crushed rock before being used as haul routes during the project. Temporary road spurs will be created in the treatment units to access landings and create truck turn arounds. All temporary roads will be abandoned post-harvest. No impacts are expected to public highways.

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**

[16] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-14-Transportation

the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

None.

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. The project will involve the transportation of forest products via truck through park property and over public roads between the park and mill destinations.

g. **Proposed measures to reduce or control transportation impacts, if any:**

Warning signs will be posted around entry points to public roads notifying of "log trucks entering highway". Mashel Prairie Rd is the only road where log truck ingress/egress from the property will occur and it is a rural county road with low traffic volume.

15. Public services

Find help answering public service questions[17]

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.**

Not applicable.

16. Utilities

Find help answering utilities questions[18]

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

Not applicable.

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.**

Not applicable.

C.Signature

Find help about who should sign[19]

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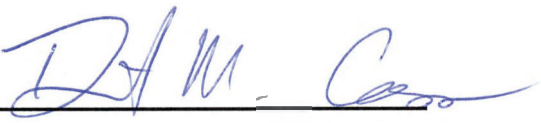
[17] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-15-public-services
[18] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-b-environmental-elements/environmental-elements-16-utilities
[19] https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-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.

X 

Type name of signee: DAVID M. CASS

Position and agency/organization: AGENCY FORESTER, WA STATE PARKS

Date submitted: 6/13/2024

D.Supplemental sheet for nonproject actions

Find help for the nonproject actions worksheet[20]

Do not use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   - **Proposed measures to avoid or reduce such increases are:**

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

3. **How would the proposal be likely to deplete energy or natural resources?**

   - **Proposed measures to protect or conserve energy and natural resources are:**

[20] https://ecology.wa.gov/regulations-permits/sepa/environmental-review/sepa-guidance/sepa-checklist-guidance/sepa-checklist-section-d-non-project-actions

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

    - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

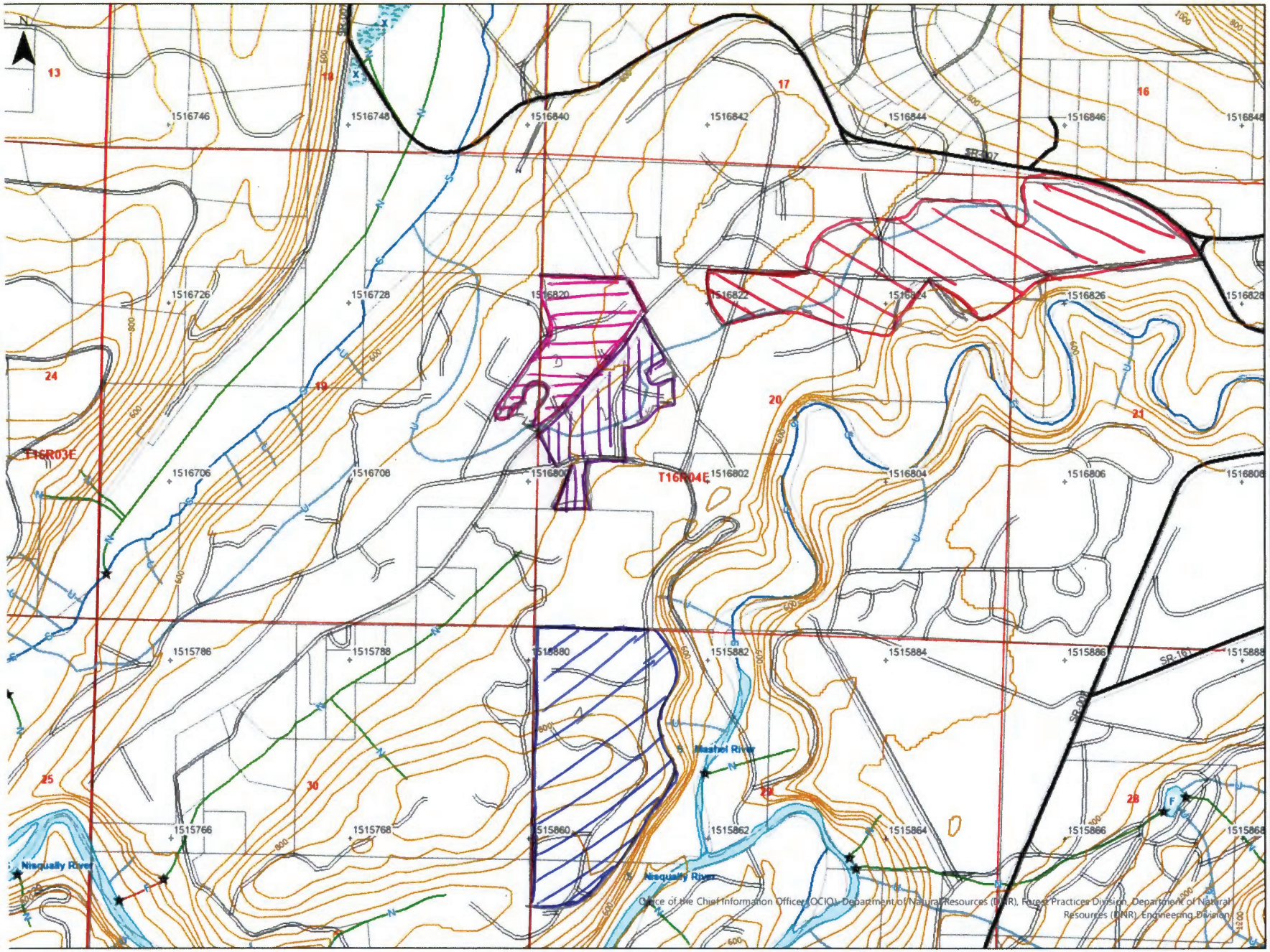
5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

    - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

    - **Proposed measures to reduce or respond to such demand(s) are:**

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**



Forest Practices Activity Map

Application # 2423981

Legal Description

S19 T16.0N R04.0E, S21 T16.0N R04.0E,
S16 T16.0N R04.0E, S25 T16.0N R03.0E,
S30 T16.0N R04.0E, S29 T16.0N R04.0E,
S20 T16.0N R04.0E, S24 T16.0N R03.0E,
S17 T16.0N R04.0E, S13 T16.0N R03.0E,
S18 T16.0N R04.0E, S28 T16.0N R04.0E

Map Symbols

- Harvest Boundary
- Road Construction
- Stream
- RMZ / WMZ Buffers
- Rock Pit
- Landing
- Waste Area
- Clumped WRTS/GRTS
- Existing Structure

Additional Information

UNIT 1
UNIT 2
UNIT 3
UNIT 4

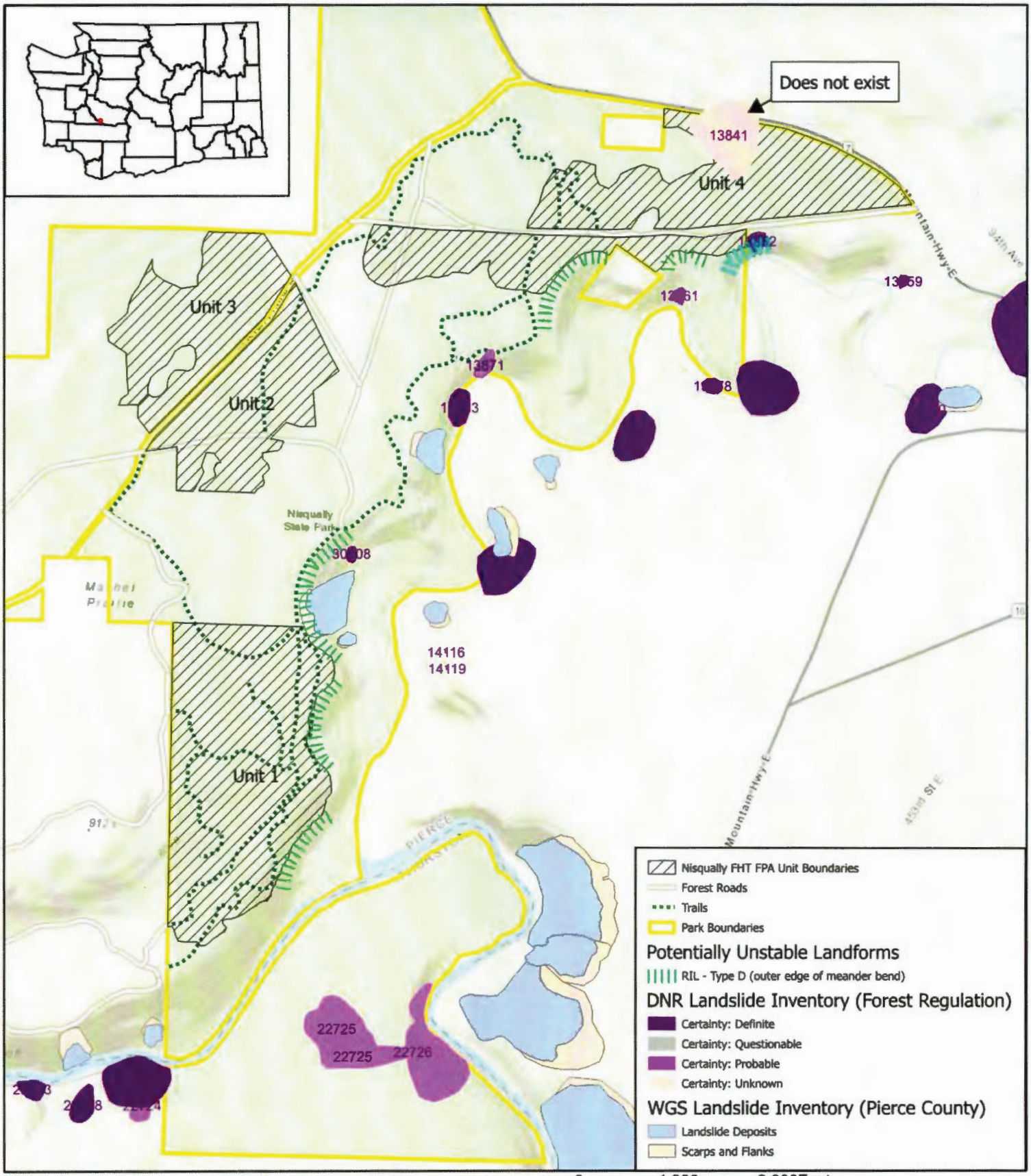
Approximate Scale 1:12,000
0 500 1,000 2,000 Feet

Date: 6/14/2024 Time: 10:55 AM

Office of the Chief Information Officer (OCIO), Department of Natural Resources (DNR), Forest Practices Division, Department of Natural Resources (DNR), Engineering Division

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES

APPROXIMATE UNIT LOCATIONS



Nisqually FHT FPA

Appendix D: Slope Stability Form Map

NAD83 HARN Washington State Plane South

Data in these maps were compiled for cartographic purposes. Due to the variability of the source information, the Washington State Parks & Recreation Commission cannot accept responsibility for errors or omissions, and, therefore, there are no warranties which accompany this material.

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