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. <u>You may use "not applicable" or</u> <u>"does not apply" only when you can explain why it does not apply and not when the answer is unknown</u>. 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 <u>all parts of your proposal</u>, 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: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the <u>SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)</u>. 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 [help]

1. Name of proposed project, if applicable: [help]

West Rocky Prairie Wildlife Area Forest Thin and Oak Release

- 2. Name of applicant: Richard Tveten, Washington Department of Fish and Wildlife [help]
- 3. Address and phone number of applicant and contact person: 1111Washington St SE, Wildlife.

Program, Olympia, WA 98501. 360-480-1581 [help]

- 4. Date checklist prepared: March 30, 2022[help]
- 5. Agency requesting checklist: Washington Department of Fish and Wildlife [help]
- 6. Proposed timing or schedule (including phasing, if applicable): [help]

August - October 2022	November 2022	November 2023	Spring 2023	Summer 2023-2023
Road construction (including rock hauling, rock placement, grading, etc.). Tree harvest and slash piling.	Refurbish permanent roads and seed temporary roads.	Pile Burning	Plant native species.	Weed mowing.

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

Yes. Periodically maintain treated areas with brush mowing and prescribed fire going forward under this SEPA review. [help]

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

A Cultural Resource Survey will be completed. [help]

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. [help] No.

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

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.) [help]

The project will perpetuate a legacy of prairie and Oregon white oak savanna and woodland on the West Rocky Prairie Wildlifie Area Unit, which will enhance habitat for WDFW Species of Greatest Conservation Need. The 99-acre commercial forest thinning involves three types of thinning:

50 acres of oak release and restoration: Douglas fir and other tree species will be thinned to
release existing old-growth oak trees from competition or allow the growth of new oak where
large oaks are currently deficient. Oak restoration thinning includes an Alternate Plan under
the Forest Practices Rules so WDFW can save some of most impressive oaks in the South
Puget Sound region that are present near seasonal streams. Thinning in the alternate plan
areas and will protect 71 large oak trees of which 21 exceed 20" DBH and 5 that exceed 30"
DBH. Some large Douglas fir will also be retained in the oak release areas and will be

managed to more quickly reach their full potential as old growth trees.

- 40 acres of Douglas fir plantation release: Dense, largely monotypic plantations will be thinned to increase diversity and accelerate development of old-growth conifer forest conditions. As legacy stumps suggest that many of these areas were western red cedar forests, thinning is designed to encourage westerns red cedar where present
- 9 acres of prairie restoration: Most Douglas fir will be removed from formerly open prairie areas. The largest Douglas fir trees (Typically over 36" in diameter at breat height) on the prairie, however, will be retained due to the challenges associated with removing such large trees from sensitive prairie habitat.

Road Work	Details
Maintaining 3.2 miles of	This includes grading of existing road surfaces and
existing roads.	adding gravel only where needed. One rock ford will be installed in a non-fish wetland. Gravel and rock will come from a local quarry.
Constructing 1.8 miles	Construction will involve the minimal grading
of new permanent roads	necessary of native soils and adding gravel. A rock entrance and a small gravel parking area will be
	installed on flat ground by Tilley Road. Also, about
	300 feet of road will be raised about one foot near
	Tilley road using gravel and rock from a local quarry.
Constructing and	Construction will involve the minimal grading
abandoning 1.2 miles of	necessary of native soils. Per Forest Practice Rules
new temporary roads	the temporary roads will be abandoned upon
	completion by seeding them, installing water bars
	to prevent erosion and tank traps to prevent vehicle
	access.
Abandoning 0.3 miles	Soil disturbing activities may include the installation
of existing road.	of water bars and tank traps as well seeding.

The project will include the following road work

After the initial thinning is completed, slash materials will be piled and burned. Once slash is cleared, the site will be planted with native prairie and woodland species. Following the initial establishment of native species, the site will be maintained via mowing with a tractor to control Scotch broom. Prescribed fire will also be used to maintain prairie and woodland vegetation.

The 810-acre property is home to rare plants, state and federally listed butterflies and federally threatened Mazama packet gophers as well as critically imperiled plant communities i.e. prairies and oak woodlands. The site is of conservation concern due to fire-suppression related conifer encroachment and invasive species including Scotch broom and Hamalayan blackberry. The project goal is to restore these rare habitats with an emphasis on the needs for federal- and state-listed threatened and endangered species as well as other WDFW Species of Greatest Conservation Need.

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. [help]

The West Rocky Prairie Wildlife Area Unit is in Sections 2, 11 and 12 of T 6N R 2W in Thurston County. The Site can be accessed via Tilley Road on the West and 143rd Avenue SE near the South east corner of the site.

Site Plan with topography and vicinity map attached.

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth [help]

a. General description of the site: Most of the project site is on relatively flat glacial outwash plain. Treatment areas consist of former prairie, oak woodlands and Douglas fir plantation. There are extensive wetlands and several, fish bearing seasonal stream on the site. Most treatment areas are in the transition zones between rparie and wetlands where Douglas fir is replacing prairie and oak woodlands.[help]

(circle one): **Flat**, rolling, hilly, steep slopes, mountainous, other _____ There are slopes of 20% on the wildlife area but the project areas and the land immediately surrounding the project areas is relatively flat.

b. What is the steepest slope on the site (approximate percent slope)? There are slopes of 20% on the wildlife area but the project area and ground immediately surrounding the project area is largely flat. [help]

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? Project areas soils include Spanaway sandy gravelly loam (0-3% slopes) and Spananway Nisqually complex 2-10% slopes. Both are very well draining soils that are associated with prairie and oak woodlands.

There are a wide variety of soils elsewhere on the site including:

- wetland soils Mukilteo muck, Semiahmoo muck, Tiswch silt loam and Norma silt loam.
- Upland forest soils typically not associated with oak woodlands Alderwood gravelly sandy loam and Everett very gravelly sandy loam. [help]
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. No. [help]
- 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.

The project will include the following road work. No other filling, excavation or grading are proposed.

Road Work	Details
Maintaining 3.2 miles of	This includes grading of existing road surfaces and
existing roads.	adding gravel only where needed. One rock ford

Constructing 1.8 miles of new permanent roads	 will be installed in a non-fish wetland. Gravel and rock will come from a local quarry. Construction will involve the minimal grading necessary of native soils and adding gravel. A rock entrance and a small gravel parking area will be installed on flat ground by Tilley Road. Also, about 300 feet of road will be raised about one foot near Tilley road using gravel and rock from a local quarry.
Constructing and abandoning 1.2 miles of new temporary roads	Construction will involve the minimal grading necessary of native soils. Per Forest Practice Rules the temporary roads will be abandoned upon completion by seeding them, installing water bars to prevent erosion and tank traps to prevent vehicle access.
Abandoning 0.3 miles of existing road.	Soil disturbing activities may include the installation of water bars and tank traps as well seeding.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help] Erosion is unlikely due to planning the work in the dry season, flat terrain and the drainage characteristics of the soil. WDFW will seed the skid trails immediately after project completion to minimize the potential for erosion.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? 0% [help]
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help] Disturbed soils will be seeded with native grasses and forbs. Water bars will be installed on abandoned roads

2. Air [help]

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. The tree removal will likely be conducted over 2-3 months. Logging equipment and log trusks will emit diesel exhaust. Pile burning will generate smoke but pile burning will be conducted in accordance with a DNR permit to minimize smoke impacts. Future prescribed burning will also generate smoke but pile burning in accordance with DNR permits to minimize impacts. [help]

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. No [help]

c. Proposed measures to reduce or control emissions or other impacts to air, if any: WDFW will haul away as much large wood as possible for use in stream restoration projects to minimize the need for burning. [help]

3. Water [help]

- 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.

Seasonal fish bearing streams include Beaver Creek, Allen Creek and an unamed tributatry to Beaver Creek. All eventually flow into the Black River near Littlerock. There are large wetlands associated with streams. [help]

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.

Yes, tree harvesting will occur on about 38 acres within 200 feet of streams and wetlands. All thinning , however, will be conducted within Forest Practice standards.

A temporary stream crossing (probably a 24" culvert) will be installed across a seasonal stream during the dry season.

A rock ford will be installed during the summer in an existing road where it crosses a seasonally wet swale to make it more passable in the winter where water sometimes crosses the road.

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. [help]

Approximately 1,800 cubic feet of rock will be placed in tire ruts where an existing road crosses a wetland. The rock source would be a nearby rock quarry.

- Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help] No
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. No. [help]
- 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 [help]
- b. Ground Water:
 - 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 [help]

- 2) Describe waste material that will be discharged into the ground from septic tank 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. Not applicable [help]
- c. Water runoff (including stormwater):
 - 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.

As the soils are glacial outwash in origin, little runoff, if any, will occur in the project area. Runoff, if generated, will likely infiltrate within 30 foot of roads. [help]

2) Could waste materials enter ground or surface waters? If so, generally describe. [help] No

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

No

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

Native forbs and grasses will be planted immediately after harvest and road abandonment work is completed. Water bars will be installed where needed to minimize road roadoff.

- 4. Plants [help]
- a. Check the types of vegetation found on the site: [help]
 - __X__deciduous tree: alder, maple, aspen, other
 - __X__evergreen tree: fir, cedar, pine, other

__X__shrubs

__X__grass

____pasture

- ____crop or grain
- _____ Orchards, vineyards or other permanent crops.
- __X__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- ___X___water plants: water lily, eelgrass, milfoil, other
- ____other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [help]

Douglas-fir along with Oregon ash, cedar, hemlock, cherry, alder and maple will be removed. Forest understory and praire edge shrubs like vine maple, snowberry as well as invasive species including Scot's broom and Himialayan blackberry will be crushed during harvest, especially on skid trains. These plants and will be removed during slash cleanup via burning or chipping to make room for prairie restoration plantings.

The anticipated long-term result will be a 9-acre increase in prairie habitiat, 50 acres of

improved/increase oak habitat and the accelerated succession of 40 acres of conifer forest.

- c. List threatened and endangered species known to be on or near the site. [help]
 - Golden paintbrush (Federally Threatened)
 - Water Howellia (Federally Threatened)
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

The project is intended to restore prairie, Oregon white oaks and restore the oak understory to native oak savannah and woodland species mix. Conifer removal is the first step in this process.

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

Scot's broom, various exotic grasses including tall oatgrass, reed canarygrass, sweet vernalgrass, bromes, orchardgrass, tall fescue, Timothy, Kentucky bluegrass, various species of bentgrass; ox-eye daisy, eat's ear, St. John's wort, Canada thistle, bull thistle, tansy ragwort, cudweed, creeping buttercup, Himalayan blackberry, sheep sorrel, cattail, dandelion and Vinca.

- 5. Animals [help]
- a. <u>List</u> any birds and <u>other</u> animals which have been observed on or near the site or are known to be on or near the site. [help]

Examples include:

birds: hawk, heron, eagle, songbirds, other: Streaked horned lark mammals: deer, bear, elk, beaver, other: Mazama pocket gopher fish: bass, salmon, trout, herring, shellfish, other __Olympic mud minnow_____

- b. List any threatened and endangered species known to be on or near the site. [help]
 - Mazama pocket gopher (Federally Threatened)
 - Streaked horned lark (Federally Threatened)
 - Oregon spotted Frog (Federally Threatened)
 - Taylor's Checkerspot (Federally Endangered)

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

It is a likely stopover for migrating songbirds. We hope to make the site a migration corridor for western gray squirrels which are present to the east but not to the west where seemingly suitable habitat is present.

d. Proposed measures to preserve or enhance wildlife, if any: [help]

The project restores 99 acres of oak woodland, prairie habitat and late seral conifer forest for wildlife, including Mazama pocket gopher, Taylor's checkerspot, streaked horned larks and other WDFW species of greatest conservation need. Thinning of conifers will protect critically impaired ecological systems and allow the remaining forests to more quickly reach climax conditions which is also an underrepresented condition in the area. After removal of conifers WDFW will restore praire

and woodland understory vegetation then maintain it via mowing and prescribved burning.

e. List any invasive animal species known to be on or near the site. None known.

6. Energy and Natural Resources [help]

- 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. [help] Not applicable
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help] Not applicable.
- 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: <u>[help]</u> Not applicable.

7. Environmental Health [help]

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. [help]
 Hazards common to forestry operations will be present like vehicle

accidents, falling trees and wildfire. Diesel vehicles, chainsaws, etc. will be present. Herbicides will be used post harvest for weed control.

- Describe any known or possible contamination at the site from present or past uses.[help] None known.
- 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. [help] None known
- 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. [help] NONE beyond herbicides discussed above.
- Describe special emergency services that might be required. [help] None. There are four fire stations within 20 minutes of the site.
- 5) Proposed measures to reduce or control environmental health hazards, if any: [help]

Minimization of herbicide use and no applications unless needed to control exotics. Avoidance of drift during application.

b. Noise [help]

 What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]
 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. [help] Short term noise from timber harvest machinery, vehicles, chain saws and potentially chippers.

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

8. Land and Shoreline Use [help]

- 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. [help]
 This is a walk-in only wildlife area with hiking, bird watching and hunting as primary forms of recreation. Surrounding properties are rural residential and a gravel pit.
- 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? [help]

The site has been logged in the past. Future logging is possible on the site to maintain praire, oak woodlands and reduce overstocking in plantations.

- 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: [help] No
- c. Describe any structures on the site. [help] None
- d. Will any structures be demolished? If so, what? [help] No
- e. What is the current zoning classification of the site? [help] Open space
- f. What is the current comprehensive plan designation of the site? [help] Open space

- g. If applicable, what is the current shoreline master program designation of the site? [help] NA
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

The project area includes Oregon white oak and prairie which are classified under the Critical Area Ordinance by Thurston County. The creeks and associated wetlands are also considered Critical areas.

- i. Approximately how many people would reside or work in the completed project? [help] None
- j. Approximately how many people would the completed project displace? [help] None
- k. Proposed measures to avoid or reduce displacement impacts, if any: [help] None
- L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help] The property was purchased for recovery of threatened and endangered prairie, oak woodland, and wetland species as well as for recreation. The proposed measures are intended to help recover these species and habitat types. The implementation of the restoration will ultimately lead to increased recreational use if species abundance can be significantly increased.
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: [help]
 None needed.
- 9. Housing [help]
- Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [help] N/A
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]
 N/A
- c. Proposed measures to reduce or control housing impacts, if any: [help] N/A

10. Aesthetics [help]

 a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help] N/A

- b. What views in the immediate vicinity would be altered or obstructed? [help] This project will slightly expand the views of the prairie for existing houses on the eastern edge of the Site.
- b. Proposed measures to reduce or control aesthetic impacts, if any: [help] N/A

11. Light and Glare [help]

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]
 N/A
- b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]
 N/A
- c. What existing off-site sources of light or glare may affect your proposal? [help] None
- d. Proposed measures to reduce or control light and glare impacts, if any: [help] None.
- 12. Recreation [help]
- a. What designated and informal recreational opportunities are in the immediate vicinity? [help] West Rocky Prairie is a walk-in only Wildlife Area Unit wildlife area with hiking, bird watching and hunting as primary forms of recreation. Surrounding properties are rural residential and a gravel pit. Millersylvannia State Park is a populatr park about a mile to the northeast

About a mile of service road off of 143 Avenue SW that is closed to vehivles is normally open for walking. It is the most commonly used access into the West Rocky Prairie Unit This road will have to be closed to the public for up to a month, for safety reasons, when the logger is operating south of Beaver Creek. WDFW will post access information on the kiosk at the parking lot on 143th Avenue SW.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [help] No recreational uses would be permanently displaced and could be enhanced in the long term after overstocked forests are cleared of excess trees and brush. For safety purposes recreation would have to be temporarily excluded from work areas.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help] Temporary impacts to recreation will be minimized by working from one end of the site at a time. That way, part of the site will always remain open.
- 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 located on or near the site? If so, specifically describe.

None of the foundations or demolished remains of historic farming activity near the project area are eligible. A single large berm associated with historic explosives manufacture has not been formally evaluated, but may be eligible for state or national historic registers.

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.

The project area is associated with a prairie landscape in a part of the state where prairies are the result of Indigenous land management; Rocky Prairie itself is evidence of ancient and sustained tribal use. Traditional place names for the creek and prairie have not been uncovered, and specific sites have not been identified. The only know early land grant was north of the project area. WDFW is in the process of completing a Cultural Resource Assessment including archaeological inventory and ethnographic/historic investigation. Prior to that, no cultural resource studies have been completed.

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.

The project was reviewed by the WDFW archaeologist. Initial review included examination of historic GLO and USGS maps and air photos, review of the DAHP WISAARD database, historic newspaper searches for associated individuals and place names, and development of locally specific cultural resource expectations based on physical parameters such as terrain and geology, soils, terrain, hydrology, vegetation, and other factors. Field studies, which included surface survey and subsurface testing, were conducted by professional archaeologists with negative results for significant archaeological resources.

Consultation will occur with interested tribes to identify the potential for impacts to cultural resources. Any concerns or additional information resulting from that consultation will be considered.

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

The project has been reviewed by the WDFW archaeologist, and the Cultural Resource Assessment will be used to consult with interested tribes and the Department of Archaeology and Historic Preservation. At the explosives-related berm mentioned above, encroaching conifer growth will be cut, returning it to a more original appearance; no ground disturbance will be allowed on or inside the berm. The project will operate under WDFW's Inadvertent Discovery Plan, which provides the project proponent with a detail series of steps to follow upon the unanticipated discovery of archaeological or cultural materials

14. Transportation [help]

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. [help]
 Logging trucks will exit the site onto Tilley Road on the western edge of the site and onto 143rd Avenue SW near the southearn corner corner of the wildlife area.

- 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? [help]
 No
- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help] Up to six additional parking spots near Tilley Road.
- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The proposed eastern haul route is currently used as service road and a pedestrian trail. The project will improve the service road/trail by filling ruts and and potholdes with gravel.

A new permanent maintenance access road will be built exending access into the site from the west. The west entrance road currently extends about 1/4 of the way across the site. It will be extended eastward to connect with existing roads in the eastern 1/3 of the site.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help] No
- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help] None
- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [help] No
- h. Proposed measures to reduce or control transportation impacts, if any: [help] None

15. Public Services [help]

- 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. [help] No
- b. Proposed measures to reduce or control direct impacts on public services, if any. [help] None

16. Utilities [help]

a. Circle utilities currently available at the site: [help]

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other None

c. 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 [help]

C. Signature [help]

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:

Wett len

_____ Name of signee ___Richard Tveten _____

Position and Agency/Organization __WDFW Forest Management Team Lead____

Date Submitted: _____3/30/2022_____