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.

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.

A. Background [HELP]

1. Name of proposed project, if applicable: *Minter Creek Hatchery Intake Replacement*

2. Name of applicant: *Doug Wiedemeier, WDFW*

3. Address and phone number of applicant and contact person: *600 Capitol Way N, Olympia WA 98501-1091; 360-789-2464*

4. Date checklist prepared: *September 9, 2019*

5. Agency requesting checklist: *WDFW*

6. Proposed timing or schedule (including phasing, if applicable): *Begin construction in summer 2020 (if permits obtained) and complete by 2023.*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. *No other work currently planned.*

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. *A wetland survey and critical areas report are available.*

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. *No.*

10. List any government approvals or permits that will be needed for your proposal, if known. *WDFW will pursue all County permits, a hydraulic project approval, and a Corps permit.*

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 screens and fish ladders at the intakes do not meet state and federal standards and need to be brought up to current standards. WDFW will take this opportunity to eliminate one surface water intake, and take all surface water from the upper intake so that it will be gravity fed. The current upper intake takes water in at two locations. The new intake will eliminate the second location.*
A new sediment settling pond will be constructed to significantly reduce sediment passed into the hatchery and the wear it has on hatchery pumps and pipes. The current sand trap will be removed.
There is active erosion of the access road, and WDFW proposes to add wood to deflect flow and hold the wood down with rock above. Oversteepened slopes will be stabilized.
The old concrete fish counting structure will be partially removed. Removal will include the pair of concrete supports in contact with normal flows. Removal will include the concrete base between supports, and restoring the stream bed.
The lower intake will be removed and streambank will be restored, and functional large wood will be added to improve aquatic habitat quality. New sheetpile will be added immediately adjacent to the existing sheetpile to protect the hatchery.
New piping (two side by side pipes) to the upper intake will be installed, along with a buried electrical conduit. The second pipe will be used in summer months as needed to maintain minimum flows in Minter Creek between the intake and hatchery, by pumping water back up to the intake site.

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.
12710 124th Ave CT KPN, Gig Harbor WA 98329. Township 22N, Range 1E, section 29. Pierce County. See plans for additional location information.

B. Environmental Elements [HELP]

1. Earth [help]

a. General description of the site:

(circle one): Flat, rolling, hilly, steep slopes, mountainous, other _***Generally flat along Minter Creek, with steep slopes beyond project area***_____

Minter Creek immediately upstream of the hatchery is largely undeveloped within riparian zone, and therefore contamination of soils is not expected.

b. What is the steepest slope on the site (approximate percent slope)? *Approximately 100% at road and bank stabilization area.*

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.
The soil along Minter Creek is Aquic xerofluvents. West of Minter Creek the soil is Indianola loamy sand. There is significant earth movement proposed. Water quality is important to fish production, so it is unlikely that soils are contaminated along the stream.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. *No. The bank protection is needed to correct toe erosion where Minter Creek is eroding the toe of the slope impacting the access road.*

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.
Purpose: to improve performance of hatchery and meet all state and federal standards for surface water withdrawls.
Type: fish hatchery
Total Area: Total disturbed area of 68,489 square feet; 31,825 below OHWM and 36,664 above OHWM.
Any imported fill will be from a commercial source. Some streambed material has been stored from 20198 and will be reused below OHWM.
See sheet 21 and 22 of permitting plans.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Possibly, however BMPs will be in place. Once construction has been completed and soils

are stabilized, there should be minimal risk of future erosion. Upon completion, areas of bare soils will be seeded. Significant plantings of trees and shrubs will occur after construction.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *The only additional new impervious surface will be the new sediment settling pond. The sand trap and a portion of the fish collection structure will be removed. Overall there will be under 6000 square feet of new impervious surface.*

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: *BMPs will be in place during and after construction to control erosion. The new site will be graded to thoughtfully allow runoff to move into areas that will not present problems.*

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. *There will be an increase in diesel emissions while construction is occurring. Upon completion emissions should return to current levels.*

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. *None known.*

c. Proposed measures to reduce or control emissions or other impacts to air, if any: *None, as once construction is complete emissions should return to normal levels.*

3. Water [help]

a. Surface Water: [help]

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. *Yes, Minter Creek is adjacent to the site, as are several unnamed tributaries to Minter Creek. Minter Creek flows into Henderson Bay, part of Puget Sound.*

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, the project will involve significant work in Minter Creek, at both intakes, the location with ongoing erosion of the road, and the removal of a portion of the old fish collection structure.*

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.
Overall, there will be 4,269 CY of fill removed below OHWM, and 4,878 CY of fill placed below OHWM. WDFW will reuse any stored stream substrate acculumulated on site and obtain additional material from a local commercial source.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *Yes, but the surface water intakes are already used under existing water rights. The water rights will be amended to*

reflect the changes being proposed. No additional withdrawls or diversions not already permitted. The lower surface water intake will be removed, and those water rights transferred up to the upper intake.

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

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. *Yes, the hatchery will continue to discharge, while meeting water quality standards and the existing NPDES permit. The pollution abatement pond will continue to be used.*

b. Ground Water: [help]

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. *Yes, groundwater is currently withdrawn from several wells for domestic and hatchery use. The wells will remain unchanged.*

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. *No change from current discharge.*

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. *Future runoff (stormwater) will be shed as it currently is at site.*

2) Could waste materials enter ground or surface waters? If so, generally describe. *This project will not increase waste materials from current levels. The existing Polution Abatement pond will continue to be used.*

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. *No.*

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: *Minor changes to drainage at the road and bank stabilization site.*

4. Plants [help]

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

_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
_____water plants: water lily, eelgrass, milfoil, other
_____other types of vegetation

b. What kind and amount of vegetation will be removed or altered? *Most vegetation removed will occur in the area of the sediment settling pond. WDFW will seek to keep as many conifer as possible, and try to avoid impacting large mature western red cedar. Vegetation will be altered around intake to be removed. Project will remove invasive species and plant native species. There is also some knotweed present at the upper intake that will be addressed.*

c. List threatened and endangered species known to be on or near the site.
Marsh sandwort (Arenaria paludicola) and Whitebark pine (Pinus albicaulis) are potentially found in the project area. A search will be done prior to starting construction to identify whether listed plants are present in work area. Not known to be present. If found, regulatory agencies will be notified and consulted as necessary.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
The area of the upper intake will have Japanese Knotweed removed and native plants planted adjacent to the stream. At the lower intake site, the invasive Himalyan blackberry will be removed and native plants will be planted and monitored for three years. See sheet #20 of plans for proposed planting.

e. List all noxious weeds and invasive species known to be on or near the site.
Known invasive species include Himilayan blackberry, Japanese Knotweed and reed canary grass.

5. Animals [help]

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

Examples include:

birds: **hawk, heron, eagle, songbirds**, other:
mammals: **deer, bear, elk, beaver**, other:
fish: bass, **salmon, trout**, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site.
Steelhead: Puget Sound steelhead are listed.
Chinook: Puget Sound chinook are listed as threatened.
Marbled Murrelet: No habitat (nesting habitat) nearby, but individuals likely use the Puget Sound to forage. Marbled murrelets are not uncommon in marine environment.

Streaked horned lark is possibly found throughout western Washington.

c. Is the site part of a migration route? If so, explain.
Yes, the site is in the Pacific Flyway and also sees annual migration of fish including anadromous fish.

d. Proposed measures to preserve or enhance wildlife, if any: *WDFW will remove the lower intake, which will improve fish migration. Also the stream banks around the removed intake will be restored, and large wood will be placed in the stream to increase aquatic habitat value. The new intake will meet all state and federal standards for screens and fish ladders.*

e. List any invasive animal species known to be on or near the site.
Invasive species include European starling and house sparrow.

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.

The elimination of the lower intake will make much of the hatchery water supply gravity driven, so we expect to use less energy overall. The potential summer pumpback may offset that some, but that is expected to only be needed for a few months out of the year. Overall there should be significant savings. The use of other utilities is expected to remain similar to current.

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:

The new intake will be a gravity system, and result in substantial energy reduction most months. Energy consumption may increase in the few months where water is pumped back upstream. Overall there will be a savings.

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. *No increase from present hazard potential.*

1) Describe any known or possible contamination at the site from present or past uses.
No known contaminates at site.

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.
Hatcheries use several chemicals to keep fish healthy, including treatment for parasites. These chemicals are already used at the existing site. Other utilities will be located and avoided during construction.

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.
Hatcheries use several chemicals to keep fish healthy, including treatment for parasites. These chemicals are already used at the existing site.

4) Describe special emergency services that might be required.
None anticipated.

5) Proposed measures to reduce or control environmental health hazards, if any: *The elimination of an intake and associated weir will improve fish access upstream and improve downstream flow of wood and sediment.*

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? *There will be a temporary increase in noise as the construction occurs. Once construction is done, noise levels should either return to normal or decrease slightly, as pumps will be used less because of gravity supply.*

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.
Short-term there will be an increase in traffic and construction noise.
Long-term noise levels will return to normal.

3) Proposed measures to reduce or control noise impacts, if any:
Construction will be limited to 7 AM to 7 PM, unless local ordinances restrict noise further, in which case the more restrictive hours will be adhered to.

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. *The site is currently already used as a fish hatchery. Adjacent properties are either residential or vacant lots. The upper intake is not located on WDFW lands, but there is an existing easement and landowners are actively being contacted.*

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 site has been a fish hatchery for many decades.*

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.
There is an existing hatchery (office, ponds and raceways, bridge over Minter Creek, water distribution tower, pollution abatement pond, a weir to direct returning salmon back into the hatchery and fish ladder and two residences) at this location.

d. Will any structures be demolished? If so, what?
Yes, see plans. The lower surface water intake and weir will be removed and the stream at that location will be restored. The upper intake and weir will be demolished and replaced with a new structure that includes a better fish ladder. The existing sand filter will also be removed.

e. What is the current zoning classification of the site?
Rural Sensitive Resource

f. What is the current comprehensive plan designation of the site?
Site is Rural Unincorporated.

g. If applicable, what is the current shoreline master program designation of the site?
Site is designated as High Intensity.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
There are several wetlands that have been identified. Most will be avoided by construction activities. See plans and wetland report.

i. Approximately how many people would reside or work in the completed project?
There will be no change. There are two families living on site, and that will not change.

j. Approximately how many people would the completed project displace?
No people will be displaced by this project.

k. Proposed measures to avoid or reduce displacement impacts, if any:
No people will be displaced by this project.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
This proposal will not change use, therefore compatibility is not an issue.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
None proposed or needed, since there will be no impact.

9. Housing [help]

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

No change to housing at site. Housing is provided for staff so that response time to emergencies is minimal.

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

No changes to housing.

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

No impacts to housing.

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?

The new utility building at the upper intake will be 14 feet tall. Exterior building materials will likely be concrete and sheet metal, with a yet to be determined roof material.

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

No changes to views as a result of this proposal.

b. Proposed measures to reduce or control aesthetic impacts, if any:
None proposed or needed.

11. Light and Glare [help]

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

There will be no changes in light or glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No, elevation and trees hide project site from most neighboring properties.

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 anticpated. Should there be any impacts, WDFW will seek to correct or mitigate.

12. Recreation [help]

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

People come to the hatchery to fish and bird watch. Public use will continue as present.

b. Would the proposed project displace any existing recreational uses? If so, describe.
Only during construction for safety reasons. Once construction is complete, all recreational uses can resume as usual.

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 [help]

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.

Yes, historic archaeological site 45PO1295.

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.

Two archaeological monitoring reports conducted, one in 2013 second in 2019.

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.
Tribal consultation, DAHP consultation, archaeological monitoring.

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.
Archaeological monitoring of gravity intake and settling pond. WDFW Inadvertent discovery plan.

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.

See plans. Crevison Drive is the access to 124th Ave CT KPN. Hatchery is signed.

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?

Public Transit exists in Gig Harbor, 6.5 miles to the east.

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

No change in parking.

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).
No

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

Site only uses roads for transportation.

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?

Increased vehicular trips would occur during construction only. Once the project is completed, volumes should return to normal.

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

h. Proposed measures to reduce or control transportation impacts, if any:
There may need to be a flagger and/or signs at the intersection of Creviston Drive and 124th Ave CT on very busy days for large trucks, as there is a curve on Creviston Drive, limiting vision. Otherwise no transportation impacts anticipated.

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.
No.

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

16. Utilities [help]

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

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.
No additional utilities needed or utilized at the site.

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: _____

Name of signee ____Doug Wiedemeier_____

Position and Agency/Organization ____Permitting biologist, WDFW, CAMP_____

Date Submitted: __9/17/19_____