

# SEPA ENVIRONMENTAL CHECKLIST

JUNE 2015

## ***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:*** [\[help\]](#)

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: [\[help\]](#)  
Skamokawa Groundwater Chum Spawning Channel

2. Name of applicant: [\[help\]](#)

Washington State Department of Fish and Wildlife (WDFW)

3. Address and phone number of applicant and contact person: [\[help\]](#)

Washington Department of Fish and Wildlife  
600 Capitol Way N  
Olympia, WA 98501  
Contact: Melissa Erkel  
(360) 902-2212

4. Date checklist prepared: [\[help\]](#)

January 27, 2016

5. Agency requesting checklist: [\[help\]](#)

Washington State Fish and Wildlife (WDFW)

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)

Summer 2016

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

The spawning channel has geological, hydraulic, and groundwater monitoring data available to support the site location. The proposed project incorporates environmental data in the project design.

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, there are not any applications pending governmental approvals.

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

An HPA and Corps permit will be required.

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.) [\[help\]](#)

This project is designed to increase the availability of high quality spawning conditions specifically for environmentally Threatened chum salmon in the lower Columbia River region. Completion of the channel will result in a no net loss of habitat functions.

Two sites will have channels constructed on them. The downstream channel will be located on the McNally property and will be 725 feet long, and 10 feet wide. The upstream channel on Emlen/DNR property will be 500 feet long and the width will vary between 4 and 6 feet in the lower 200 feet of the channel and 8 feet for the upper 300 feet of channel. Gravel specifically designed for spawning chum will be installed in both channels. Instream flow from upwelling groundwater in the new channel is expected to provide preferred habitat for chum spawning and rearing habitat.

Overstory and instream habitat at the project site will have a minimum of disruption or alteration beyond the extent required to undertake the proposed project. Coordination has been taken with DNR to ensure that all large coniferous trees that could potentially be used for marbled murrelet habitat remain with little to no root damage. On the upstream site large wood will be placed on the upper bank in the floodplain at the head of the channel to help protect from high flood flows. Large woody debris will also be installed at the mouth of the channel.

All best management practices, low impact development techniques, and integrated management practices will be implemented. No mitigation other than native plantings is proposed for this project.

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. [\[help\]](#)

For the downstream site location: From SR 4 heading west turn right onto E Skamokawa Valley Rd. Turn left on Middle Valley Rd, then turn right on Peterson Rd. At the end of Peterson road turn left; follow the driveway to the last house of the left. The site is located on this property and the adjacent parcel.

For the upstream site location: From SR 4 heading west turn right onto E Skamokawa Valley Rd. Turn left on Middle Valley Rd, in 2.6 miles turn right on Oatfield road. The project is located on this parcel on the left bank side of Skamokawa Creek.

Abbreviated Legal Description: T10N S29 R06W  
Coordinates: 46.3175517 N lat / -123.4534760 W long.

**B. ENVIRONMENTAL ELEMENTS** [\[help\]](#)

**1. Earth** [\[help\]](#)

a. General description of the site: [\[help\]](#)

(circle one): (Flat), rolling, hilly, steep slopes, (mountainous), other \_\_\_\_\_

The project is located in Skamokawa Valley where it is generally flat. Mountainous areas are nearby.

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

The project site typically has a 0 to 1% slope.

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. [\[help\]](#)

Soil types found in the area include nuby silt loam, Gerhalem silt loam, Humptulips silt loam, sandy clay loam at the downstream site. At the upstream site there are mostly gravels, cobbles, sand and minimal sandy clay loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No.

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. [\[help\]](#)

Upper site:

- 380 cy of streambed mix to be added to the constructed channel.
- 260 cy of 6" cobbles for coir lifts to be installed at the toe of the channel.
- Cobble coir wraps will consist of non-woven coir fabric, straw or burlap blanket to contain soil and an outer woven fabric for structural integrity.
- 54 piling logs with a diameter of 10-14" and minimum length of 12', species Douglas fir or cedar.
- 56 of toe logs with a minimum diameter of 14" and a minimum length of 16', species Douglas fir or cedar.
- 9 pieces of LWD with root wads, species Douglas fir or cedar.
- 36" long 5/8" diameter threaded rod to be used to attached toe logs to log pilings.
- 8 rootwad logs. Rootwads will have a minimum diameter of 6' and the logs will have a minimum diameter of 18", length will be at a minimum 40'. Species will be ponderosa pine, Douglas fir or cedar.

Lower site:

- 845 cy of streambed mix to be added to the constructed channel.
- 475 cy of 6" cobbles for coir lifts to be installed at the toe of the channel.
- Cobble coir wraps will consist of non-woven coir fabric, straw or burlap blanket to contain soil and an outer woven fabric for structural integrity.
- 20 piling logs with a diameter of 10-14" and minimum length of 12', species Douglas fir or cedar.
- 30 of toe logs with a minimum diameter of 14" and a minimum length of 16', species Douglas fir or cedar.
- 36" long 5/8" diameter threaded rod to be used to attached toe logs to log pilings.
- 2 rootwad logs. Rootwads will have a minimum diameter of 6' and the logs will have a minimum diameter of 18", length will be at a minimum 40'. Species will be ponderosa pine, Douglas fir or cedar.
- 50 cy of quarry spalls.

CUT & FILL TOTALS IN CUBIC YARDS

SITE #	CUT (Channel Excavation)		FILL (All Imported Materials)	
	Above OHW	Below OHW	Above OHW	Below OHW
U/S - EMLEN DNR	1,750	10	820	10
D/S - McNALLY	2,220	10	1,400	0
TOTALS	3,970	20	2580	10

All fill materials will be obtained from an approved local quarry. Local quarries include Naselle Rock in Naselle, Storedahl in Kelso or Derosier in Longview

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

Yes, erosion could occur as a result of project ground breaking and excavation activities.

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

None.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Construction work will be entirely isolated from Skamokawa Creek. All work, including earthwork will be completed as quickly as possible and operate to minimize disturbance. All excavation will be performed in isolation from living water using cofferdams. The majority of the channel will be excavated before the ends are excavated and the channels are connected to the river.

Excavated materials will be placed in an upland location completely isolated from the river., Disturbed soils will be stabilized and protected from erosion by mulching, plastic sheeting, sodding, hydro-seeding, erosion control fabrics according to approved measures. Soil compaction will be minimized to the greatest extend possible.

Temporary material stockpiling will be located on site more than 150 feet away from the river or adjacent wetland. Stockpiled materials will also be covered with plastic to prevent erosion. Any toxicants (creosote, oil, cement, concrete, and equipment wash water) construction debris, overburden, and other waste materials will be disposed of at an approved facility. Temporary fill materials will not be stockpiled in an area where it could affect sensitive areas.

Only materials meeting project specifications will be placed in the spawning channel. The completed project will not include any chemical or material pollution to any water source or wetland. No foreign materials will enter any waterway or wetland. Spill kits will be on site should an accidental spill occur. Water quality will be monitored as approved by permitting agencies. After construction activities are completed water will be reintroduced slowly to the new channel.

**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. [\[help\]](#)

Typical emissions will be generated from construction equipment. No source of emissions will be generated from the completed project.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

No off site sources of emissions or odors are expected to affect this proposal.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

None are proposed.

**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. [\[help\]](#)

Skamokawa Creek is at the project location. Skamokawa Creek flows into the Columbia River. At the downstream site location there are freshwater wetlands at the project location.

- 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. [\[help\]](#)

The proposed project will work adjacent to Skamokawa Creek. This project creates side channel to Skamokawa Creek, constructed specifically for spawning chum. Please refer to attached plans.

- 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. [\[help\]](#)

Activity (fill, drain, excavate, flood, etc.)	Wetland Name <sup>1</sup>	Wetland type and rating category <sup>2</sup>	Impact area (sq. ft. or Acres)
DS Site excavate	Wetland A	II, Riverine Forested and Emergent	0.36
DS Site fill	Wetland A	II, Riverine Forested and Emergent	0.36

Approximately 350 lineal feet of channel will be excavated removing 1,260 cubic yards of fill to allow for adequate groundwater in the channel. Once that fill is removed 277 cubic yards of spawning gravel will be added to the channel. All fill materials will be obtained from an approved local quarry. Local quarries include Naselle Rock in Naselle, Storedahl in Kelso or Derosier in Longview.

Total Excavation within Wetland	= 1260 cu yards
Total fill within wetland	= 598 cu yards
Stream bed gravel mix	= 277 cu yards
spalls/ big cobbles at side channels	= 50 cu yards
Toe treatments ( logs/backfill, coir)	= 271 cu yards

4) 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. [\[help\]](#)

Yes, the entire site is within the 100 year floodplain.

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. [\[help\]](#)

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

Groundwater will not be withdrawn from a well. No water will be discharged to groundwater.

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. [\[help\]](#)

No waste materials will be discharged to the ground from septic tanks or any other source as a result of this project.

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. [\[help\]](#)

Stormwater will infiltrate through natural ground surfaces before eventually returning to Skamokawa Creek.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

Best Management Practices (BMPs) are used to prevent any source of waste materials from entering surface water. Fueling of machines will be done away from any source of surface water. Spill kits will be available on site. No source of waste material will come from the completed project.

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

Upwelling groundwater will combine with surface water flow in the new channel that will be returned to Skamokawa Creek. No changes are anticipated that could affect drainage patterns in Skamokawa Creek.

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

Most construction activities will be uplands in dry conditions away from Skamokawa Creek. Cofferdams lined with plastic will be placed at either end of the project to isolate the construction area away from Skamokawa Creek. Existing berms at either end of the channel will not be removed until necessary. Any water in the constructed area will be isolated from Skamokawa Creek until project completion by pumping it to an upland location where it will be treated, the infiltrated over undisturbed ground before eventually entering Skamokawa Creek.

Rewatering the coffer area will be done in a slow measured manner to prevent the sudden downstream release of sediment laden water. The downstream end of the coffer dam will be removed first followed by partial removal of the upstream end to release one quarter to one third of the flow into the dewatered area. Once flows are no longer subsurface, partial removal of the coffer dam will continue in stages that release an additional one quarter to one third of the flow until the barrier is completely removed. As during barrier construction, the fish isolation nets will be inspected to ensure they remain securely in place. The nets will be inspected for impinged or dead fish throughout the rewatering process. Once the cofferdam is completely removed the nets will be removed. The complete rewatering process will occur in one day between sunrise and sunset to ensure adequate light for the safe and efficient inspection of the isolation nets and removal of any entrained fish.

#### 4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site: [\[help\]](#)

- 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? [\[help\]](#)

Understory brush and shrubs will be removed only where necessary for construction. Several small deciduous trees may need to be removed. Any vegetation that is removed will be cut off at ground level and no grubbed. Restoration plantings will be done at project conclusion. See attached plans for planting plan detail.

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

The ESA listed wildlife species that occur within Wahkiakum county are the northern spotted owl, marbled murrelet, and Columbian white tailed deer. The only species that has been detected in the area is the marbled murrelet. Critical habitat has been designated on property adjacent to the upper Skamokawa site.

The species of fish that are ESA listed that occur within the vicinity are lower Columbia River coho salmon, lower Columbia River Chinook salmon, Columbia River chum salmon, and lower Columbia River steelhead trout. These fish species are all found in Skamokawa Creek.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Revegetation areas will help restore the area around the project. Plantings will be broken down into upper and lower bank plantings. At the up stream site 16,350 square feet will be planted for the upper bank plantings, and 10,498 square feet will be planted for the lower bank plantings. Control seeding and shrub and small tree plantings will be done. At the downstream site 60,930 square feet will be planted for the upper bank plantings, and 15,251 square feet will be planted for the lower bank plantings. Large woody debris will also be placed upland and in Skamokawa Creek at the upstream site. Species to be planted include Douglas Fir, western red cedar, thimbleberry, nootka rose, big leaf maple, red alder, pacific ninebark, salmonberry, and vine maple.

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

Himalayan blackberry is located near the project area.

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. [\[help\]](#) \_\_\_\_\_

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. [\[help\]](#)

The ESA listed wildlife species that occur within Wahkiakum county are the northern spotted owl, marbled murrelet, and Columbian white tailed deer. The only species that has been detected in the area is the marbled murrelet. Critical habitat has been designated on property adjacent to the upper Skamokawa site.

The species of fish that are ESA listed that occur within the vicinity are lower Columbia River coho salmon, lower Columbia River Chinook salmon, Columbia River chum salmon, and lower Columbia River steelhead trout. These fish species are all found in Skamokawa Creek.

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

Salmon and steelhead migrate through Skamokawa Creek adjacent to the proposed project site.

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

The project is specifically designed to support spawning chum salmon. The new channel may also provide habitat for other species during spawning and rearing activities. The project will be conducted in daylight hours within WDFW management plans and approved work windows, within regulatory permit guidelines. The project will be done when the least amount of rearing or migrating species are present.

Before construction activities start the following fish removal procedures will be followed to protect fish that could be present in Skamokawa Creek:

Fish removal operations are only conducted by or under the direct supervision of a fishery biologist. Before in water work starts, a sein net will be slowly moved across the edge of the wetted perimeter of the reach to be isolated, toward the center of the river channel at a slow measured pace to encourage the downstream movement of fish, reduce the risk of stranding, and to volitionally move fish out. Fish seining will continue in the wetted portions within the area being dewatered to flush fish out volitionally downstream and out of the area, until the water level and water flow with the area being dewatered is too low for effective seining. Adequate numbers of personnel trained and experienced in seining fish and in fish removal practices will be present during fish removal activities.

The sein will be comprised of soft (non-abrasive) nylon material typically 9.5 millimeters (0.37 inches) and of a sufficient length to extend from the shoreline at each end of the net out to mid-channel and beyond the extend where a super sack barrier will be placed. The net will have a weighted bottom line, and it will stay in place during construction as a block net. The net will be inspected for impinged or dead fish frequently during construction and visual observation of the isolated area will be conducted (at least every 4 hours) to monitor for fish presence.

Coffer dams, constructed of bulk bags and lined with plastic sheeting, will be installed with an excavator staged above OHW to isolate construction activities from live water. If necessary,

plastic sheeting will be installed over the top of sandbags for an improved seal. If required, silt curtains will be placed in the river to trap sediment and ensure that no turbid waters leave the site. The block net will then be pulled close to the coffer dam, where it will remain in place during construction and until coffer dam removal.

De-watering the area behind the coffer dam will be done slowly during daylight hours between sunrise and sunset when there is sufficient light to safely inspect the dewatered areas for fish that may have become stranded in isolated pools. The pumps used to divert water to upland areas for treatment before returning to the river will be screened to prevent impingement of fish.

Any fish or other vertebrates inside the isolated area will be transferred to live water with soft aquarium dip nets as soon as they are captured. Fish removal and monitoring activities will be recorded for a post-project report. When the area is sufficiently de-watered, and fish have been removed from the isolated area, excavation will begin.

All Best Management Practices will be used during construction to prevent sources of siltation. The contractor will work below OHW only as the work requires.

e. List any invasive animal species known to be on or near the site. [\[help\]](#)

There are not any known invasive animal species on or near the site. Waders, boots and any other gear used will be inspected to avoid transferring aquatic invasive species. Felt soled boots will not be used to prevent the spread of invasive species.

## 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. [\[help\]](#)

No source of energy will be used by the completed project.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [\[help\]](#)

This project will not affect any potential use of solar energy by adjacent properties.

- 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: [\[help\]](#)

No energy conservation features are included in the plans for this proposal.

## 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. [\[help\]](#)

- 1) Describe any known or possible contamination at the site from present or past uses. [\[help\]](#)

No known sources of contamination at the site from past or present uses are known.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [\[help\]](#)

No known sources of existing toxic or hazardous chemicals will affect project development of design.

- 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. [\[help\]](#)

No known sources of existing toxic or hazardous chemicals will be stored, used or produced during the project's development or construction or at any time during the operating life of the project.

- 4) Describe special emergency services that might be required. [\[help\]](#)

No emergency services are anticipated.

- 5) Proposed measures to reduce or control environmental health hazards, if any: [\[help\]](#)

During construction a spill kit will be available on site if there is any fuel or other hazardous types of spills. No other measures are proposed to reduce or control environmental health hazards.

b. Noise [\[help\]](#)

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

No sources of noise are typically present at this natural site.

- 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. [\[help\]](#)

No types of noise are anticipated from the completed project.

- 3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

No measures are proposed to control noise

**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. [\[help\]](#)

The downstream sites is a private residence with pasture fields. Fields are kept mowed, but don't house any livestock. The upstream site is private and public managed forests. The private property also has a small farm with chickens and goats. The proposed project will not affect the current land use or nearby properties.

- 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? [\[help\]](#)

Yes, the a project is taking place both on farm land and forest lands. There will not be a conversion of land use with the installation of this project. The tax status of the lands will also not change.

- 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: [\[help\]](#)

No, there will not be an effect to the surrounding lands operations.

- c. Describe any structures on the site. [\[help\]](#)

Downstream site: On the McNally property there is a residence house, small shed and underground well located upstream of the project area. All are in good condition and currently being used. A gravel road/driveway provides access to the property.

There are not any structures or roads on the Stewart property.

Upstream site: There are not any structures near the section of property where the project will occur. On the Emlen parcel across the creek there is a house and barn that are currently in use.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

No.

- e. What is the current zoning classification of the site? [\[help\]](#)

Most of the property that the project will occur on does not contain a zoning classification. The Emlen property at the upstream site has a land classification of farm land.

- f. What is the current comprehensive plan designation of the site? [\[help\]](#)

Agricultural.

- g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Rural.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

The project is in floodplain classified area.

- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

Two people reside in a home near the downstream project site.

- j. Approximately how many people would the completed project displace? [\[help\]](#)

None.

- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

N/A. No measures are proposed to reduce displacement impacts.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

This proposal supports watershed restoration plans by providing new spawning habitat for chum, a threatened species in the Columbia River. Large wood placed in the floodplain will provide some floodplain relief. This project supports watershed restoration goals in the Skamokawa watershed and the Lower Columbia Region.

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [\[help\]](#)

No additional measures have been taken to ensure that this project is compatible with nearby agricultural and forest lands.

## 9. Housing [\[help\]](#)

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

No housing units will be provided.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

No housing units will be eliminated.

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

No measures are proposed to control housing impacts.

**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? [\[help\]](#)

No structures will be built as part of this project.

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

No views will be altered or obstructed.

- b. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

No measures are proposed to reduce or control aesthetic impacts.

**11. Light and Glare** [\[help\]](#)

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

No glare is anticipated.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No safety hazards are anticipated.

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

No existing off-site sources of light or glare are anticipated that would affect this proposal.

- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

No measures to reduce or control light and glare impacts are proposed.

**12. Recreation** [\[help\]](#)

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Fishing and hiking.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No, this project will not displace any existing recreational use.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

No measures are proposed to reduce or control impacts on recreation.

**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 located on or near the site? If so, specifically describe. [\[help\]](#)

A review of the database maintained by the Washington State Department of Archaeology and Historic Preservation (DAHP) shows no building, structures, or sites recorded in or near the project.

- 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. [\[help\]](#)

A review tribes and DAHP of the database maintained by DAHP and available historic maps show no landmark, features or other evidence of Indian or historic use or occupation known at this time. As part of WDFW's planning process a cultural review of the project will be completed. The review will include consultation with affected

- 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. [\[help\]](#)

A determination of the probability for cultural resources to be located within the project are was preformed based largely upon review and analysis of past environmental and cultural contexts and previous cultural resource studies and sites and tribal consultation. Research to be conducted for this assessment includes review of environmental and cultural contexts from a variety of sources including the Washington State Department of Archaeology and Historic Preservation (DAHP), Washington Information System for Architectural and Archaeological Records Data (WISAARD), Bureau of Land Management's General Land Office (GLO) Survey Records database, History Link, Historic May Works, University of Washington's Digital Collection, and Washington State University's Early Washington Maps Collection. Consultation with interested tribes and field review will be initiated upon request from the Army Corps of Engineers.

- 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. [\[help\]](#)

Cultural review of the project and the results of consultation would inform final project design. In the event that the project encounters archaeological deposits or features, WDFW's Inadvertent Discovery Plan should be enacted. Contractors and WDFW staff will be briefed on the plan prior to project initiation.

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. [\[help\]](#)

The project is in Wahkiakum County. Access to the site is gained by State Route 4, then head west onto E Skamokawa Valley Rd. Turn left on Middle Valley Rd. From Middle Valley Rd turn right onto Peterson Rd to access the lower site. The upper site is located off of Oatfield Rd. Refer to page two on design plans for directions.

- 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 public transit serves the site.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

No parking spaces will be created or eliminated.

- 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). [\[help\]](#)

No improvements will be required to existing roads, streets, pedestrian, bicycle or state transportation facilities.

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

The project will not use water, rail or air 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? [\[help\]](#)

Highest period of use will be from WDFW staff during seasonal salmon spawning and rearing activities, typically in the fall or early winter. WDFW staff will travel (typically by pickup trucks) to the completed project for monitoring and data collection activities.

- 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 interference with the movement of agricultural or forest products on roads or streets in the area is anticipated.

h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

No measures are proposed.

**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. [\[help\]](#)

The proposed project will not result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

No measures are proposed.

**16. Utilities** [\[help\]](#)

a. Circle utilities currently available at the site: [\[help\]](#)  
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,  
other \_\_\_\_\_

No utilities are available at the site.

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. [\[help\]](#)

No utilities are proposed for the project.

**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: \_\_\_\_\_

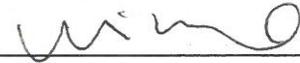
Name of signee Melissa Erkel\_\_\_\_\_

Position and Agency/Organization Fish Passage Biologist/WDFW\_\_\_\_\_

Date Submitted: 2/5/2016\_\_\_\_\_

**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 Melissa Erkel

Position and Agency/Organization Fish Passage Biologist/WDFW

Date Submitted: 2/5/2016