

WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

CHINOOK RIVER ESTUARY RESTORATION PROJECT

2. Name of applicant:

WASHINGTON STATE DEPARTMENT OF FISH AND WILDLIFE

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

**DONNA BIGHOUSE
2108 GRAND BLVD
VANCOUVER, WA. 98661
360.906.6738**

4. Date checklist prepared: **11-06-2013**

5. Agency requesting checklist: **WASHINGTON DEPARTMENT OF FISH AND WILDLIFE**

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

July 16-September15, 2014 for in-water work (with a possible two week extension). There could be an additional two months of work out of water -- planting trees and installing a fence.

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

No. Not at this time.

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

A Draft Chinook River Estuary Restoration Plan is in progress for this project. A new hydrodynamic and hydrologic model was completed by Pacific Northwest National Laboratory (PNNL) in December 2011. PNNL has also completed a technical memorandum on a vegetation survey at the site during 2012. Currently, WDFW is monitoring water surface elevation, temperature, and salinity at the Chinook River estuary.

CULTURAL ASSESSMENT (SECTION 106) in progress.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None known.

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

**HYDRAULIC PROJECT APPROVAL (HPA)
CULTURAL ASSESSMENT (SECTION 106)
BIOLOGICAL EVALUATION (ESA)
POSSIBLE FILL AND GRADE PERMIT (SECTION 10/404 OR 404)
NATIONWIDE 27 PERMIT COE
POSSIBLE WATER QUALITY CERTIFICATION (SECTION 404)**

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 Washington Department of Fish and Wildlife is proposing a first phase of restoration to the Chinook River Wildlife Unit along the Chinook River in Pacific County. The primary goal of this phase of work is to expand on previous restoration efforts to recover the natural estuarine and riparian wetland habitats of the Chinook River by restoring historically present tidal flows through the estuary. WDFW is developing this restoration in partnership with the Washington Department of Natural Resources (DNR). The outcome is a functioning estuary that will provide significant habitat improvements for in-basin (Chinook River) and out-of-basin (Columbia River) anadromous salmonids. Three primary objectives are:

- Benefit the fish and wildlife management objectives of the WDFW Wildlife Area, while protecting adjacent landowners from risk of flooding.**
- Directly and indirectly support the restoration of anadromous fish populations of the Chinook River and the Columbia River Basin; with an emphasis on recovery of ESA-listed stocks.**
- Provide enhanced fish and wildlife based recreational opportunities to the public.**

This project is a fish habitat enhancement project for the recovery of ESA-listed salmonids. The Chinook River estuary historically supported five anadromous salmonid species: steelhead, sea-run cutthroat, Chinook, coho, and chum salmon. Recent monitoring indicates that the abundance of these species in the Chinook River watershed has been significantly reduced from historic levels. The Chinook River estuary also provides important rearing habitat for out-of-basin juvenile salmonids originating from the Columbia River. The loss of habitat and reduction of salmonid populations is attributed primarily to the construction of the Highway 101 overpass and associated tide gate structures in the early 1920's. During this time, wetlands within the Chinook estuary were converted to agricultural fields and pastures. Drainage of these low elevation fields was created incorporating the existing tidal sloughs and the addition of an extensive ditch network. Numerous crossings with culverts have been incorporated into the system over the past century, and many of these crossings and structures have failed, blocking and/or limiting tidal exchange. WDFW has located several crossings over historical tidal sloughs and channels that are crucial for maximization of estuarine and fish habitat. Opening these channels is a simple and effective way of restoring these key ecological processes. These enhancements will occur on WDFW lands (1,051 acres total), including a 201 acre fee title property located to the north of Giles Island on the Chinook River, acquired during 2013.

The specific project elements are:

- 1) Restore and/or excavate 3,300 linear feet corresponding to approximately 3,800 cubic yards (cy) of artificially filled or altered tidal channels;**
- 2) Remove by excavation eight (8) relict channel crossings (approximately 900 cy) – these channel crossings currently completely block the channels.**
- 3) Use excavated material to enhance floodplain complexity.**
- 4) Install three 30” culverts with tide gates under first crossing. Install one 30” culvert under second crossing. Install two 30” culverts with tide gates on third crossing. Build access road up to earthwork spoils site. Work will be completed with excavators, dump trucks and dozers.**
- 5) Replant all disturbed areas with native plants and seed.**

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.

The proposed project is located on Washington State Department of Fish and Wildlife (WDFW) land. The 1,051 acre Chinook River Wildlife Unit (Johns River Wildlife Area) is located about 2 miles north of the town of Chinook, Washington just east of State Highway 101 in Pacific County. There is an unimproved parking area on the east side of the highway. The Chinook River is a direct tributary to the Baker Bay on the lower Columbia River at River Mile (RM) 4.2. The Chinook River Wildlife Unit is bordered by private land to the east, west south and north. The site is located in sections 5,6,8,31,32, township 9 North, range 10 West, W.M. Pacific County tax parcel numbers 10103150008, 10103250002, 09100613006,09100550005, 0900550012, 10103150002, 10103222002, 10103231003, 10103150003, 10103226000, &10103247000.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (circle one): **Flat**, drained wetlands, channels, rolling, hilly, steep slopes, mountainous, other

b. What is the steepest slope on the site (approximate percent slope)?
5%

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

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 prime farmland.

The NRCS National Cooperative Soil Survey Map shows the majority of the area is covered by Ocosta and Rennie silty clay loam with small areas of Yaquina and Westport fine sand and Vesta silt loam .

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

None Known.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

An access road across two drainage ditches will be cleared and built up to provide a secure roadway to a nine acre privately owned site located within the newly acquired WDFW 201 acre property (See sheets 10 &11 in the design plans). This roadway will be re-graded as necessary. We will import approximately 200 cubic yards of ballast/crushed rock to build the driving surface. The source of this rock will come from the Wirkkala Pit in the Chinook/ Long Beach area. An estimated 900 cubic yards of native material will be used to create a berm around the nine acre private site according to Sheet #11. This material will come from the earthwork spoil site located along an existing drainage ditch to the north of the gravel access road (Sheet #10).

Additional minimal grading will be necessary to clear access to restoration areas A, B, & C.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

No. Temporary erosion control measures will be implemented. An erosion/siltation control plan will be designed for this project.

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

Yes. There is 0.45 acres of gravel surface.

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

Erosion control methods include: stabilized construction access points, silt fences, straw bales, and straw wattles. Silt barriers will be properly maintained until construction is completed and the soils are stabilized.

2. Air

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Automobile and heavy equipment exhaust, dust during construction. No emissions to the air after construction. Quantities are unknown.

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

None known.

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

Construction equipment will utilize properly functioning exhaust systems.

Limit the construction hours from 6:00 am to 6:00 pm daily

3. Water

- a. Surface:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

The Chinook River is a type F, fish bearing stream as designated by the Washington State Department of Natural Resources. The Chinook River flows into Baker Bay on the lower Columbia River at river mile 4.2. The National Wetlands Inventory shows the majority of the site as freshwater emergent wetland and freshwater forested/shrub wetland.

- 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 purpose of this project is to restore juvenile salmon habitat within the lower Chinook River estuary. See 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.

Approximately 4,700 cubic yards of material will be excavated from areas A, B, & C. All of this material will be re-graded to create hummocks in the floodplain.

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

No

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

Yes, the project site lies completely 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.

No

b. Ground:

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

No

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (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 waste material will be discharged as a part 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.

Stormwater runoff for this project will not change. The stormwater will follow its natural course and drain into the Chinook River..

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

No

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

No reduction or control of surface water is proposed.

4. Plants

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

_____ deciduous tree: red alder,

_____ evergreen tree: Douglas fir, shore pine, Sitka spruce

_____ shrubs red elderberry, salmonberry, oceanspray, willows, Indian plum, Nootka rose, Himalayan blackberry, Douglas spiraca

_____ grass reed canary grass

_____ Pasture: Mix of pasture grasses(majority cut for late winter elk forage production; portions cut for hay.

_____ crop or grain: smartweed and barley (unharvested and left for duck forage)

_____ wet soil plants: Narrow leaf cattail, skunk cabbage, Spear saltbush, slough sedge, Common brass buttons, Common spikerush, Baltic rush, Western lilaeopsis, Water parsley

_____ water plants: Widgeongrass, eelgrass, Northern milfoil

_____ other types of vegetation

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

Small native shrubs will be removed in limited instances, but nearly all vegetation removal will consist of non-native reed canary grass.

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

A search was conducted from the Natural Heritage Information System and there was no record of listed plant species in the area.

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

Native plants have been incorporated into a planting plan.

5. Animals

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

birds: birds of prey, heron, eagle, songbirds, shorebirds, upland birds, and waterfowl:

mammals: deer, bear, elk, beaver, coyote, other small mammals:

fish: salmon, trout, herring, smelt, sturgeon, freshwater mussels and clams., and Pacific lamprey

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

Chinook, coho, and chum salmon are all listed as threatened under the ESA.

Marbled murrelet are listed as threatened and are known to be near our project site.

Eulachon and green sturgeon are listed as threatened and could be near this site.

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

Yes.

All Columbia River salmonids migrate upstream and downstream of this site. The site is also on the pacific flyway migration route for waterfowl birds. Regular shore bird concentrations are also documented on the Chinook River.

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

A fresh water wetland, riparian habitat, and salt-water estuary restoration project is proposed for this site. Waterfowl, elk, deer, and pheasant are hunted during established seasons. This site also offers an excellent opportunity for bird watching. Pheasant release area.

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None

7. Environmental health

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

No

1) Describe special emergency services that might be required.

None

2) Proposed measures to reduce or control environmental health hazards, if any:

None

b. Noise

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

General automobile traffic on State Highway 101 and heavy equipment during construction.

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.

**Traffic and heavy equipment for construction, 6:00 am – 6:00 pm daily.
No long term noise expected.**

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

Limit the work hours from 6:00 am – 6:00 pm daily.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties.

The Chinook River Wildlife Unit has been managed for elk and waterfowl habitat. The current focus is estuary fish habitat restoration; and fish population abundance and thus fishing opportunity may be increased over current levels. Waterfowl, elk, deer, and pheasant are hunted during established seasons. This site also offers an excellent opportunity for bird watching. Also a pheasant release area.

The Chinook River Wildlife Unit is bordered by rural and low density residential development to the North, East and South. State Highway 101 borders the site to the west.

b. Has the site been used for agriculture? If so, describe.

Yes. This site has been used for grazing cattle.

c. Describe any structures on the site.

None

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

No

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

This site is designated as Rural Lands according to the Pacific County zoning 2012.

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

Pacific County designates this area as general rural in their current comprehensive plan.

g. If applicable, what is the current shoreline master program designation of the site?

It is designated shoreline along the Chinook River.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None

k. Proposed measures to avoid or reduce displacement impacts, if any:

None

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

This is a habitat restoration project to restore salmon habitat. The project is compatible with all existing and projected land use designations and/or regulations.

9. **Housing**

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

None

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

None

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

None

10. **Aesthetics**

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

None

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

None

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

None

11. Light and glare

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

None

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

None

c. What existing off-site sources of light or glare may affect your proposal?

None

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

None

12. Recreation

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

Some of the informal activities may include fishing, boating, hunting, bird watching and other water-related activities.

Hunting and fishing

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

No displacement of recreational use is anticipated. There is a managed pheasant hunting season on a portion of the wildlife area

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

None

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

NONE KNOWN. However a cultural assessment has been initiated on this site to comply with requirements of Section 106.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

NONE KNOWN

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

NONE

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

This site can be directly accessed from State Highway 101. See design plans.

c. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

There is no public transit to or near the site.

The nearest public transportation stop is in Astoria OR which is approximately 15 miles from Chinook WA.

c. How many parking spaces would the completed project have? How many would the project eliminate?

None

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

This project proposal will be improving a farm road on WDFW property. This is a private easement that is not accessible to the public at this time.

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

No

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

N/A

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

None

15. Public services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No

b. Proposed measures to reduce or control direct impacts on public services, if any.

None

16. **Utilities**

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

None

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

None

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: *Donna Bighouse*

Date Submitted: November 7, 2013

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(do not use this sheet for project actions)

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

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

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

Proposed measures to avoid or reduce such increases are:

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

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

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

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

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

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

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

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

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

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

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