

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:

Waterwheel Creek Restoration Project

2. Name of applicant:

Wild Fish Conservancy Northwest

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

Wild Fish Conservancy Northwest
PO Box 402
15629 Main Street NE.
Duvall, WA 98019

Contact Person: Jamie Glasgow
(360) 866-4669
jamie@wildfishconservancy.org

4. Date checklist prepared:

February 6, 2012

5. Agency requesting checklist:

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

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

Construction is anticipated to begin in early summer 2012 depending on site conditions.

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

No.

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

Specific Project Information Form (SPIF) for the Army Corps of Engineers and a JARPA form.

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.

The Cherry Valley Fish Passage and Drainage Project has been proposed by the Washington Department of Fish and Wildlife and is located next to the Waterwheel Creek Restoration Project. It is a related but independent project with a separate funding source and permitting, and is going through separate environmental review (#11-096).

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

King County Clearing and Grading Permit, King County Flood Certification Approval, King County Farmland Preservation Approval (FPP), Washington State Department of Ecology (WSDOE) Shoreline Exemption (administered by King County), WDFW Hydraulic Project Approval, Army Corps of Engineers Section 404 Permit –NWP #27, ESA Section-7 Review by the U.S. Fish and Wildlife Service and NOAA, WSDOE 401 Water Quality Certification Exemption, Coastal Zone Management (CZM) Exemption.

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 objective of this project is to improve fish and wildlife habitat within the Cherry Valley Wildlife Area while maintaining or improving drainage from adjacent farmland. The project involves excavating a new 4,600-foot long naturalized stream channel for Waterwheel Creek and filling three existing agricultural drainage ditches (Laterals B, C, and D). Undersized culverts at the downstream end of each of Laterals B, C, and D will be removed. Spoils from the excavated floodplain will be used to fill the existing drainage ditches, to fortify the landward side of the mainstem Cherry Creek levee, and to amend the road that currently exists along the mainstem levee improving access to an existing pump station. The new channel and associated revegetated riparian corridor covers an area of approximately 8.5-acres. The project also includes placing woody debris within the constructed stream channel to improve fish habitat. A 40-foot long vehicle bridge will be installed across the downstream end of the naturalized channel to provide access to the pump station. Abandoning the drainage ditches and creating one larger, naturalized stream channel will improve water quality and dramatically increase the amount of habitat available to fish. The new channel alignment will mimic the sinuosity and condition of the likely historical conditions.

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EVALUATION FOR AGENCY USE ONLY

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 *Cherry Valley Wildlife Unit* is located northeast of and adjacent to the town of Duvall. The project site can be accessed from Highway 203 driving north from Duvall for one mile and is located on the east side of the road. The precise location of the site is in King County, Southwest ¼ of Section 7, Township 26 North, Range 7 East. The parcel number is 0726079031. The street address is 27715 N.E. Cherry Valley Road, Duvall, WA.

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

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

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

5%.

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 soils are equally comprised of muck and loam.

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

No.

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

Construction activities will result in a net cut of approximately 21,000 C.Y. The cut material is a result of constructing a naturalized 4600-foot long stream channel and riparian corridor. 8638 C.Y. of excavated material will be placed alongside an existing levee and 4959 C.Y. of excavated material will be used to fill in three abandoned lateral tributaries and an existing pond.

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

Some minor erosion may occur but would be highly unlikely. Most of the site is flat and the predominant slope is near 1%. Construction will take place during the summer during mostly dry conditions. The site is surrounded and buffered by extensive fields of reed canary grass which would act as a filter in the unlikely event that sediment may be mobilized during construction.

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

Impervious area is limited to the vehicle bridge at the downstream end of the restored channel. Less than 0.01% of the site will be impervious.

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

Best Management Practices will be employed to address any potential erosion that may occur. A silt fence will be placed around the perimeter of the clearing limits. All disturbed areas will be seeded and covered with straw.

a. 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.

Minor dust and vehicle exhaust from construction activities are expected. There will be no long-term changes to background emission levels from this project.

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

No.

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

None.

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.

Yes. Waterwheel Creek (Lateral B) is a perennial stream located within the work area. All ditched tributaries within the Cherry Valley Wildlife Unit flow into Lateral A and into Cherry Creek. Cherry Creek is a tributary to the Snoqualmie River in WRIA 07. A small, shallow, manmade donut-shaped pond ~1.5-acres is located within the project site.

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 channel redesign will reconnect the upper and lower segments of Waterwheel Creek.

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2) 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.

The project site is located within a jurisdictional wetland.

CUT AND FILL VOLUMES (CY)

	Cut	Fill	Net	Acres
New Channel Corridor	15448	306	15142	3.33
Confluence Re-grade	7297	1	7296	2.02
Levee Extension	0	8638	-8638	1.93
Lateral B	8	1485	-1476	0.97
Laterals C and D	2	1792	-1790	3.71
Lower Pond	83	1682	-1599	1.28
		Total Net Fill	8934	
		Swell Factor	0.20	
		Net Fill (adj)	13502	

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

Not during construction of the new channel and floodplain. Waterwheel Creek will be diverted into the new naturalized channel after most of the construction has been completed.

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

Yes. The entire project area is located within the 100-year floodplain of the Snoqualmie River and Cherry Creek.

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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.

There will be no waste material discharged to surface waters.

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.

Summer low flows in Waterwheel Creek are less than 2 cfs. Channel excavation will be done in the dry, absent surface water. If groundwater is encountered during excavation, it will be pumped away until the water table allows the bottom of the new stream channel to be constructed. There may be a need to place some dewatering wells at the lowermost segment of the stream channel to lower the groundwater surface elevation to allow construction. In either case clean groundwater will be pumped back into the stream below the project site.

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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.

There will be no waste material discharged.

d. 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.**

Precipitation would be the source of runoff at the project site. There is no stormwater generated from impervious surfaces currently or as a result of the project. Surface water will drain to the new Waterwheel Creek stream channel.

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

With the implementation of Best Management Practices (BMPs), erosion control measures, and the natural filtration characteristics associated with the existing reed canary grass infestation, no waste materials are anticipated to enter any ground or surface waters.

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

General Measures to Reduce Runoff Impacts

- 1. BMPs will be used to control erosion from any construction related runoff impacts. Silt fences will be installed on the perimeter of the work footprint area as it progressively enlarges.
- 2. Excavators will use vegetable oil in place of hydraulic fluid to minimize potential impacts to surface or ground waters in the case of an accidental spill. Spill prevention kits will be available on site for each machine in use.
- 3. Heavy equipment will be cleaned and inspected daily for fuel or lubricant leaks prior to entering the job site.

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- 4. The entire work area can be temporarily isolated from the waters of Waterwheel and Cherry Creeks if needed. Any turbidity generated from construction or from a significant summer storm event can be retained on the project site and allowed to settle out any suspended sediments. Turbid water can also be filtered in the reed canary grass at pre-identified acceptable locations.
- 5. Staging and refueling areas will be isolated and located completely away from surface waters to eliminate any potential impacts resulting from staging or fueling activities.

4. Plants

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

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

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- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

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

Approximately 11-acres of reed canary grass will be removed within the work area.

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

No threatened or endangered species of plants are known to be on site.

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

The new riparian corridor of Waterwheel Creek will be replanted with native vegetation.

5. Animals

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

birds: hawk, heron, eagle, songbirds, other:

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

fish: bass, salmon, trout, herring, shellfish, other: Winter observations of sculpins, 3-Spine Sticklebacks, lamprey, catostomids, catfish, non-native centrarchids, and native cyprinids. Potential presence of Olympic mudminow (documented in Cherry Creek headwaters).

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

Juvenile Puget Sound Chinook salmon and Steelhead trout have been observed in Cherry Creek floodplain tributaries. Foraging Bull trout have been observed in the Snoqualmie River.

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

Waterfowl species use this site as part of their migration routes.

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

The primary objective of this project is to preserve and enhance fish and wildlife habitat on the site. Wild Fish Conservancy will perform work on this project during periods where there will be minimal impacts to waterfowl and aquatic species due to limited presence. The Waterwheel Creek restoration Project in itself is intended to improve habitat for fish and wildlife.

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.

N/A.

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

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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.**

Materials that are likely to be present on site include gasoline, diesel fuel, hydraulic fluid, and lubricants. An accidental spill of any of these fluids could occur during construction operations.

1) Describe special emergency services that might be required.

None anticipated.

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

A spill prevention and pollution control plan will be prepared by WFC project engineers to reduce the risk for spills and to outline necessary procedures to be taken in case of a spill.

b. **Noise**

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

None.

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3) 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.

There will be short-term increases in noise levels during construction activities between the hours of 7AM to 6PM. No long-term changes in noise levels are expected once the project has been completed.

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

None.

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8. Land and shoreline use.

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

Be as specific as possible. The words in parentheses are examples that give more information than classifications alone.

Agricultural (orchard, crop farm, cattle ranch, dairy farm, poultry, etc.).

The site is currently used as a Washington Department of Fish and Wildlife Area that provides public access and protects critical habitat for wildlife. The site is a popular area for waterfowl hunting as well as wildlife viewing. Adjacent properties are currently used for agricultural production and as private home sites.

Is there any agriculture land directly affected by the proposal, or near the vicinity of a project site? If yes, describe.

No.

Would this proposal affect the ability of the adjacent agricultural landowners to continue farming?

The proposed project will not affect the ability of the adjacent agricultural landowners / properties to continue present farming activities.

Would this proposal affect existing agricultural drainage patterns within the vicinity? If yes, please generally describe.

The existing agricultural drainage patterns will be affected by the project. There are 3 existing agricultural drainage ditches (Laterals B, C, and D) that convey surface water runoff from properties upland of the project work site. Lateral B currently conveys the flows of Waterwheel Creek. The proposed project will construct a new channel and floodplain for Waterwheel Creek that increases the conveyance capacity of flood flows off the project site and the surrounding agricultural properties. As part of the proposed project Laterals B, C, and D will be filled to eliminate annual fish kills from water quality issues.

Would this proposal affect or interfere with normal agricultural operations such as oversize equipment access, pesticide applications, and tilling and harvesting? If yes, generally describe.

No, normal agricultural operations will not be affected by the proposed project.

Residential (apartment/condominiums, townhouses/duplexes, single-family homes, group home, etc.)

No.

Commercial (gas station/mini-mart, restaurant, grocery store, strip mall, super mall, etc.)

No.

Community or public services (school, church, daycare, fire station, etc.).

No.

Industrial (warehouse, light manufacturing, pulp and paper mill, refinery, etc.)

No.

Natural resource (forest land, mining, wildlife preserve, etc.)

No.

Recreational (golf course, country club, resort, park, etc.).

No.

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

Historically. The land was purchased by WDFW in the 1970's and has been designated as a Wildlife Unit since then.

Provide specific information on any land-use conversion directly or indirectly caused by the proposal.

There will be no land-use conversion associated with the proposed project.

How much agriculture land will be converted to a nonagricultural use of a result of this proposal?

Land use will remain managed as part of the Cherry Valley Wildlife Unit.

Will this proposal result in placing or removing agricultural soils from the site? If yes, generally describe.

No.

Describe proposed measures to preserve or enhance agricultural resource lands, if any.

Proposed measures to preserve or enhance agricultural resource lands include using spoils from the excavated Waterwheel Creek floodplain to: fill the existing drainage ditches, fortify the landward side of the mainstem Cherry Creek Levee, and amend the road that currently exists along the mainstem levee to improve access to an existing pump station. All of these actions will help to improve drainage off of agricultural lands after flood events.

c. Describe any structures on the site.

Structures on the site are limited to a portable toilet, remnants of fences, primitive roads, a drainage pump and flap gate facility, and two gates.

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

No.

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

A-35 – agricultural.

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

Agricultural.

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

N/A.

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

Segments of this area are classified as Cherry Valley Wetlands within the WDFW Priority Habitats and Species database and are considered sensitive.

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.

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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:

No changes in land use are proposed.

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?

The tallest structure, the vehicle bridge, is approximately 3 feet tall.

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.

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

No.

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

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?

Within the Cherry Valley Wildlife Unit the primary recreational opportunities include waterfowl hunting, dog training, wildlife viewing, and nature walking. The Snoqualmie River and Cherry Creek offer boating, swimming, and fishing activities.

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

Recreationists will be temporarily excluded from the construction site during construction.

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.

- 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:**

The proposed project will be constructed within an existing footprint of prior development and earthwork.

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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.**

State Highway 203 provides direct access to the site.

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

The site is not serviced by public transit. The nearest public transit is located 1-mile away in Duvall.

- 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).**

No.

- 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.**

None.

- 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.

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- 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.**

There is electricity available to a nearby drainage pump facility.

- 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:

Date Submitted: February 14, 2012