

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[HELP\]](#)

1. Name of proposed project, if applicable:

Caribou Creek Fish Passage Restoration: Cortese-Sorenson Dam Removal

2. Name of applicant:

Kittitas County Conservation District

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

**Mark Crowley, Kittitas County Conservation District
2211 W Dolarway Road, STE 4
Ellensburg, WA 98926
(509) 925-3352 ext. 205**

4. Date checklist prepared:

November 16, 2018

5. Agency requesting checklist:

Washington Department of Fish & Wildlife

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

Implementation in winter or spring 2019.

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.

Preliminary Design Report

**HIPIII Project Notification Form for ESA Consultation with USFWS and NOAA
Cultural Resources Report for NHPA Consultation
Joint Aquatic Resources Permit Application (JARPA)
State Environmental Policy Act (SEPA) Checklist
WDFW Hydraulic Project Approval Application
Kittitas County Shoreline Exemption & Floodplain Development Applications**

9. Do you know whether applications are pending for governmental approvals of other

None known.

10. List any government approvals or permits that will be needed for your proposal, if known. proposals directly affecting the property covered by your proposal? If yes, explain.

- **U.S. Army Corps of Engineers**
 - **Section 404 Permit**
- **Bonneville Power Administration**
 - **National Historic Preservation Act Section 106 Consultation**
 - **Endangered Species Act Section 7 Consultation**
- **Washington Department of Ecology**
 - **Section 401 Water Quality Certification**
- **Washington Department of Fish & Wildlife**
 - **SEPA DNS**
 - **Hydraulic Project Approval (HPA)**
- **Kittitas County**
 - **Floodplain Development Permit**
 - **CAO Review**

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 Kittitas County Conservation District (KCCD), through the Yakima Tributary Access & Habitat Program (YTAHP) is proposing to remove an inactive unscreened gravity irrigation diversion on Caribou Creek to fully restore fish passage at stream mile 1.17.

The concrete diversion was in operation, unscreened and forming a fish passage barrier through the 2017 irrigation season. The fish screening component was addressed by Kittitas County Conservation District through the YTAHP by moving the irrigation intake to a new location and installing screens that meet NOAA Fisheries and WDFW fish screening criteria. Therefore, the gravity diversion is no longer necessary. The remaining project component is fish passage, which will be addressed by removing the concrete check dam structure. The project will result in restored fish passage through this reach.

Please see attached designs.

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 project is located in Kittitas County, WA.

The approximate latitude and longitude of the project location is 46.954907, -120.445212

The project is located in T17N, R19E, Section 22, ¼ Section NE & NW.

Kittitas County parcels 490133 & 430133.

See page 1 of the attached design drawings for vicinity maps.

B. Environmental Elements [\[HELP\]](#)

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

a. General description of the site:

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

b. What is the steepest slope on the site (approximate percent slope)?
~1%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

The USDA web soil survey identifies the soil as primarily opnish ashy loam. Any excess material from excavation will be disposed of upland out of the floodplain.

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

Reed canary grass is thick in the project area and the soil appears to be relatively stable. However, the creek takes an unnatural 90-degree turn in the project site and therefore energy is accelerated on the outside (left) bank.

After removal of the concrete check dam, the banks will be sloped to a minimum of 1.5:1 and blended to match upstream and downstream slope. Rock erosion protection will be placed in the voids on the left bank (outside bend) at the 90-degree bend to protect the vulnerable soils during high flow events. A planting bench will be created on the right bank and a coir log and matting will be placed. A robust riparian planting of red-osier dogwood will be installed on both banks.

Please see attached designs.

- e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

The removal of the concrete structure and underground pipe is estimated to remove 15-25 cubic yards of concrete from the streambed and streambanks. No fill is proposed to fill the void in the streambed, allowing the stream flow to naturally recover and reshape the streambed.

A total amount of approximately 24 cubic yards of rock will be placed as bank and toe erosion protection in the voids from the concrete on the left bank.

Excavation for the temporary stream bypass will be approximately 50 cubic yards and excavation for the bank sloping will be approximately 45 cubic yards.

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

Minor erosion may occur due to disturbed soils. Sediment and erosion control BMPs will be in place during all phases of construction.

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

None.

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

Temporary erosion controls will be in place before any significant alternation of the project site and appropriately installed downslope of the project activity within the riparian buffer area until site rehabilitation is complete. Sediment barriers will be installed and maintained for the duration of project implementation. Temporary erosion control measures may include fiber wattles, silt fences, jute matting, wood fiber mulch and soil binder, or geotextiles and geosynthetic fabric.

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

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

There will be temporary emissions associated with the construction equipment used to remove the concrete check dam. Project personnel will access the site via vehicle. No significant impact to air quality is anticipated.

- 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:

Work will be completed as quickly and efficiently as possible and all equipment will be turned off when not in use. Project personnel will carpool to the work area as much as possible and vehicles will be turned off when not in use.

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

- a. Surface Water: [\[help\]](#)

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

Yes, Caribou Creek. Caribou Creek is a tributary of the Wilson Creek complex which enters the Yakima River at river mile 147.

- 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, all work will occur within 200 feet on Caribou Creek. This project proposes to remove a concrete irrigation check dam to restore fish passage in this reach of Caribou Creek.

- 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.

The removal of the concrete structure and underground pipe is estimated to remove 15-25 cubic yards of concrete from the streambed and streambanks. No fill is proposed for the voids in the stream post dam removal, allowing the stream flow to naturally recover and reshape the streambed.

Fill will be imported as rock erosion protection at an unnatural nearly 90-degree bend in the stream. Rock erosion protection will be placed in the voids on the left bank (outside bend) at the ~90-degree bend to protect the vulnerable soils during high flow events.

Excavation for the temporary stream bypass will be approximately 50 cubic yards and excavation for the bank sloping prior to rock placement will be approximately 45 cubic yards.

- 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 area 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.

No. Sediment and erosion control BMPs will be implemented at all phases of construction.

b. Ground Water: [\[help\]](#)

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

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.

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.

Precipitation will be the main cause of stormwater runoff associated with the proposed project. If storm events should occur or are forecast to occur during project implementation, immediate best management practices would be applied according to the Stormwater Management Manual for Eastern Washington (2004, 2018 update).

2) Could waste materials enter ground or surface waters? If so, generally describe.
If needed, the contractor will operate a 2"-diameter trash pump to pump muddy water from excavations to prevent overflow into the stream. The water will be discharged on flat ground within 100-feet of the project for infiltration into the ground.

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

No, the project it is not likely to significantly impact drainage patterns in the vicinity.

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

Erosion control measures will be applied during project implementation to limit the negative ecological impacts caused by runoff.

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

a. Check the 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

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?

Riparian vegetation in the project area consists primarily of reed canary grass. The reed canary grass will be disturbed due to construction activities. Upon removal of the concrete check dam and placement of the rock erosion protection, a robust planting of red-osier dogwood livestakes and planting bench of sedges will be installed.

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

Ute Ladies'-Tresses are listed as threatened, but none are known to occur in Kittitas County.

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

A robust planting of red-osier dogwood livestakes will be installed throughout the project site. A planting bench of native sedges will be installed on the right bank as well. The entire area of disturbance will be seeded with a native seed mix consisting of native grasses. Disturbed soils due to the stream bypass in the agricultural field will be restored to pre-project conditions.

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

Reed canary grass is present.

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

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

Examples include:

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

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

fish: bass, salmon, trout, herring, shellfish, other _____

- **Birds: Northern goshawk; flammulated owl; great horned owl; golden eagle; White-headed woodpecker; songbirds**
- **Mammals: elk; mule deer; beaver; mountain quail; bighorn sheep**
- **Fish: steelhead and rainbow trout; Chinook salmon; coho salmon; westslope cutthroat; brook trout; bull trout**
- **Reptiles and amphibians: Northern alligator lizard; western fence lizard; western rattlesnake; ring-necked snake; racer; common garter snake; Columbia spotted frog; rubber boa; western toad**

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

**Middle Columbia River Steelhead
Columbia River Bull Trout**

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

Yes, Caribou Creek is used by salmon and steelhead for spawning and rearing.

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

This project is designed and funded to improve habitat for ESA listed species. The project proposes to remove a concrete irrigation dam, which is a fish passage barrier, to restore fish passage in this reach of Caribou Creek.

e. List any invasive animal species known to be on or near the site.

No known invasive animal species are present.

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.

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 [\[help\]](#)

- 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.

There is a remote chance that petroleum products could leak from the construction equipment or project personnel's vehicles onto the ground. All equipment will be kept in good working condition to minimize this risk. All equipment will have an approved spill kit to contain and clean up spills if they should occur.

- 1) Describe any known or possible contamination at the site from present or past uses.

None 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.

None known.

- 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.

None known.

- 4) Describe special emergency services that might be required.

In the event of a fuel or oil spill, the contractor will be required to immediately contact the nearest office of the Washington State Department of Ecology and the WDFW. In the event of a wildfire, the contractor will be required to immediately call 911 and contact the Washington State Department of Natural Resources.

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

All equipment will be kept in good working condition to minimize the risk of leaks. All equipment will have an approved spill kit to contain and clean up spills if they should occur.

b. Noise

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

Noise is not anticipated to affect the project. Noise in the area is primarily from vehicle traffic and the train.

- 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.

Noise associated with the construction equipment will occur during daylight hours. Equipment noise may exceed 100 decibels. There will be no long-term increase in noise due to this project.

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

Equipment will be turned off when not in use.

8. Land and Shoreline Use [\[help\]](#)

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The property is currently in irrigated agricultural production and has been for decades. Surrounding lands are rural residences with commercial agricultural production and pasture land. The proposal will not change the current land use or affect 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?

The property is currently in irrigated agricultural production and has been for decades. This project will not change the current use.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No, it will not.

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?

Commercial Agriculture.

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

Commercial Agriculture, Allowed Use.

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

None.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. The project area is mapped on several of the Critical Area inventory maps.

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:

Not applicable.

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

None.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None.

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

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 [\[help\]](#)

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.

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

None.

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

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?

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 [\[help\]](#)

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

None, the proposed project is on private land and the property is in commercial agricultural production.

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

No.

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

None.

13. Historic and cultural preservation [\[help\]](#)

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No known sites that are eligible for listing in national, state, or local preservation registers. A cultural resources survey was conducted and a report of the findings was produced. BPA is conducting National Historic Preservation Act Section 106 consultations and the project will not be constructed until Section 106 consultation is completed.

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.

None known. A cultural resources survey was conducted and a report of the findings was produced. BPA is conducting National Historic Preservation Act Section 106 consultations and the project will not be constructed until Section 106 consultation is completed.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

A cultural resources survey was conducted and a report of the findings was produced. BPA is conducting National Historic Preservation Act Section 106 consultations and the project will not be constructed until Section 106 consultation is completed.

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.

None at this time.

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.

The project site will be accessed via a private access road from South Ferguson Road.

- 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?

No.

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

None.

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

No.

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

No.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

No additional vehicular trips.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

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

None.

15. **Public Services** [\[help\]](#)

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

No.

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

None.

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

- a. Circle utilities currently available at the site:
Electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____
- c. Describe the utilities that are proposed for the project, the utility providing the service,
and the general construction activities on the site or in the immediate vicinity which might
be needed.
No new utilities are proposed.

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 _____

Position and Agency/Organization _____

Date Submitted: _____