

## 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: **Taneum Canal Company Fish Bypass Repair**
2. Name of applicant: **U.S. Bureau of Reclamation**
3. Address and phone number of applicant and contact person:  
**Arden Thomas**  
**U.S. Bureau of Reclamation**  
**Columbia-Cascades Area Office**  
**Yakima, WA. 98901**  
**(509) 575-5848 ext. 298**
4. Date checklist prepared: **August 22, 2011**
5. Agency requesting checklist: **Washington Department of Fish and Wildlife**
6. Proposed timing or schedule (including phasing, if applicable): **September, 2011. Project length is approximately 8 working days.**
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.

**Biological Assessment for impacts to steelhead and bull trout (attached, 2 documents)**

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

No

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

- HPA
- ESA letter of concurrence for *Not likely to adversely affect* determination. Received from USFWS. Still needed from NMFS
- NEPA Categorical Exclusion Checklist, Reclamation

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 project is located on Taneum Creek, a tributary to the Yakima River near Thorp, WA. It is associated with the Taneum Canal Company (TCC) point of diversion on Taneum Creek and the associated fish screen and bypass facilities. The Bureau of Reclamation is responsible for the Operations and Maintenance of the fish screens and bypass. The high flows in mid-May in Taneum Creek scoured out a large portion of the TCC canal embankment. The fish bypass that routes fish safely past the TCC fish screens and back to the river passed through that eroded canal embankment. While the creek was still high and before the condition of the fish bypass could be assessed, the canal embankment was rebuilt by placing sand, gravel, and rip-rap into the scoured areas directly into the stream. Once the flows started to receded, it became apparent that the bypass outfall was at least partially blocked and natural gravel deposition occurred at the previous location of the fish bypass which reduced the effective depth of water at the bypass outlet. Also, the concrete encasement at the very end of the fish bypass pipe had shifted. As relatively high flows continued and the fish screens operated by passing floating debris down the fish bypass, any openings that remained at the fish bypass outfall apparently became plugged with the debris passing down the fish bypass, so that now the bypass is effectively plugged and there is no sign of free flowing water coming out of the fish bypass outfall area.

In order to repair the TCC fish bypass and to protect it from future flood flows, Reclamation proposes to: a) excavate the existing canal embankment to access the fish bypass pipe; b) replace and rebury the fish bypass pipe; c) place a rock barb just upstream of the pipe to protect it from erosion; and d) rock the revetment face and key in large rocks in the revetment to protect the revetment and overflow channel (currently used for temporary fish passage) from erosion during flood flows.

Work performed for this project will occur between July 15 and September 30, 2011: the period of lowest natural streamflow in Taneum Creek. Reclamation crews will construct the project. Construction will require about 8 working days to complete and will entail the following actions:

- Heavy equipment required to complete the project includes a hydraulic excavator and/or backhoe working from the canal bank, and dump truck to deliver rock to the site. The excavator/backhoe will be refueled and staged away from the creek. All other equipment required to complete the project will consist of hand tools (e.g. shovels).
- Very little vegetation, and no mature vegetation, will be disturbed as part of this project. Access and all construction activities will be confined to the right bank, which is currently a highly modified rock revetment and serves as an access road for the canal. Some immature vegetation around the overflow channel will be disturbed or removed when rock is placed to stabilize the eroding bank. This vegetation consists of shrubs and small trees in areas of active erosion (Figure 6). The left bank riparian area is vegetated with large cottonwood trees. This bank will not be impacted by construction activity.
- The excavator/backhoe will place a sandbag cofferdam to isolate the work area. The area that will be isolated by the sandbags is not expected to have surface flow at the time of construction. If subsurface flow contributes a significant amount of water in areas isolated by the sandbags, this water will be pumped out and discharged in the left bank riparian area to minimize turbidity effects.

- The excavator/backhoe will dig out enough of the revetment to access the undamaged portion of the fish bypass pipe. The damaged portion of the pipe will be cut off using a torch and a new fish bypass pipe will be attached and extended out to approximately the edge of the new canal embankment. Personnel working with hand tools will be in the water assisting with spotting, rigging, and cutting/welding.
- The concrete encasement will be reinstalled at the end of the bypass pipe and the whole bypass pipe will be buried with rip-rap and the same fill material that was excavated to access the pipe.
- Rock will be placed upstream of the repaired bypass pipe to form a rock groin, directing flow away from the pipe and helping to protect the pipe from flood flow. In addition, the rock groin currently located upstream of the bypass will be rearranged.
- New rock will be placed along the revetment, starting from the spot where the new rock ends, and the approximate location of the bypass pipe, and extending upstream past where the overflow pipe enters the stream, ending at the point where the riparian vegetation becomes continuous. Rocks will be keyed into the bank at 2 locations: the upstream point where rock is to be placed and just downstream of where the overflow pipe enters Taneum Creek. The revetment will need to be excavated in order to key in the large rocks into the bank. The rock will be individually placed, and no rock will be end dumped into the stream.

In total, approximately 230 cubic yards of new rock will be placed along approximately 75 feet of revetment.

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 at the Taneum Canal Company diversion and associated fish screen, located in the NW ¼ Section of Sec. 5, T 18N, R 17E; 47° 04' 51.62" N lat / 120° 44' 45.36" W long. Tax parcel: 609133**

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

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)?

**2%**

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.

**Ashy loam, gravelly sandy loam, cobbly sand loam**

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

**The proposed project is the result of an eroding shoreline. Other than that there are no other signs of unstable soils.**

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

**Approximately 50 cubic yards of revetment material will be excavated to unearth the bypass pipe. Once the bypass pipe is repaired, this excavated material will be used to backfill the pipe. In addition to material removed and replaced around the bypass pipe, rock will be placed along the revetment upstream of the bypass pipe extending approximately 75 feet upstream of the bypass pipe outfall. When the fish screen facilities were originally constructed, rip rap protection was originally placed along this stretch of revetment. Given the recent flood events that have occurred in the ~20 years of construction, this revetment needs to be re-armored. Along the toe of the revetment, rock will be placed 2 rocks deep, using 4 foot diameter rock. Rock will be placed up to the top of the revetment, transitioning to 2-3 foot diameter and then 1-2 foot diameter rock as you move up the slope. Additionally, one additional barb will be placed immediately upstream of the fish bypass outfall to protect it from erosion. Rock for the revetment and 1 additional barb will be angular riprap purchased for a local quarry and delivered to the site.**

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

**The construction detailed in the project will serve to reduce further erosion. The proposed project could result in increased erosion following the placement of material within the OHWM as well as during construction prior to the placement of the select material. The section of the revetment immediately downstream of the project area was rebuilt with large rock during the May, 2011 flood and should not be susceptible to potential erosion cause the placement of additional rock upstream.**

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

**No impervious surfaces are called for with this project and amount of impervious surfaces will not be affected.**

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

**No erosion is anticipated with the construction of the project and future erosion will be avoided. As part of the project construction, a cofferdam will be installed to reduce the potential for any increase in turbidity as a result of the project. After construction, there will not areas of exposed soil.**

## 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.

**Limited exhaust from construction equipment for 8 days. No long term sources of emission.**

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

**None**

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

**None required**

**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.

**Taneum Creek is on site and flows into the Yakima River**

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.

**The entire project will occur within 200 ft of the river. The intent of the project is to rebuilt the bypass to original conditions, and so the original site plan is attached. A schematic is also included to illustrate the additional placement of riprap and barbs not included in the original design.**

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 200 cubic yards of rock will be placed along the revetment expending approximately 75' upstream of the bypass pipe outfall. The revetment will be excavated back to toe in the rocks, and as a result the footprint of the existing revetment will not change. Along the toe of the revetment, rock will be placed 2 rocks deep, using 4 foot diameter rock. Rock will be placed up to the top of the revetment, transitioning to 2-3 foot diameter and then 1-2 foot diameter rock as you move up the slope. Additionally, one additional barb will be placed immediately upstream of the fish bypass outfall to protect it from erosion. Rock for the revetment and 1 additional barb will be angular riprap purchased for a local quarry and delivered to the site.**

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

**There is very limited flow in the project area during August and September. As such, surface water is not expected in the vicinity of the construction area, since the thalweg is located on the left bank and the bypass and revetment is on the right bank. Sandbags will be placed to insure no impact to Taneum Creek, but no surface water is expected to be diverted by the placement of these sandbags.**

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

**The rock excavated and placed at the toe of the revetment will be within the 100-year flood plain. According to the FEMA map, Taneum Ditch (elevation 1880) is not within the 100-year flood plain.**

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.

**None**

**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.

**Does not apply**

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.

**Does not apply**

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.

**Does not apply**

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

**No, does not apply**

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

**Does not apply**

4. Plants

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

deciduous tree: alder, maple, aspen, **other: cottonwood**

evergreen tree: fir, cedar, pine, other

Shrubs: **willow**

grass

pasture

crop or grain

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?

**None**

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

**No threatened or endangered plant species**

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

**Cottonwood and willow stakes will be installed in the rip-rap at the time of construction, at a depth low enough to ensure access to subsurface flow, to help vegetate the revetment.**

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: hawk, heron, eagle, songbirds, other:

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

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

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

**Species listed under the ESA that may be present in the vicinity of the Project site include Middle Columbia River Steelhead trout (*Oncorhynchus mykiss* – threatened) and Columbia River bull trout (*Salvelinus confluentus* – threatened).**

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

**Yes, the creek is used by anadromous salmon**

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

**The project will repair the damaged fish bypass and reduce the likelihood that future flood events do not damage the fish bypass or the fish screens. The revetment will be planted at the time of construction to provide additional riparian habitat along Taneum Creek. New fill in the floodplain will be kept to a minimum: the rock placed along the revetment will be dug into the revetment so that the overall footprint does not increase; new rock extending out into Taneum Creek will be limited to one barb to protect the bypass outfall.**

## 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.

**Does not apply**

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

**Does not apply**

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:

**Does not apply**

## 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.

**Does not apply**

1) Describe special emergency services that might be required.

**None**

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

**None needed**

## b. Noise

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

**There are no sources of noise that will affect the project.**

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

**Short term there will be an increase in noise associated with the operation of construction equipment. The duration will be 8 days and will be limited to the project site. Noise is not expect to impact the surrounding properties and will be limited to daylight hours.**

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

**Does not apply**

8. **Land and shoreline use**

- a. What is the current use of the site and adjacent properties?  
**Fallowed pasture, wildlife area**
- b. Has the site been used for agriculture? If so, describe.  
**Before it was purchased by Reclamation, the parcel used to access the diversion dam and fish facilities was used as a ranch.**
- b. Describe any structures on the site.  
**All infrastructure is located on site associated with irrigation withdrawal from Taneum Creek and includes a headgate structure, sill, trashrack, roughened channel, irrigation canal, fish screen, fish bypass, gaging station, and revetment access road.**
- d. Will any structures be demolished? If so, what?  
**No**
- e. What is the current zoning classification of the site?  
**Commercial agriculture, rural**
- f. What is the current comprehensive plan designation of the site?  
**Commercial agriculture, rural**
- g. If applicable, what is the current shoreline master program designation of the site?
- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.  
**Do not know**
- 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:  
**Does not apply**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:  
**Does not apply**

TO BE COMPLETED BY APPLICANT

EVALUATION FOR  
AGENCY USE ONLY  
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### 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?

**Does not apply**

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

**Does not apply**

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

**Does not apply**

### 11. Light and glare

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

**Does not apply**

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?

**Does not apply**

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

**Does not apply**

12. **Recreation**

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

**The immediate vicinity is closed to the public**

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

**Does not apply**

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

**Does not apply**

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.

**No**

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

**None**

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

**Should cultural resources be discovered during construction, all ground disturbing activities in the area of the archeological resource will stop and the Bureau of Reclamation Archeologist will be contacted. Construction will not resume until all mitigative measures developed in consultation with the State Historic Preservation Officer have been completed**

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.

**No public streets directly access the site. A private Irrigation District road is used to access the site. To get to the Reclamation property, From I-90 take exit 101 and head south for about 0.6 miles, away from Thorp. Turn northwest onto Thorp Cemetery Rd. and follow it until it intersects Taneum Rd. Turn left on Taneum Rd. and follow approximately 1,500 feet to gated private road on the left.**

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

**No, the nearest transit stop is in Cle Elum.**

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

**Does not apply**

- 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.

**Does not apply**

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

**The completed project will result in no increase in vehicular trips. Current vehicular trips are approximately 3 times per week from April – October.**

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

**Limited transportation impact**

**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.

**Does not apply**

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

**Does not apply**

**16. Utilities**

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

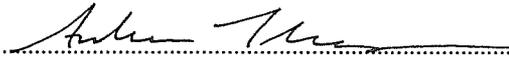
**None**

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:  .....

Date Submitted: 8-22-2011 .....