

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:

Lake Terrell Dam Channel Restoration and Fish Passage Project

2. Name of applicant:

Whatcom Conservation District

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

6975 Hannegan Rd

Lynden, WA 98264

(360) 354-2035 ext 131

fcory@whatcomcd.org

Frank Corey

4. Date checklist prepared:

January 20, 2012

5. Agency requesting checklist:

Washington Department of Fish and Wildlife

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

August/September 2012 – repair/modify dam, reconstruct stream channel

October/November 2012 – riparian planting

October 2012 to October 2017 – monitoring and adaptive management

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

Monitoring and adaptive management of the project will continue for 5 years.

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

Lake Terrell Dam Channel Restoration and Fish Passage Project Design Report, Whatcom Conservation District; November 2011 (attached)

Birch Bay Watershed Characterization and Watershed Planning Pilot Study; October 2007

Whatcom Wildlife Area 2010 Management Plan Update; WDFW

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.

Whatcom County – Land disturbance permit

Washington Department of Fish & Wildlife – HPA

U.S. Army Corps of Engineers – NWP #27

Washington Department of Ecology, Office of Dam Safety – Dam Construction Permit

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 purpose of the project is to correct a fish passage barrier on Terrell Creek by reconstructing approximately 753 lineal feet of channel to allow fish passage over WDFW's dam at the outlet of Lake Terrell. Wooden flashboards in the existing dam will be replaced by pre-cast concrete panels including a v shaped weir. Channel reconstruction will include placement of gravel fill materials and large woody debris for fish habitat. A bypass pipe controlled by a manual valve will also be installed to assist with controlling lake levels. A culvert on a tributary stream will also be replaced to restore fish passage. Riparian planting will follow instream work. Monitoring and adaptive management will continue for 5 years.

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.

Section 16, Twn 39N, R 1E

-122.687962 48.875478

3800 Block of Aldergrove Rd, Ferndale, WA 98248

N 1/2 NE-EXC E 880 FT-EXC GAS-OIL-MIN RTS AS RES AF 620689 ON W 11 ACRES OF N 1/2 N 1/2 NE-LESS RD

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other **Site is generally flat and intersected by two artificially deepened and straightened stream channels.**

b. What is the steepest slope on the site (approximate percent slope)?
Site has very little slope, less than 2%. Terrell Creek streambank slopes may exceed 2:1.

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 prime farmland.
Kickerville Silt Loam 81, Whitehorn Silt Loam 184, Labounty Silt Loam 94.

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.
Fill will be used to reconstruct the Terrell Creek stream bed to a more natural elevation allowing fish passage over the dam. A base of relatively impervious fill will be topped with courser streambed gravels. Approximately 1590 cubic yards of fill will be imported from a commercial gravel pit.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Erosion is possible but will be minimized with erosion control BMPs including seed, straw and erosion control fabric. Work will take place during the driest part of the year (August/September).

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
Does not apply

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
Work will take place during the driest months of the year (August/September). Exposed soils will be protected with seed, straw, and erosion control fabric.

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.

Normal emissions associated with the operation of construction equipment. No emissions following construction.

- 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 take place during normal daytime work hours. Project will take approximately 2 weeks to complete.

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: 1. Terrell Creek flows from Lake Terrell and eventually flows into Birch Bay.

2. An unnamed side channel parallels Terrell Creek. It is a backwatered remnant channel of Terrell Creek with no outlet.

3. An unnamed small tributary flows into Terrell Creek in 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, dam repair/modification, channel reconstruction, culvert replacement and installation of bypass pipes will all take place within existing stream channels. 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.

Fill will be used to reconstruct the Terrell Creek stream bed to a more natural elevation allowing fish passage over the dam. A base of relatively impervious fill will be topped with courser streambed gravels. Approximately 1590 cubic yards of fill will be imported from a commercial gravel pit.

Approximately 132 cubic yards of broken concrete rip rap and mucky streambed soils will be removed and disposed of at a commercial gravel pit.

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

Yes. Terrell Creek will not have flow during the construction window. However a temporary sand bag dam will be constructed upstream from the project site to contain any subsurface seepage. Water in the project site will be pumped into a temporary settling pond.

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

No

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. **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.

Temporary storm water runoff is possible but unlikely during construction. If an unusual rain event occurs during construction storm water will accumulate in the isolated stream channel and then will be pumped into a temporary settling pond. Following construction, exposed soils will be protected from erosion with seed, straw, and erosion control fabric.

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:

The work zone will be isolated using temporary sand bag dams at the upstream and downstream ends. In addition silt curtains will be installed below the sand bag dams at the downstream end of the project site.

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

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

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

Approximately 10,000 square feet of trees, shrubs and blackberries will be removed to allow construction access.

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

None known.

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

Disturbed areas will be planted with native trees and shrubs. In addition, other areas of Terrell Creek in the project area will be planted with native trees and shrubs wherever they are needed.

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. TO BE COMPLETED BY APPLICANT

None known. Steelhead are listed as having potential/historic presence but are not likely to use the project area.

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

Yes. Lake Terrell is used by migratory waterfowl. Terrell Creek is used by coho salmon.

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

The purpose of the project is to enhance fish habitat by improving fish passage and habitat conditions in Terrell Creek.

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.

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:

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.

Some small risk of fuel spill from construction equipment.

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

None anticipated

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

Spill kits will be on site during construction.

b. Noise

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

None known

- 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.

Normal noise associated with construction equipment (excavator, dump trucks). Flaggers may be used to safely guide vehicles accessing the project site. Work will take place during normal work hours.

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

None planned.

8. Land and shoreline use

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

Site is owned by WDFW and is part of the Whatcom Wildlife Area. Adjacent properties are used as rural residences and small farms.

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

No, at least not for the last 60 years.

- c. Describe any structures on the site.

The Terrell Creek dam is the only structure on site.

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

No

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

ROS, Recreation Open Space

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

Public recreation

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

Does not apply

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

Terrell Creek and its tributaries are critical areas.

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

Does not apply

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

Does not apply

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:

Project is compatible with existing and projected land uses as a wildlife reserve and recreation area.

9. Housing

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

Does not apply

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

Does not apply

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

Does not apply

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?

None

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

Riparian planting will improve aesthetics of areas impacted by project construction.

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?

None known

- 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?

Project site is within WDFW's Whatcom Wildlife Area Lake Terrell Unit. Recreation in vicinity includes: waterfowl hunting, fishing, bird watching.

- 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:

Project design will increase fish habitat in Terrell Creek without changing water levels or impacting recreational opportunities in Lake Terrell.

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.

Non 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:

All work will take place within existing stream channels that have been dredged and straightened in the past. Historic or cultural resources are unlikely within the work area. Whatcom Conservation District staff have been trained to identify cultural resources and will be on site during construction.

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.

Site is accessed from Aldergrove Rd northwest of Ferndale, WA. Fill material will come from a commercial gravel pit located on Northstar Rd approximately 1 mile from the project site.

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

Does not apply

- 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.

No

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

Does not apply

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

Does not apply

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.

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.

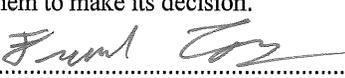
None known

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.

Does not apply

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:  (Frank Corey)

Date Submitted: 1/20/2012