

SEPA ENVIRONMENTAL CHECKLIST

A. Background

1. Name of proposed project, if applicable:

Douglas County PUD Tract 4 Shoreline Stabilization – Okanogan County, WA

2. Name of applicant:

Public Utility District No. 1 of Douglas County

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

Beau Patterson
1151 Valley Mall Pkwy
East Wenatchee, WA 98802
509-884-7191
Beaup@dcpud.org

4. Date checklist prepared:

April 20, 2017

5. Agency requesting checklist:

Public Utility District No. 1 of Douglas County

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

Upon receipt of shoreline permits and during the low reservoir tentatively scheduled for September 2017

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

There are no plans for future additions, expansions, or further activity related to the proposal.

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

JARPA, BA, Archaeology survey

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.

Shoreline Substantial Development Permit (Okanogan County)

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

Shoreline Substantial Development Permit (Okanogan County)

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 includes the repair of approximately 300 linear feet of actively eroding Columbia River bank. An existing non-native willow tree located on the end of a small point bar has provided some protection of the bank, but is severely undercut and has caused erosion to develop a small embayment to the west of the tree. A layered coir fabric revetment will be constructed at this location, surrounding the existing tree and embayment. The bottom layer will be filled with gravel to provide additional wave protection. Subsequent layers will be filled with a compressed topsoil mix suitable for vegetation re-establishment. As each layer is constructed, willow cuttings will be placed between the layers to a depth suitable to reach saturated soil. The coir revetment will be approximately 125 linear feet in length, approximately 12 feet wide at the bottom, three feet wide at the top, and approximately five feet high depending on location. The layered coir revetment will be constructed so about ½ of the revetment is above the OHWM, providing wave energy dissipation at a variety of water surface elevations and protecting existing vegetation. **Approximately 98 cubic yards (cy) of fill will be required below the OHWM for the construction of the coir revetment.** The revetment footprint is approximately 1,500 square feet (sf) (See attached drawings).

In the linear erosion area to the east of the point bar, a cobble and gravel berm will be placed waterward of the toe of slope to dissipate wave energy. The cobble and gravel bar will be approximately 175 feet long, 12 feet wide at the base and one foot wide at the top, and will be 3-4 feet in height depending on the location. The waterward slope of the cobble and gravel bar will be 4:1, and the land side will be 2:1. The finished elevation will be approximately one foot above the OHWM. **Approximately 71 cy of fill will be required below the OHWM for the construction of the cobble and gravel berm.** The berm footprint is approximately 2,100 sf.

In places where the existing bank is vertical, the bank will be reshaped to contours suitable for willow stake establishment. The shoreline and the area between the shoreline and both the cobble and gravel berm will be planted with coyote willow stakes. Approximately 1,200 sf will be planted with coyote willow to provide additional shoreline stabilization.

The proposed project would have very little, if any impact on existing habitat functions and values based on the lack of riparian vegetation and small area of impact. The existing conditions of the shoreline and riparian area have already been significantly disturbed and generally lack vegetation, which reduces the level of habitat functions and values typically provided by these habitat types. Specifically, the riparian area consists of bare sandy soil, weedy species and one severely eroded mature willow tree. The shoreline consists of an actively eroding shoreline.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The proposed project is located along the Wells Reservoir shoreline east of the intersection of Starr Road and SR97. Site address is 28 Starr Road, Tax Parcel2924190044. Section 19, Township 29 North, Range 24 East; 47.992057° N Lat. / 119.878142° W Long.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:

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

The property above the top of the bank is nearly flat and planted in grass.

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

Approximately 90%.

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.

Soils above the OHWM consist mainly of silty sands.

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

The purpose of the proposed project is to stabilize approximately 300' of actively eroding shoreline.

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 proposed project should occur in the dry during a low reservoir draw down. The coir revetment will be approximately 125 linear feet in length, approximately 12 feet wide at the bottom, three feet wide at the top, and approximately five feet high depending on location. The layered coir revetment will be constructed so about ½ of the revetment is above the OHWM, providing wave energy dissipation at a variety of water surface elevations and protecting existing vegetation. **Approximately 98 cubic yards (cy) of fill will be required below the OHWM for the construction of the coir revetment.** The revetment footprint is approximately 1,500 square feet (sf) (See attached drawings).

In the linear erosion area to the east of the point bar, a cobble and gravel berm will be placed

waterward of the toe of slope to dissipate wave energy. The cobble and gravel bar will be approximately 175 feet long, 12 feet wide at the base and one foot wide at the top, and will be 3-4 feet in height depending on the location. The waterward slope of the cobble and gravel bar will be 4:1, and the land side will be 2:1. The finished elevation will be approximately one foot above the OHWM. **Approximately 71 cy of fill will be required below the OHWM for the construction of the cobble and gravel berm.** The berm footprint is approximately 2,100 sf.

In places where the existing bank is vertical, the bank will be reshaped to contours suitable for willow stake establishment. The shoreline and the area between the shoreline and both the cobble and gravel berm will be planted with coyote willow stakes. Approximately 1,200 sf will be planted with coyote willow to provide additional shoreline stabilization.

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

The purpose of the project is to protect the existing shoreline from continued erosion and restore eroded shoreline. The proposed construction should not result in erosion, but Best Management Practices will be used to limit erosion.

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

The proposed project would increase or decrease the the impervious surface area.

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

No erosion is expected to occur as a result of the project so no control measures are being proposed. Conducting work in the dry will eliminate potential wave erosion. The flat topography and well-drained soils landward of the project reduce potential precipitation and runoff erosion to a negligible likelihood.

2. Air

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.

During construction, short-term emissions will occur from construction equipment being used on site. Long-term, the project will not increase emissions.

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 proposed.

3. Water

a. Surface Water:

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

The property is located along the Columbia 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.**

Yes. The proposed project will take place within 200 feet of the OHWM and below the OHWM.

- 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 169 cy of fill will be placed below the OHWM. There are no wetlands in the project area. Fill will be sourced by recontouring the existing bank. If additional fill material is needed it will be sourced from Godbey Concrete's Red-E-Mix Pateros Pit located 0.55 miles northwest of the project site.

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

None. All work should be timed to occur in the dry with low reservoir elevations.

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

No. There is no mapped floodplain on the Columbia River in this location.

- 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 waste materials will be discharged.

b. Ground Water:

- 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 waste materials will be discharged.

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.**

Due to the flat topography of the site and high soil porosity, no surface water runoff management will be needed. The proposed project will not change the existing drainage at the site.

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

No waste materials will enter ground or surface waters.

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

No

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

None proposed.

4. Plants

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?

The proposed project will protect the existing mature tree at the top of the bank. The vegetation present on the shoreline consists of weedy species. The excavation for the

proposed improvements will result in the disturbance of approximately 2,100 sq ft of bare sandy soil and weeds.

c. List threatened and 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 include Ute ladies'-tresses (*Spiranthes diluvialis* – threatened). No Ute ladies'-tresses were identified on site, and suitable habitat is not present.

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

Approximately 1,200 sf will be planted with coyote willow to provide additional shoreline stabilization. Willow cuttings will be supplemented with other native shrub species suitable to the location.

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

Vegetation present adjacent to the subject property includes yellow flag iris, blackberry, and Siberian elm. Milfoil is present near the site.

5. Animals

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 _____

b. List any threatened and 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 Area include the Upper Columbia River Spring-run Chinook salmon (*Oncorhynchus tshawytscha* - endangered), Upper Columbia River steelhead (*O. mykiss* – endangered), and Columbia River bull trout (*Salvelinus confluentus* – threatened).

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

Yes. The area is also used as a migration route by anadromous salmonids and waterfowl.

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

The proposed project will have no negative impact on water quality, water supply, recreation, or aesthetics of the Columbia River. The project has been designed to protect the existing shoreline from continued erosion and will restore native riparian vegetation. The

project will eliminate the existing eroding bank and provide a more stable, vegetated shoreline that will result in a greater level of habitat function. The project will also protect the existing large tree. Without the proposed project, the existing large tree will eventually fall over into the river, which would eliminate the riparian function provided. The protection of this tree will protect the existing riparian functions at the site.

The proposed project will also significantly minimize the potential impacts by completing the construction during a low reservoir draw down allowing the work to be completed in the dry. The PUD is proposing to lower the reservoir in September 2017 (for other maintenance activities) and this will dewater the site. By completing the project in the dry, all potential construction impacts will be eliminated.

Best Management Practices (BMPs) would be employed to reduce the potential for construction-related impacts on species and habitats. The following BMPs will be followed for this project.

- A Spill, Prevention, Control, and Countermeasure (SPCC) plan will be developed by the contractor prior to the commencement of any construction activities and will be used for the duration of the project.
- A copy of the SPCC plan with any updates will be maintained at the work site by the Contractor and will provide advanced planning for potential spill sources and hazardous materials (gasoline, oils, chemicals, etc.) and will outline roles and responsibilities, notifications, inspection, and response protocols.
- Care will be taken to prevent any petroleum products, chemicals, or other toxic or deleterious materials from entering the water. If a spill were to occur, work would be stopped immediately, steps would be taken to contain the material, and appropriate agency notifications would be made. Fuel hoses, oil drums, or fuel transfer valves and fittings, etc., shall be checked regularly for drips or leaks, and shall be maintained and stored properly to prevent spills.
- All upland soil disturbed areas will be protected in accordance with standard BMPs as outlined in the WA Department of Ecology Stormwater Management Manual for Eastern Washington. A detailed Upland Erosion & Sediment Control Plan will be developed by the Contractor prior to the start of construction. The Plan will include descriptions of project site specific work equipment, activities and approaches, and the corresponding BMPs and Water Quality Protection measures that will be implemented for conformance with the permit requirements and conservation measures outlined herein.
- Excess or waste materials will not be disposed of waterward of the OHWL, or allowed to enter waters of the state.
- The contractor shall have a spill containment kit, including oil absorbent materials, on site to be used in the event of a spill or if any oil product is observed in the water.
- The contractor will be required to capture any debris associated with project construction and not allow it to enter the Columbia River

- Turbidity and other water quality parameters will be monitored to ensure construction activities are in conformance with Washington State Surface Water Quality Standards, or other conditions as specified in the WDOE Water Quality Certification (WQC).
- Appropriate BMPs will be employed to minimize sediment loss and turbidity generation during excavation, re-handling, rock installation and other earth disturbing activities.

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

None

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.

No energy will be required to meet the completed projects need.

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 proposed.

7. Environmental Health

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

No environmental health hazards are associated with this project.

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.

None required

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

Environmental health hazards are not expected through the development of this project. Only approved construction materials will be used in construction of this project.

b. Noise

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

No noise exists in the surrounding area that would 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.

Typical construction equipment operation (excavator and truck noise) will occur at the site. This noise will only occur during construction activities and will be limited to daylight hours. Long term use will be the same as the existing level of noise.

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

None proposed.

8. Land and Shoreline Use

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 adjacent property is residential, with associated residential structures and development. Other properties in the area are developed orchards. The current use of the adjacent property waterward of the property boundary is public lands associated with the Wells Hydroelectric Project.

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?

No

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

c. Describe any structures on the site.

There are no structures located within the project area. Nearby structures include three rural residences and two well houses.

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

No

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

Public Use

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

Public Use

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

Rural

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

No; however, the shoreline of the Columbia River (aquatic and riparian) are protected.

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

None

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

None

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

None proposed.

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

Approval for this project will be obtained from Okanogan County.

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

None 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 proposed.

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?**

No buildings or structures will be constructed as part of this project.

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

None

- d. **Proposed measures to reduce or control aesthetic impacts, if any:**

None proposed.

11. Light and Glare

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

None

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

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 proposed.

12. Recreation

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

Informal recreational opportunities in the immediate vicinity include fishing, boating, water skiing, and other typical water sports.

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 proposed.

13. Historic and cultural preservation

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.

The site is within the Lake Pateros Archaeological District; no contributing sites are known to be within project boundaries.

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.

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.

This area has been previously disturbed as irrigated orchard prior to construction of Wells Dam. Douglas PUD consulted with the Washington State Department of Archaeology and Historic Preservation, and with the Confederated Tribes of the Colville Reservation on this project with a finding of No Historic Properties Affected. An archaeological survey was conducted April 19, 2017 and DAHP provided a letter of concurrence dated May 1, 2017. Correspondence is available upon request.

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.

Contractors and workers will be informed to immediately stop work if artifacts of historical or cultural importance are found. If any are found, work will immediately stop and the land owner (Douglas PUD) will be notified along with the Washington State Historic Preservation Office.

14. Transportation

- 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.**

SR 97 and Starr Road (Okanogan County Road 1525) are nearby public roads. Access to the site will be from Starr Road via private road and agreement with adjoining property owner.

- 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?**

No new parking spaces will be required or eliminated as part of this project.

- 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.**

The project will not facilitate a transportation use. The primary access to the site is and will continue to be by road.

- e. **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 vehicular trips would be generated by the completed project.

- 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 proposed.

15. Public Services

- 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.**

The proposed project will not result in an increased need for public services.

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

None proposed.

16. Utilities

- a. **Circle utilities currently available at the site:**

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other _____

- 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.**

No new utilities are proposed or required for this project.

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: _____

Name of signee Beau Patterson _____

Position and Agency/Organization Land-use Specialist, Public Utility District #1 of Douglas County

Date Submitted: _____