



6g



US Army Corps of Engineers
Seattle District

WASHINGTON STATE Joint Aquatic Resources Permit Application (JARPA) Form^{1,2}

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.

AGENCY USE ONLY	
Date received:	Department of Ecology RECEIVED
Agency reference #:	WA 11 2015
Tax Parcel #(s):	Shorelands & Environmental Assistance Program

Part 1—Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]

Coweeman Mitigation Bank

Part 2—Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Woodward, Victor			
2b. Organization (If applicable)			
Habitat Bank, LLC			
2c. Mailing Address (Street or PO Box)			
P.O. Box 354			
2d. City, State, Zip			
Kirkland, WA 98033-0354			
2e. Phone (1)	2f. Phone (2)	2g. Fax	2h. E-mail
(425) 785-8428	()	()	victorw@habitatbank.com

¹Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at <http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx>.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

²To access an online JARPA form with [help] screens, go to http://www.epermittinq.wa.gov/site/alias_resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [\[help\]](#)

3a. Name (Last, First, Middle)			
Taylor, Steffanie N.			
3b. Organization (If applicable)			
Ecological Land Services, Inc.			
3c. Mailing Address (Street or PO Box)			
1157 3 rd Avenue, Suite 220			
3d. City, State, Zip			
Longview, WA 98632			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
(360) 578-1371	()	(360) 414-9305	steff@eco-land.com

Part 4—Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [\[help\]](#)

- Same as applicant. (Skip to Part 5.)
- Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.
- Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
Lopes, Gregory M/Arlene M			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
520 Valley View Drive (Parcel WI36002008)			
4d. City, State, Zip			
Kelso, WA 98626			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail
(360) 270-9015	()	()	

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- There are multiple project locations (e.g. linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]			
<input checked="" type="checkbox"/> Private <input checked="" type="checkbox"/> Federal (Bonneville Power Association) <input checked="" type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)			
5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]			
Valley View Drive			
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Kelso, WA 98626			
5d. County [help]			
Cowlitz			
5e. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
	36	8N	2W
	31	8N	1W
5f. Provide the latitude and longitude of the project location. [help]			
<ul style="list-style-type: none"> Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83) 			
46.136060 N -122.870817 W			
5g. List the tax parcel number(s) for the project location. [help]			
<ul style="list-style-type: none"> The local county assessor's office can provide this information. 			
Phase 1: WI36002008, WI3605002, WI3605001, WI3608001, 24125, and WI3601001. Phase 2: WE3101003			
5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]			
Name	Mailing Address	Tax Parcel # (if known)	
See Attachment C			

5i. List all wetlands on or adjacent to the project location. [help]

Wetland Summary Table

Wetland	Size (ac.)	Cowardin Class	HGM Classification	Ecology Rating
A	33.51	FO/SS/EM	Depressional	I
B	0.44	EM	Depressional	III
C	1.02	FO/SS/EM	Depressional	III
D	0.36	FO/EM	Depressional	III
E	0.01	FO/SS/EM	Riverine	II
F	0.05		Depressional	III
G	0.05		Riverine	II
H	0.01		Riverine	III
I	0.43	EM	Riverine	II
J	0.17		Riverine	II
K	0.12	FO/SS/EM	Riverine	II
L	0.10		Depressional	III
M	0.06		Depressional	III
N	0.01		Depressional	III
O	0.28		Depressional	III
P	0.13		Depressional	III
Q	0.26		Riverine	II
R	0.17		Riverine	II
S	0.08		Riverine	III
T	0.05		Riverine	III
U	0.44		Slope	III
Total	37.75			

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Stream	DNR Stream Type	Stream Length	Stream Width
Coweeman River	Type S (fish bearing/perennial/shoreline of the state)	1.5 miles (onsite)	60-80 ft.
Tributary 1	Type F (fish bearing/perennial)	0.92 miles (total)	6-8 ft.
Tributary 2	Type F (fish bearing/perennial)	1.06 miles (total)	4-5 ft.
Tributary 3	Type Ns (non-fish bearing/seasonal)	0.19 miles (total)	2 ft.
Tributary 4	Type Ns (non-fish bearing/seasonal)	0.29 miles (total)	2 ft.
Tributary 5	Type Ns (non-fish bearing/seasonal)	0.26 miles (onsite)	3-4 ft.
Tributary 6	Type Ns (non-fish bearing/seasonal)	200 feet (onsite)	2 ft.

5k. Is any part of the project area within a 100-year floodplain? [\[help\]](#)

Yes No Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

The Bank includes 104.45 acres of level-to-undulating Coweeman River floodplain and has been actively used for agriculture and cattle grazing for at least three-quarters of a century. A large (33.51 acres) palustrine forested/shrub/emergent/ aquatic bed wetland complex locally known as "Hart's Lake" (Wetland A) and three smaller wetlands (Wetlands B, C, and D) are located within the floodplain of the Bank site. The remaining 208.8 acres of the Bank site southward includes six tributary streams, associated forested wetlands and forested woodland with 174.01 acres meeting priority habitat standards for Old Growth Forest, as defined by the Washington Department of Fish and Wildlife (WDFW) (*Priority Habitats and Species List*, August 2008). The remaining 32.37 woodland acres is well-established mature second growth forest that does not yet meet criteria to be considered old growth.

5m. Describe how the property is currently used. [\[help\]](#)

The floodplain portion of the property is currently used for livestock grazing and the forested portion is used for timber production.

5n. Describe how the adjacent properties are currently used. [\[help\]](#)

Surrounding land use is a combination of residential, rural residential, agricultural, and forest land.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [\[help\]](#)

Three easements are present on the Bank property: 1) a 50-foot-wide gas pipeline easement runs north and south through the western part of the Bank site within Parcels WI3605002 and 24125, 2) a 15-foot-wide fiber optic easement extends through parcels WI3605002 and WI3602008 along an access road from the west and meets the gas pipeline easement, and 3) a 200-foot-wide Bonneville Power Administration (BPA) easement runs through the Murray family parcel (WE3101003) and the northeastern tip of the City of Kelso parcel (WI3601001).

5p. Provide driving directions from the closest highway to the project location, and attach a map. [\[help\]](#)

At Exit 39 on I-5, turn east onto Allen Street, and then immediately turn right onto Kelso Drive, turn left onto Russell Street, then immediately turn right onto Coweeman Drive, then turn left onto Valley View Drive, and continue to the end. The north side of the Bank site is accessed off a private driveway approximately 1.3 east on Allen Street. From Allen Street turn right immediately after the BPA tower.

Part 6–Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

The goal of the Coweeman River Mitigation Bank is to reestablish, create, rehabilitate, enhance, and preserve wetland functions across the site, as well as, restore and create riparian habitat and off-channel rearing and refuge habitat along this reach of the Coweeman River.

6b. Describe the purpose of the project and why you want or need to perform it. [\[help\]](#)

The purpose of the project is to create a wetland and stream mitigation bank to provide compensatory mitigation for unavoidable impacts to wetlands and other aquatic resources, as well provide conservation credits for impacts to listed salmonids for projects within the Bank service area.

6c. Indicate the project category. (Check all that apply) [\[help\]](#)

- Commercial
 Residential
 Institutional
 Transportation
 Recreational
 Maintenance
 Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [\[help\]](#)

- | | | | |
|--|---|---|--|
| <input type="checkbox"/> Aquaculture | <input checked="" type="checkbox"/> Culvert | <input type="checkbox"/> Float | <input type="checkbox"/> Retaining Wall (upland) |
| <input checked="" type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir | <input type="checkbox"/> Floating Home | <input type="checkbox"/> Road |
| <input type="checkbox"/> Boat House | <input type="checkbox"/> Dike / Levee / Jetty | <input type="checkbox"/> Geotechnical Survey | <input type="checkbox"/> Scientific Measurement Device |
| <input type="checkbox"/> Boat Launch | <input type="checkbox"/> Ditch | <input checked="" type="checkbox"/> Land Clearing | <input type="checkbox"/> Stairs |
| <input type="checkbox"/> Boat Lift | <input type="checkbox"/> Dock / Pier | <input type="checkbox"/> Marina / Moorage | <input type="checkbox"/> Stormwater facility |
| <input checked="" type="checkbox"/> Bridge | <input type="checkbox"/> Dredging | <input type="checkbox"/> Mining | <input type="checkbox"/> Swimming Pool |
| <input type="checkbox"/> Bulkhead | <input type="checkbox"/> Fence | <input type="checkbox"/> Outfall Structure | <input type="checkbox"/> Utility Line |
| <input type="checkbox"/> Buoy | <input type="checkbox"/> Ferry Terminal | <input type="checkbox"/> Piling/Dolphin | |
| <input checked="" type="checkbox"/> Channel Modification | <input type="checkbox"/> Fishway | <input type="checkbox"/> Raft | |

Other: The project will also involve adding large woody structures within and along the banks of the Coweeman, removing debris (car bodies) from the Coweeman, and excavating within wetland areas for enhancement purposes.

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [\[help\]](#)

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

All activities will be located within the 100-year floodplain of the Coweeman River. Grading for wetland creation and enhancement activities will occur within and adjacent to Wetlands A and B and adjacent to Wetlands C and D. Large woody material pieces and structures will be placed within the Coweeman River, within a jurisdictional ditch, on the floodplain, and within Wetlands A through D. Channel recontouring will occur on Tributaries 2 and 5, as well as on the ditched outlet from Wetland A, which connects to the Coweeman. Additionally portions of the incised bank of the Coweeman River will be reshaped to create riparian wetland benches and an overflow notch will be excavated on the bank of the Coweeman to allow inflow of water into Wetland A. Side channel habitat connecting directly to the Coweeman River and additional wetland area will be created adjacent to Wetland C and Wetland B. Stream gravel amendments (from onsite sources or purchased from offsite sources) will be added to the recontoured areas of Tributaries 2 and 5 within Wetland A. Culverts on the outlet to Wetland A and Tributary 1 will be removed and replaced with bridges. The Basis of Design Report prepared by Shannon & Wilson, Inc. (December 2014) details hydrologic and hydraulic design of the project. All appropriate guidelines for creation of off-channel habitat restoration and reconnection as detailed in the *Programmatic Biological Assessment Restoration Actions in Washington State* (U.S. Army Corps of Engineers revised July 29, 2008) will be followed. The Coweeman River will be isolated from work areas that are at or below the ordinary high water mark of the river. No in-water work is anticipated other than car body removal and installation of large woody material. Figures A-1 through A-8 and B-2 through B-13 illustrating the project information are attached. Construction elements checked above in *Section 6d* are grouped in the following areas and discussed below:

Area A – comprised of Wetland A and surrounding area

Area B – comprised of Wetland B located north of the Coweeman River

Area C – comprised of Wetlands C and D and surrounding area

Equipment used may include haul trucks, excavators, mini excavators, bulldozers, cranes, pick-up trucks, and hand tools.

Area A

Tributaries 2 and 5

Tributaries 2 and 5 within Wetland A will each be extended approximately 200 feet from the end of their defined stream channels to better connect to more frequently inundated areas of Wetland A to promote fish access. Construction activities associated with creating the new channels within Wetland A are detailed below in *Sections 7h and I*. See also Figures B-4D and B-4E.

Wetland A outlet

The outlet of Wetland A is considered a fish-bearing, jurisdictional ditch. Fish enhancement improvements will be made within the ditch, and the ditch outlet will be relocated near the Tributary 1 confluence with the Coweeman River (Figure B-3a). Improvements will include gravel amendments and addition of woody material to create stepped pools. Stream gravel will be placed within the channel bottom. Gravel will be purchased from a local source, and onsite sources may be used if sufficient gravel is found during excavation of the new connection from the ditch to the Coweeman River. Stream gravel will be placed using an excavator. Additionally, the existing under-sized culvert crossing on the ditch will be replaced with a bridge (Sheet 15). A fiber optic line and natural gas line are located in this crossing and will be attached to the bridge, as the crossing must remain for maintenance access of both the Bank site and gas line.

Floodplain Overflow Notch

A floodplain overflow notch will be excavated along the south bank of the Coweeman River north of Wetland A and a shallow swale will connect the notch to Wetland A (Figure B-4B). This will improve floodplain connectivity along the incised area of the Coweeman River reducing overflow levels down to the 5,000 cfs, approximately the 2-year (bankfull) flood event. This notch will increase the frequency at which a connection is made between the Coweeman River and the floodplain in Area A. Historically, this frequency has been limited due to channel

incision along this reach. Fish entering the floodplain during high flow periods can return to the Coweeman River via this notch or alternatively via the shallow swale that will be created through the wetland to the reconfigured Wetland A outlet to provide fish escapement. A large wood bar apex jam, anchored by timber pilings will be constructed at the downstream (west) side of the floodplain notch. The log jam at the entrance will deflect flood flows into the wetland area and promote long-term stability and connectivity of the floodplain overflow notch, as well as provide habitat and refuge for fish. Flows into the notched area will be blocked using sand bag dams or other approved measures until disturbed soil is stabilized.

Tributary 1/Wetland A Outlet Alcove

A large alcove will be excavated encompassing the confluence of Tributary 1, the newly realigned Wetland A outlet, and the Coweeman River (Figure B-3a). The existing bank will be excavated at the 10-foot North American Vertical Datum of 1988 (NAVD88) elevation creating a large alcove where the cold, freshwater tributaries enter the river and will act as an attraction point for salmonids. Large woody material will be added to the alcove for additional habitat enhancement and it will be seeded with native trees, shrubs, and emergent species. The existing culvert on Tributary 1 will be removed and will be replaced with a bridge (Sheet 14).

Riparian Bench Creation

Site grading will create riparian wetlands along the south bank of the Coweeman River (Figures 10, 14, 16 and 24). The grading will start at an elevation of 10 feet NAVD88 and create a gradual slope (either 3H:1V or 5H:1V) from the river bank up to the upland riparian elevations. The 10-foot elevation corresponds to a flow of approximately 1,000 to 1,300 cfs in this reach of the Coweeman River. Based on the monthly flow duration information provided in the Basis of Design Report, flows greater than or equal to this magnitude would be expected to occur between approximately 25 percent of the time during November through March and typically less than 1 percent of the time in April through October. These benches will be seeded with a native seed mix for soil stabilization and will be planted with native trees and shrubs based on elevation and expected inundation levels. Large woody material will be anchored along the benches with boulder or timber pile anchors or using a buttress configuration to provide additional fish habitat and bank stabilization (Sheet 16).

Car Body Removal

Several car bodies were historically placed in the Coweeman River likely, for bank stabilization purposes (Figure 10). These car bodies will be removed with a crane or excavator and will be disposed at an approved offsite location. A work area isolation plan will be prepared to prevent sedimentation within the river. Disturbed soils on the bank will be seeded with a native seed mix following removal. Large woody material will be anchored along the benches with boulder or timber pile anchors or using a buttress configuration to provide additional fish habitat and bank stabilization (Sheet 16).

Post-Construction Hydrology in Wetland A

Post-construction surface water elevations within Wetland A are anticipated to rise approximately 6 to 12 inches. The increased water levels will expand areas of seasonal and occasional flooding throughout the wetland and will extend the duration of inundation within these seasonally and occasionally flooded areas by a few days (Figure B-8). The existing vegetation communities are well-suited for persistent inundation and are expected to expand as their hydroperiods expand.

Area B

Side Channel Habitat and Wetland Habitat Creation

Side channel habitat will be created off of the Coweeman River at an elevation of 10 feet NAVD88 and above for off-channel rearing, forage, and cover that connects directly to Wetland B (Figures B-2, B-4G, B-4H, B-5). Wetland B will be excavated 2 to 5 feet below existing grade sloping at a minimum 2 percent towards the new connection to direct fish back to the river as water recedes. Inflow from the river would be expected to occur at flows of 1,500 cfs for this reach of the Coweeman. Based on the monthly flow duration information provided in the Basis of Design Report, flows greater than or equal to this magnitude would occur between 5 and 15 percent of the time November through March and less than 1 percent of the time April through October. Habitat features such as perch poles, brush piles, and large woody material will be installed throughout this area and it will be planted with native trees, shrubs, and emergent species.

Riparian Bench Creation

A riparian wetland bench will be created along the inside of the meander bend on the north bank of the

Coweeman River by excavating the bank to create a gradual slope (6H:1V) to the upland riparian area (Figures 20 and 24). The proposed bench would be set at 10 feet NAVD88, which would occur during flows of approximately 1,500 cfs or higher for 2 to 5 percent of the time November through March. The riparian bench will be seeded and planted with native trees, shrubs, and emergent. No LWM structures or pieces will be placed in this area as there is a landslide hazard area present along the opposite bank of the Coweeman.

Area C

Side Channel Habitat

A side channel will be excavated at an elevation of 10 feet NAVD88 and above directly connecting to the Coweeman River (Figures B-2, B-4I, and B-5). The excavation will be performed in a manner to protect existing wetland functions in areas south and west of the planned channel. Side channel connection would be expected to occur at flows of 1,500 cfs for this reach of the Coweeman River. Based on the monthly flow-duration information provided in Basis of Design Report, flows greater than or equal to this magnitude would occur between 5 and 15 percent of the time in November through March and less than 1 percent of the time April through October. Habitat features such as perch poles, brush piles, and large woody material will be installed throughout this area and it will be planted with native trees, shrubs, and emergent species.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [help]

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start date: June 2015 End date: October 2015 See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [help]

~\$150,000

6h. Will any portion of the project receive federal funding? [help]

- If yes, list each agency providing funds.

Yes No Don't know

Part 7–Wetlands: Impacts and Mitigation

Check here if there are wetlands or wetland buffers on or adjacent to the project area.

(If there are none, skip to Part 8.) [\[help\]](#)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [help]

Not applicable

The overall goal of the Bank site design for wetland areas is to increase their functions and values. Silt fencing will be installed along wetland boundaries where fill will be placed adjacent to existing wetlands. Once excavation is complete, a native seed mix will be applied to all bare areas. Sandbag dams or other approved erosion control measure will be installed between the newly created wetlands and the connection to the Coweeman River just above the high tide line until the native grass seed mix is established to prevent sedimentation within the river. Work areas for channel recontouring of the tributaries within the Wetland A will be isolated from flows by creating temporary sandbag dams. No standing water is expected in the wetlands during these activities.

7b. Will the project impact wetlands? [help]

Yes No Don't know All impacts will be beneficial

7c. Will the project impact wetland buffers? [\[help\]](#)

Yes No Don't know

7d. Has a wetland delineation report been prepared? [\[help\]](#)

- If Yes, submit the report, including data sheets, with the JARPA package.

Yes No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [\[help\]](#)

- If Yes, submit the wetland rating forms and figures with the JARPA package. *Wetland rating forms are located in the Addendum to the Existing Conditions Report in Appendix E of the Basis of Design Report attached.*

Yes No Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 7g.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Not applicable

The Mitigation Banking Instrument (MBI) will state all the goals, objectives, and performance standards for establishment of the mitigation bank.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [\[help\]](#)

Activity (fill, drain, excavate, flood, etc.)	Wetland Name ¹	Wetland type and rating category ²	Impact area (sq. ft. or Acres)	Duration of impact ³	Proposed mitigation type ⁴	Wetland mitigation area (sq. ft. or acres)
Excavate	Wetland A	FO/SS/EM Depressional Cat I	0.05 ac. (2000 sq.ft.)	Permanent	Self Mitigating	N/A
Excavate	Wetland B	EM Depressional Cat III	0.44 ac	Permanent	Self Mitigating	N/A
Fill	Wetland A	FO/SS/EM Depressional Cat I	0.04 ac. (2000 sq.ft.)	Permanent	Self Mitigating	N/A

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [help]

Up to 80 cubic yards (cy) of stream gravel from onsite sources will be spread up to approximately 12 inches deep within the newly constructed channels of Tributaries 2 and 5 (40 cy yards each). These channels will each be extended approximately 200 feet from the end of their defined stream channels and to better connect to more frequently inundated areas of Wetland A to promote fish access. There is a large deposit of gravel at the delta of Tributary 5 that has built up over the years. Gravel will be moved from this area into the newly constructed channel of Tributary 5 with a mini excavator. If there is enough gravel remaining, it will be transported to Tributary 2 and will also be placed with the mini excavator. There is also gravel at the delta of Tributary 2 that may be used in the same manor. If sufficient gravel is present at the bottom of the newly excavated stream channels, less gravel, if any, will be moved from the onsite sources. On the contrary, if there is not enough gravel from onsite sources, clean stream gravel will be imported to the site and placed with the mini excavator.

Additionally, an approximate 100-foot length of the ditched outlet that lies within Wetland A will be similarly enhanced with stream gravel from onsite sources. Up to 20 cubic yards of gravel will be placed in the bottom of this portion of the newly meandered channel. The remainder of the ditch enhancement will occur outside of Wetland A, but within the jurisdictional ditch/newly meandered channel.

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]

A channel will be excavated between end of the defined channels of Tributaries 2 and Tributary 5 and Wetland A. The channels will extend approximately 200 feet from the end of their defined stream channels and to better connect to more frequently inundated areas of Wetland A to promote fish access. The channels will be approximately 5-feet wide at the bottom, 10 feet wide at the top, and will be up to 2 feet deep. Additionally, a 100-foot section of the ditched outlet within Wetland A will be remeandered to better simulate a natural stream channel. Up to 225 cubic yards of soil will be removed from the wetland to create the new meanders. The remainder of the ditch meandering and enhancement will occur outside of Wetland A, but within the jurisdictional ditch or surrounding uplands where a new channel will be created. Excavated material will be disposed of onsite in the designated stockpile areas.

The channels will be excavated with a mini excavator. The new channel of Tributary 2 will be excavated from the downstream end in the pasture portion of the wetland, upstream through the forested and scrub-shrub portion of the wetland to the point where the channel is defined. The channel excavation area on Tributary 5 is not as heavily vegetated as Tributary 2; therefore the excavator will operate where the least amount of disturbance to existing vegetation will occur, which will likely consist of starting at the upstream end and working downstream.

Wetland B (0.44 ac) will be deepened and enlarged to provide additional wetland area and off-channel fish habitat. Approximately 41,800 cy of soil (including surround upland areas) will be excavated using a bull dozer, backhoe, or excavator. The top 6 inches of topsoil will be stockpiled and re-applied following excavation to the extent practicable. Remaining soil will be placed in the in the surrounding uplands or in the designated soil disposal areas.

Part 8—Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [help]

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [\[help\]](#)

Not applicable

All excavation and fill activities within onsite water bodies will be beneficial and are not listed in *Section 8e*. Work will be conducted during low tide and during the in-water work window for the Coweeman. Flow from Tributary 1 will be directed around the large woody material placement areas by creating a temporary sand bag dam around the work area. Flow, if present, in the other tributaries will be diverted around the channel contouring work area until the excavation and gravel amendments are complete. Flow in Tributary 2 can be diverted around the work areas by creating a temporary sand bag dam, and redirecting flow to the east. On Tributary 5, a temporary sand bag dam will be installed that will divert flow to the south into the abandoned stream channel and around the work area if flow is present. A sand bag coffer dam will be installed on Tributary 1 and flow will be pumped around the culvert removal area. Recontouring within the ditched outlet of Wetland A will be done in the dry; however, a temporary sandbag dam will be placed to block flow from Wetland A into the ditch if needed. Once the recontouring work is complete on the temporary sand bag dams will be removed.

Excavation on the lowest areas of riparian benches will be done during low tide and the within the in-water work window of the Coweeman. All appropriate guidelines for creation of off-channel habitat restoration and reconnection as detailed in the *Programmatic Biological Assessment Restoration Actions in Washington State* (U.S. Army Corps of Engineers revised July 29, 2008) will be followed. A work area isolation plan will be prepared for the car body removal area and removal of the culvert on Tributary 1. Other construction areas will be isolated from the river by temporary sand bag or hay bale dams or sediment curtains. Following excavation, the benches and notches will be seeded with a native wetland seed mix and planted with trees and shrubs according to the planting plan.

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

Yes No All impacts will be beneficial

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 8d.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Not applicable

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [\[help\]](#)

8e. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from	Area (sq. ft. or linear ft.) of waterbody directly

				waterbody	affected

¹ If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
Corps	Gail Terzi	(206) 764-6903	11-13-14
Corps	Steve Manlow	(360) 906-7274	October 2014
Ecology	Kate Thompson	(360) 407-6749	11-13-14
NMFS	Jeff Fisher	(360) 534-9342	October 2014
WDFW	Steve West	(360) 906-6720	November 2014
Cowlitz County	Greta Holmstrom	(360) 577-3052	October 2014
EPA	Linda Storm	(206) 553-6384	11-13-14

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [\[help\]](#)

- If Yes, list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: <http://www.ecy.wa.gov/programs/wq/303d/>.

Yes No

The Coweeman River for temperature exceedance and bacteria.

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [\[help\]](#)

- Go to <http://cfpub.epa.gov/surf/locate/index.cfm> to help identify the HUC.

17080003

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/services/gis/maps/wria/wria.htm> to find the WRIA #.

26 Cowlitz River

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/programs/wq/swqs/criteria.html> for the standards.

Yes No Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [\[help\]](#)

- If you don't know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

Rural Urban Natural Aquatic Conservancy Other _____

9g. What is the Washington Department of Natural Resources Water Type? [\[help\]](#)

- Go to http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesApplications/Pages/fp_watertyping.aspx for the Forest Practices Water Typing System.

Shoreline Fish Non-Fish Perennial Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [\[help\]](#)

- If No, provide the name of the manual your project is designed to meet.

Yes No

Name of manual:

9i. Does the project site have known contaminated sediment? [\[help\]](#)

- If Yes, please describe below.

Yes No

9j. If you know what the property was used for in the past, describe below. [\[help\]](#)

The property has always been used for agricultural purposes.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- If Yes, attach it to your JARPA package.

Yes No

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

Species, ESU, or DPS	Federal Status	Critical Habitat in Action Area?
NMFS Jurisdiction		
Chinook Salmon (<i>Onchorhynchus tshawytscha</i>)		
Lower Columbia River Chinook ESU	Threatened	Designated
Chum Salmon (<i>Onchorhynchus keta</i>)		
Columbia River Chum Salmon ESU	Threatened	Designated
Coho Salmon (<i>Onchorhynchus kisutch</i>)		
Lower Columbia River Coho Salmon ESU	Threatened	<i>Proposed</i>
Steelhead (<i>Onchorhynchus mykiss</i>)		
Lower Columbia River Steelhead DPS	Threatened	Designated
North American Green Sturgeon		
Southern DPS (<i>Acipenser medirostris</i>)	Threatened	No
Columbia River Smelt (<i>Eulachon</i>)	Threatened	No
Southern DPS (<i>Thaleichthys pacificus</i>)		
USFWS Jurisdiction		
Bull Trout – Columbia River DPS <i>(Salvelinus confluentus)</i>	Threatened	No
Marbled Murrelet (<i>Brachyramphus marmoratus</i>)	Threatened	No
Northern Spotted Owl (<i>Strix occidentalis caurina</i>)	Threatened	No
Nelson’s Checker-Mallow (<i>Sidalcea nelsoniana</i>)	Threatened	No

9m. Name each species or habitat on the Washington Department of Fish and Wildlife’s Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

Species, ESU, or DPS	State Status
Fish	
Chinook Salmon (<i>Onchorhynchus tshawytscha</i>)	
Lower Columbia River Chinook ESU	Candidate
Chum Salmon (<i>Onchorhynchus keta</i>)	
Columbia River Chum Salmon ESU	Candidate
Coho Salmon (<i>Onchorhynchus kisutch</i>)	
Lower Columbia River Coho Salmon ESU	Not Listed
Steelhead (<i>Onchorhynchus mykiss</i>)	
Lower Columbia River Steelhead DPS	PHS Listed
Cutthroat (<i>Onchorhynchus clarki</i>)	PHS Listed
Eulachon (<i>Thaleichthys pacificus</i>)	Candidate
Pacific Lamprey (<i>Lampetra tridentate</i>)	Monitored
River Lamprey (<i>Lampetra ayresii</i>)	Candidate
Birds	
Band-tailed Pigeon (<i>Clumba fasciata</i>)	PHS Listed
Bald eagle (<i>Haliaeetus leucocephalus</i>)	Sensitive
Fox Sparrow (<i>Passerella iliaca</i>)	Not Listed
Marbled Murrelet (<i>Brachyramphus marmoratus</i>)	Threatened
Northern Goshawk (<i>Accipiter gentilis</i>)	Candidate
Northern Spotted Owl (<i>Strix occidentalis caurina</i>)	Endangered
Peregrine Falcon (<i>Falco peregrinus</i>)	Sensitive
Pileated Woodpecker (<i>Dryocopus pileatus</i>)	Candidate
Purple Martin (<i>Progne subis</i>)	Candidate
Red-tail Hawk (<i>Buteo jamaicensis</i>)	PHS Listed
Sandhill Crane (<i>Grus canadensis</i>)	Endangered
Vaux's Swift (<i>Chaetura vauxi</i>)	Candidate
Amphibians	
Cascade torrent salamander (<i>Rhyacotriton cascadae</i>)	Candidate
Columbia torrent salamander (<i>Rhyacotriton kezeri</i>)	Monitored
Dunn's salamander (<i>Plethodo dunnii</i>)	Candidate
Western Toad (<i>Anaxyrus boreas</i>)	Candidate
Mammals	
Columbian black-tailed Deer (<i>Odocoileus hemionus columbianus</i>)	PHS Listed
Elk (<i>Cervus elaphus</i>)	PHS Listed
Habitats	
Palustrine wetlands	
In-stream	

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.ecy.wa.gov/opas/>.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@ora.wa.gov.
- For a list of addresses to send your JARPA to, click on [agency addresses for completed JARPA](#).

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [\[help\]](#)

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.

A copy of the SEPA determination or letter of exemption is included with this application.

A SEPA determination is pending with Cowlitz County (lead agency). The expected decision date is _____.

I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [\[help\]](#)

This project is exempt (choose type of exemption below).

Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?

Other: _____

SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [\[help\]](#)

LOCAL GOVERNMENT

Local Government Shoreline permits:

Substantial Development Conditional Use Variance

Shoreline Exemption Type (explain): _____

Other City/County permits:

Floodplain Development Permit Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

Hydraulic Project Approval (HPA) Fish Habitat Enhancement Exemption – [Attach Exemption Form](#)

Effective July 10, 2012, you must submit a check for \$150 to Washington Department of Fish and Wildlife, unless your project qualifies for an exemption or alternative payment method below. **Do not send cash.**

Check the appropriate boxes:

\$150 check enclosed. Check # _____
Attach check made payable to Washington Department of Fish and Wildlife.

Charge to billing account under agreement with WDFW. Agreement # _____

My project is exempt from the application fee. (Check appropriate exemption)

HPA processing is conducted by applicant-funded WDFW staff.
Agreement # _____

Mineral prospecting and mining.

Project occurs on farm and agricultural land.

(Attach a copy of current land use classification recorded with the county auditor, or other proof of current land use.)

Project is a modification of an existing HPA originally applied for, prior to July 10, 2012.
HPA # _____

Washington Department of Natural Resources:

Aquatic Use Authorization

Complete JARPA Attachment E and submit a check for \$25 payable to the Washington Department of Natural Resources.

Do not send cash.

Washington Department of Ecology:

Section 401 Water Quality Certification

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

Section 404 (discharges into waters of the U.S.)

Section 10 (work in navigable waters)

United States Coast Guard permits:

Private Aids to Navigation (for non-bridge projects)