



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

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



US Army Corps
of Engineers •
Seattle District

AGENCY USE ONLY
Date received: <u>Department of Ecology</u> RECEIVED
Agency reference #: _____
Tax Parcel #(s): <u>MAR 29 2016</u>
<u>Shorelands & Environmental Assistance Program</u>

Part 1 – Project Identification:

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
SR 302 / N. of E. Victor Rd. - Culvert Replacement

Part 2 – Applicant:

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

2a. Name (Last, First, Middle)			
Sawyer, Jeff B.			
2b. Organization (If applicable)			
Washington State Department of Transportation			
2c. Mailing Address (Street or PO Box)			
P.O. Box 47440			
2d. City, State, Zip			
Olympia, WA , 98504-7440			
2e. Phone (1)	2f. Phone (2)	2g. Fax	2h. E-mail
360-570-6701		360-357-2601	sawyerj@wsdot.wa.gov

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.epermitting.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)			
Cuoio, Marcus J.			
3b. Organization (If applicable)			
Washington State Department of Transportation			
3c. Mailing Address (Street or PO Box)			
P.O. Box 47440			
3d. City, State, Zip			
Olympia, WA , 98504-7440			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
360-570-6695	N/A	360-357-2601	cuoiom@wsdot.wa.gov

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)			
N/A			
4b. Organization (If applicable)			
N/A			
4c. Mailing Address (Street or PO Box)			
N/A			
4d. City, State, Zip			
N/A			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail
N/A	N/A	N/A	N/A

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]

- Private
- Federal
- Publicly owned (state, county, city, special districts like schools, ports, etc.)
- Tribal
- 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]

This project is located on SR 302 between Milepost (MP) 4.55 and MP 4.61.

5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]

Victor, WA

5d. County [help]

Mason County

5e. Provide the section, township, and range for the project location. [help]

¼ Section	Section	Township	Range
SE	28	22 North	1 West

5f. Provide the latitude and longitude of the project location. [help]
 • Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

47.363587 N. Lat. / -122.866833 W. Long.

5g. List the tax parcel number(s) for the project location. [help]
 • The local county assessor's office can provide this information.

N/A

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)
Lance Englund & Deborah Koehn	5361 E. SR 302 Belfair, WA 98528-9391	12228-44-00010
Harmon-Jane Van Slyke Partnership	P.O. Box 91 Vaughn, WA 98394-0091	12228-41-00000
Danielle R. Young	1534 12 th Lane Fi. Fox Island, WA 98335-9664	12228-42-80301
Charles W. & Jean M. Hewitt	P.O. Box 1842 Belfair, WA 98528	12228-44-00040
Washington State Department of Natural Resources	1111 Washington St. SE Olympia, WA 98504	12228-00-60000

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

WSDOT identified and delineated 1 wetland (A) within the vicinity of the project. Wetland A is a Category III approximately 0.01 acre or 480 sq. ft. in size.

These determinations are based on the 2004 Department of Ecology (Ecology) Wetland Rating System and the Mason County local agency Critical Area Ordinance (CAO) rating system.

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

WSDOT identified North Bay within the project limits and 0 streams within the project area.

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. [\[help\]](#)

Vegetation:

Vegetation in the area includes coniferous trees such as Douglas Fir, Western Hemlock and Western Red Cedar as well as deciduous trees such as Red Alder and Big Leaf Maple. Shrubs observed in the project area include Beaked Hazelnut, Salmonberry, Indian Plum, Evergreen Huckleberry, Himalayan Blackberry and Bitter Dock. Other plants observed in the vicinity include Lady Fern, Salal, Sword Fern, American Speedwell and Giant Horsetail.

Wetland Veg.:

Wetland A is comprised of a palustrine emergent habitat type. The dominant plant species observed in a vegetation data plot is water parsley. Other species observed within the wetland included American Speedwell, Giant Horsetail, Himalayan Blackberry, Lady Fern and Bitter Dock. The dominant species and most other species observed are considered hydrophytes thus achieving the wetland vegetation parameter.

Shoreline:

The beach is mapped by WDFW as a Surf Smelt spawning location. Much of the observed spawning bed material is very coarse gravel with a median (D50) size of 36 mm and not suitable for spawning. There are inclusions of suitable spawning material (1-7 mm) within the project limits. Lenses of sand can be observed low in the beach profile, though these appear to be fairly thin and transient features.

Wetlands:

Wetland A provides nutrient and toxicant removal, production of organic matter and its export and habitat for aquatic invertebrates. The wetland boundary coincided with the limits influenced by the ground and surface water thus creating low chroma soils and a hydrophilic plant community within the wetland.

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

The property within the project footprint is used primarily for transportation purposes. The roadway is part of SR 302 which is a North and South corridor. The roadway services traffic traveling from Belfair to

Purdy through Mason County.

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

Adjacent properties include single-family homes, undeveloped open areas and county roads.

Mason County Public Utilities Department No. 3 utility company has an existing easement located Northeast of SR 302. It parallels SR 302 and is approximately 15 feet in width.

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

Above ground structures within the project area are those typical of a roadway; asphalt, top course and base course gravels and supporting fill.

Below ground structures within the project area include stormwater drainage structures and the existing culverts that convey stormwater runoff under SR 302.

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

On highway SR 3, drive North from Shelton approximately 23 miles, take E. North Bay Rd. and follow SR 302 for about 5 miles to the project location. See vicinity map depicting project area between the towns of Allyn and Purdy.

Part 6 – Project Description:

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

WSDOT proposes to replace two failing 18-inch diameter culverts on SR 302 at MP 4.57 & MP 4.59 and armor portions of the roadway embankment to prevent further erosion of the roadway. Armoring the roadway embankment will include re-constructing the toe of the roadway embankment slope to slow progression of erosion contributing to the culvert failure. A combination of a Dynamic Revetment, with the use of Beach Nourishment and Large Woody Material as mitigation was selected. The highway surface will be restored to a true and level grade following embankment repair.

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

This location has a long history of landslide instability. Landslide damage and highway repair have been documented in 1959, 1971, 1983, 1996, 2000, 2001, 2007 and 2014. The purpose of this major drainage project is to remove and replace two failing culverts crossing under SR 302, at MP 4.57 & MP 4.59 that have separated and deformed under the roadway. This failed drainage contributes to saturated and unstable roadway subgrade conditions. These isolated locations along this section of roadway including the toe of the slope on the beach which has been undermined by wave action, are all leading to erosion of the existing roadway and shoulder. A Dynamic Revetment will be constructed on the beach at the toe of the

slope to slow erosion of the roadway embankment. Then Beach Nourishment Material will be placed below the Dynamic Revetment Material. Last, 6 substantial pieces of Large Woody Material (LWM) will be placed on top of the Dynamic Revetment Material being installed above the M.H.H.W., against the toe of the slope. Approximate size of LWM will be 18" DBH, ~30 ft. long, per Margaret M. Bigelow (DFW).

This project is within a larger slide area. Repair of this large slide is beyond the scope of this project. The roadway embankment slopes are near vertical on the west side (water side) of the roadway. Ditch in-slopes on the east side of the roadway are 2:1.

The speed limit has been lowered from 40 mph to 25 mph due to subsidence and rough roadway conditions. Embankment repair and roadway restoration will allow the 40 mph speed limit to be re-established.

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 type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir | <input type="checkbox"/> Floating Home | <input checked="" 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 checked="" type="checkbox"/> Ditch | <input 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 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 type="checkbox"/> Channel Modification | <input type="checkbox"/> Fishway | <input type="checkbox"/> Raft | |

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.

The entire project is located within 100-year floodplain boundaries. There will be no measurable impact to the 100-year floodplain because of the size of the existing water body (North Bay / Case Inlet).

The final sequence of construction will be determined by the contractor, but will generally be as follows:

- Install safety items such as signs and temporary traffic control
- Perform surveying and staking, place high-visibility fence to protect sensitive areas and install physical best management practices (BMPs) to avoid and minimize impacts to nearby waterbodies. See 8a for a list of BMPs

Clearing:

Approximately 0.03 acre of herbaceous, shrub and non-mature forest vegetation will be cleared as a result of this project. Beach, wetland impacts and buffer impacts will occur as a result of the project and are identified under questions 7h and 8e.

Construction activities include the following:

- Excavate the roadway prism, remove the existing culverts and catch basin

- Install subgrade material for culverts, catch basin and utilizing shoring boxes
- On the west side of SR 302, install Dynamic Revetment, Beach Nourishment and Large Woody Material for slope stabilization
- Rebuild the roadway prism and perform final grading
- Install soil amendments
- Install emergent plant species to impacted areas
- Remove temporary traffic control devices
- Remove temporary BMPs

Equipment:

Construction will require the use of Long reach excavator, dump trucks and trailers, backhoe, derrick barge, generators, loader, vibratory compactors, asphalt paving machines, pavement striping trucks, portable generators, pickup trucks and various hand & power tools. Some equipment use may be required on the beach during low tide.

Staging:

Construction staging and equipment storage locations will be determined by the contractor, but will not take place within critical areas or their functional buffers. The contractor will be required to prepare and submit a project-specific spill prevention, control, and countermeasures plan (SPCC Plan) that identifies the location(s) where equipment and materials will be staged, used and stored the appropriate distance(s) from nearby waterways and sensitive areas. The SPCC Plan will also identify proper handling and disposal procedures if pre-existing contamination is discovered. No on-site construction activities may commence until WSDOT has accepted the SPCC Plan.

Timing:

Work below mean higher high water of North Bay to install Dynamic Revetment, Beach Nourishment and LWM will occur during work times specified in WAC 220-660-330 as stipulated by WDFW through Hydraulic Project Approval. This work may occur in the 2016 or 2017 work window.

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: Summer / 2016 End date: Fall / 2017 See JARPA Attachment D

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

Engineers Estimate for entire project, \$1.5 Million

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

- If yes, list each agency providing funds.

Yes No Don't know **Federal Highway Administration**

It is anticipated that all phases of this project will include federal funding.

Part 7 – Wetland 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. [\[help\]](#)

WSDOT has avoided and minimized impacts to wetlands and buffers to the greatest extent practicable. Total avoidance was not possible due to constraints associated with safety and design guidelines, culvert design guidelines, site access constraints or culvert location and proximity to wetland (A).

Temporary impacts to Wetland A, located on the east side of SR 302, could not be avoided due to excavation required to install the culverts and clear debris from the ditch line. The existing stormwater drainage ditch has contributed to the presence of Wetland A.

Best Management Practices (BMP):

BMP measures include erosion and sediment control, structural erosion control, sediment retention and water quality treatment to control turbidity during project construction and operation. Temporary BMPs include but are not limited to the use of geotextile-encased check dams, geotextile silt fences, erosion control blanket, compost berm, straw wattles, straw bales, mulching and stabilized construction entrances.

Temporary Erosion and Sediment Control (TESC) Plan:

The contractor is required to submit or adopt a TESC plan prior to beginning any work on site. The TESC plan will include methods to prevent sediments and sediment-laden water generated by construction activities from reaching any area streams, marine water or wetlands.

7b. Will the project impact wetlands? [\[help\]](#)

Yes No Don't know

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.

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

No permanent wetland impacts. Temporary wetland impacts will be restored on-site by re-vegetation using the appropriate species.

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

Mitigation will consist of restoring the temporarily impacted areas of Wetland A which includes re-grading the existing ditch line to existing as-built conditions.

The existing wetland soil material to be excavated will not be re-used or stockpiled on site. After the existing wetland soil material is excavated and the newly graded ditch is complete, all impacted areas can be replanted with emergent plant species. The temporary wetland impacts will not require a planting plan due to the small size of the impacted area.

The project will provide the following compensation for the project impacts to wetlands and buffers: 0.015 acre of wetland re-vegetation with associated buffer. This will be accomplished through restoring historic hydrologic regimes and connectivity to North Bay / Case Inlet. It will also serve to improve critical water quality and hydrologic functions.

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 cu. yd.)	Duration of Impact ³	Proposed Mitigation Type ⁴	Wetland Mitigation Area (sq. ft. or acres)
Excavate: culvert and catch basin (East of SR 302) Sta. 102+81	Wetland A	Slope and III	About: 360 sq. ft. or 5 cu. yds.	Temporary Impact - Less than a Year	Re-seeding on Site	0.0 sq. ft. or 0.0 acre
Fill: culvert and catch basin (East of SR 302) Sta. 102+81	Wetland A	Slope and III	About: 360 sq. ft. or 5 cu. yds.	Temporary Impact - Less than a Year	Re-seeding on Site	0.0 sq. ft. or 0.0 acre
Excavate: culvert (East of SR 302) Sta. 103+74	Wetland A	Slope and III	About: 288 sq. ft. or 3 cu. yds.	Temporary Impact - Less than a Year	Re-seeding on Site	0.0 sq. ft. or 0.0 acre
Fill: culvert (East of SR 302) Sta. 103+74	Wetland A	Slope and III	About: 288 sq. ft. or 3 cu. yds.	Temporary Impact - Less than a Year	Re-seeding on Site	0.0 sq. ft. or 0.0 acre
Excavate: (East of SR 302) Ditch Grading	Wetland A	Slope and III	About: 2,942 sq. ft. or 20 cu. yds.	Temporary Impact - Less than a Year	Re-seeding on Site	0.0 sq. ft. or 0.0 acre

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. [\[help\]](#)

Fill Material:

See (7h.) for more information; Within Wetland A approximately 8 cu. yds. of fill material will be placed as stabilization material for the replacement of existing culverts, catch basin, slope armoring and ditch grading.

All filling activities identified within Wetland A will be completed using backhoe or excavator machines in order to place the quarry spalls and crushed surface based course material.

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. [\[help\]](#)

Excavated Material for Culverts, Catch Basin and Ditch Grading:

See (7h.) for more information; within Wetland A, approximately 3,590 sq. ft. or 28 cu. yds. of existing soil will be removed using a backhoe or excavator machine in order to restore the existing culverts, catch basin and re-establish the ditch profile. Excavation within Wetland A is limited to the ditch—impacts will be temporary and the ditch will be restored to as-built conditions. All excavated material will be hauled off site and the contractor will obtain all permits required for disposal and comply with Mason County disposal requirements.

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. [\[help\]](#)

WSDOT has avoided and minimized impacts to North Bay / Case Inlet and its shoreline to the greatest extent practicable. Total avoidance was not possible due to constraints associated with design guidelines, culvert design guidelines, site access constraints, or culvert location proximity to the shoreline and necessity for a Dynamic Revetment to stabilize the shoreline slope.

Avoidance and minimization measures include:

- Clearing, grubbing, and excavating the minimum necessary to construct the project
- Performing construction activities during the in-water work window identified by WDFW
- All work will occur in the dry including avoiding work during high tides (tidal cycle)
- Majority of work will occur during daytime hours (expected work shift 10 hours in length)
Anticipated that there will be two periods where work will occur 24 hours a day for each culvert to be installed (3 days maximum each)
- Performing all construction activities in compliance with water quality standards (RCW 90.48 and WAC 173-201A) set forth by Ecology
- Hand-seeding all temporary riparian vegetation impacts with native vegetation

During construction, the project will avoid and minimize impacts to the existing aquatic environment with

the use of appropriate BMPs and implementation of a Temporary Erosion and Sediment Control (TESC) plan.

Temporary BMPs used to control erosion and sediment during construction will include, but are not limited to the following: geotextile-encased check dams, geotextile silt fences, erosion control blanket, straw bale, mulch and stabilized construction entrances.

See Section 7a for additional BMPs, Temporary Erosion and Sediment Control Plan, Protecting and Maintaining Existing Vegetation and Design Alterations.

This project will perform work during the in-water work window. Temporary erosion and sediment control (TESC); and spill prevention control and countermeasures (SPCC) plans will be prepared for this project.

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

Yes No; North Bay / Case Inlet

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. [\[help\]](#)

WSDOT considers this culvert replacement and revetment project to be “self-mitigating” in that the resulting benefits (described below) offset all project related non-wetland impacts.

This project's self-mitigating benefits include:

- Minimizing the need for repetitive maintenance of the shoreline or intertidal zones
- Improving upstream and downstream hydraulics by replacing failed culverts
- Increasing riparian functions by replanting the buffer with native vegetation
- Improving North Bay / Case Inlet habitat through:
 - Avoiding placement of shoreline riprap or other hard structures
 - Placement of Beach Nourishment Material
 - Placement of Large Woody Material

The area of the Dynamic Revetment is mapped as a smelt spawning area based on a 1993 survey. The current status and use of the beach area is not known. Based on field reviews, some areas where the revetment will be placed are too coarse to be currently considered suitable spawning, especially the lower tidal elevation areas. Habitat suitability is dynamic so for the purposes of this project we will assume the entire revetment area in the elevation range used by smelt is suitable. This area equates to 5,200 sq. ft.

Loss of suitable forage fish spawning habitat is a region wide problem as historical sources of material to replenish beach sediment have been cut off by development. To mitigate the potential impact of the Dynamic Revetment, an area below the toe of the revetment totaling 5,500 sq. ft. will be augmented with

suitable sized smelt spawning gravels. Beach Nourishment is a proven methodology to maintain and restore forage fish habitat. This area, as shown on JARPA Drawings 3 and 4, is within the tidal elevations used by smelt.

Including this work is consistent with NMFS terms and conditions along with WDFW requirements for HPA approval.

In order to install the Dynamic Revetment, Beach Nourishment and Large Woody Material along the slope, material will be placed using equipment from the roadway during high tide. But, some equipment may be used on the beach during low tide.

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 (sq. ft. / cu. yds.) to be Placed in or Removed from Waterbody	Area (sq. ft. or L.F.) of Waterbody Directly Affected
Fill: Dynamic Revetment Material (D.R.M.)	North Bay (Case Inlet)	W. of SR 302 between MP 4.57 & MP 4.59	Permanent	2,700 sq. ft. or 400 cu. yds.	About 290 L.F. of D.R.M. will be placed Above Mean Higher High Water (M.H.H.W.)
Fill: Splash Pads (S.P.)	North Bay (Case Inlet)	W. of SR 302 between MP 4.57 & MP 4.59	Permanent	100 sq. ft. or 4 cu. yds.	About 290 L.F. of S.P. will be placed Above M.H.H.W.
Fill: Dynamic Revetment Material (D.R.M)	North Bay (Case Inlet)	W. of SR 302 between MP 4.57 & MP 4.59	Permanent	7,500 sq. ft. or 300 cu. yds.	About 250 L.F. of D.R.M. will be placed Below M.H.H.W.
Fill: Beach Nourishment Material (B.N.M.)	North Bay (Case Inlet)	W. of SR 302 between MP 4.57 & MP 4.59	Permanent	5,500 sq. ft. or 110 cu. yds.	About 290 L.F. of B.N.M. will be placed Below the D.R.M. fill.
Fill: Large Woody Material (L.W.M.)	North Bay (Case Inlet)	W. of SR 302 between MP 4.57 & MP 4.59	Permanent	6 Substantial Pieces ~18" DBH & 30' Long w/Root Wads	About 6 pieces of L.W.M. will be evenly spaced on top of the D.R.M. and B.N.M. fill.

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. [\[help\]](#)

Dynamic Revetment Material (D.R.M.):

See (8e.) for more information; WSDOT is proposing the installation of D.R.M. along the shoreline of North Bay / Case Inlet. Material will be placed at the toe of the slope along approximately 250 linear feet of shoreline to protect the roadway from continued erosion and restore the roadway to the as-built condition. Approximately 7,500 sq. ft. or 300 cu. yds. of D.R.M. fill consisting of large cobble and beach sediment matching the size of the existing beach material will be placed below the M.H.H.W. elevation. Then approximately 2,700 sq. ft. or 400 cu. yds. of D.R.M. fill consisting of large cobble and 100 sq. ft. or 4 cu. yds. of quarry spalls for the Splash Pads, will be placed above the M.H.H.W. elevation.

Beach Nourishment Material (B.N.M.):

See (8e.) for more information; B.N.M. fill will be installed along the shoreline of North Bay / Case Inlet. Material will be placed below and extend approximately 290 linear feet beyond the D.R.M. fill. Approximately 5,500 sq. ft. or 110 cu. yds. of B.N.M. fill consisting of 10 mm or 3/8" minus fine aggregate material will be placed (refer to Attachment A).

Large Woody Material (L.W.M.):

See (8e.) for more information; Final work includes the installation of 6 substantial pieces of L.W.M. that will be placed on top of the D.R.M. and B.N.M. fill. Approximate size of L.W.M. will be 18" DBH, ~30 ft. long. The LWM will be evenly spaced along the D.R.M. against the toe of the roadway slope.

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. [\[help\]](#)

N/A

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
Mason County	Barbara Adkins	360-427-9670 Ext. 286	May, 2015
Washington Department of Fish and Wildlife	Margaret Bigelow	360-427-2179	February, 2016
Washington Department of Ecology	Penny Kelley	360-407-6076	March, 2016
U.S. Army Corps. of Engineers	Sandra Manning	206-764-6911	March, 2016

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

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.

- **Watershed Name: Puget Sound**
- **USGS Cataloging Unit: 17110019**

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 #.

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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: **Marine**

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 **Highway Runoff Manual (M31-16.04); dated April, 2014**

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 site has been used as a transportation corridor, state right of way, for many years.

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. [\[help\]](#)

Federally listed species that may occur within the project vicinity include:

- Puget Sound Chinook Salmon
- Puget Sound Bull Trout
- Puget Sound Steelhead
- Southern Resident Killer Whale
- Puget Sound Bocaccio, Canary and Yelloweye
- Yellow-billed Cuckoo

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:

- | | | |
|--------------------------|-------------------|---|
| • Butter Clam | • English Sole | • Bald Eagle |
| • Manila Clam | • Hake | • Yellow-Billed Cuckoo |
| • Pacific Oyster | • Cod | • Black-Backed Woodpecker |
| • Native Littleneck Clam | • Walleye Pollock | • Pileated Voo |
| • Geoduck | • Rock Sole | • Oregon Vesper Sparrow |
| • Dungeness Crab | • Loon | • Purple Martin |
| • Pandalid Shrimp | • Lurre | • Cascade Red Fox |
| • Surf Smelt | • Grebe | • California Sea Lion |
| • Chinook Salmon | • Loons | • Dall's Porpoise |
| • Bull Trout Steelhead | • Grebes | • Harbor Seal |
| • Killer Whale | • Cormorants | • Pacific Harbor Porpoise |
| • Chum | • Fulmar | • Steller Sea Lion |
| • Coho | • Shearwaters | • Black Tailed Deer |
| • Sea-Run Cutthroat | • Petrels | • Bocaccio, Black, Brown, Copper, Quillback, Canary, Redstripe, Yelloweye |
| • Steelhead | • Alcids | • Rockfish |
| • Lingcod | • Blue Heron | |
| • Sand Lauce | • Brant | |

Habitats:

- Nearshore – Puget Sound

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 _____ (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): Maintenance / Repair

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 #: 453157H**
 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)

