



**WASHINGTON STATE**  
**Joint Aquatic Resources Permit**  
**Application (JARPA) Form<sup>1,2</sup>** [\[help\]](#)

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



US Army Corps  
of Engineers  
803 16 District

AGENCY USE ONLY

Date received:

Agency reference #: \_\_\_\_\_

Tax Parcel #(s): \_\_\_\_\_

\_\_\_\_\_

**Part 1–Project Identification**

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

Port of Kalama T-Barge Dock

**Part 2–Applicant**

The person and/or organization responsible for the project. [\[help\]](#)

**2a. Name** (Last, First, Middle)

Reeder, Tabitha

**2b. Organization** (If applicable)

Port of Kalama

**2c. Mailing Address** (Street or PO Box)

110 West Marine Drive

**2d. City, State, Zip**

Kalama, WA 98625

**2e. Phone** (1)

(360) 673-2325

**2f. Phone** (2)

**2g. Fax**

**2h. E-mail**

treeder@portofkalama.com

<sup>1</sup>Additional 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.

<sup>2</sup>To 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](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@oria.wa.gov](mailto:help@oria.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.) [\[help\]](#)

<b>3a. Name (Last, First, Middle)</b>			
White, Nicole			
<b>3b. Organization (If applicable)</b>			
PND Engineers, Inc.			
<b>3c. Mailing Address (Street or PO Box)</b>			
1736 Fourth Avenue S, Suite A,			
<b>3d. City, State, Zip</b>			
Seattle, WA 98134			
<b>3e. Phone (1)</b>	<b>3f. Phone (2)</b>	<b>3g. Fax</b>	<b>3h. E-mail</b>
(360) 624-1387		(360) 624-1388	NWhite@PNDEngineers.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.

<b>4a. Name (Last, First, Middle)</b>			
-----			
<b>4b. Organization (If applicable)</b>			
Port of Kalama			
<b>4c. Mailing Address (Street or PO Box)</b>			
110 West Marine Drive			
<b>4d. City, State, Zip</b>			
Kalama, WA 98625			
<b>4e. Phone (1)</b>	<b>4f. Phone (2)</b>	<b>4g. Fax</b>	<b>4h. E-mail</b>
(360) 673-2325			



## 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.

<b>5a.</b> Indicate the type of ownership of the property. (Check all that apply.) <a href="#">[help]</a>			
<input type="checkbox"/> Private <input type="checkbox"/> Federal <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 <a href="#">JARPA Attachment E</a> )			
<b>5b.</b> Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) <a href="#">[help]</a>			
Directly across from 380 West Marine Drive			
<b>5c.</b> City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) <a href="#">[help]</a>			
Kalama, WA 98625			
<b>5d.</b> County <a href="#">[help]</a>			
Cowlitz			
<b>5e.</b> Provide the section, township, and range for the project location. <a href="#">[help]</a>			
¼ Section	Section	Township	Range
SW	17	6 North	1 West, W.M.
<b>5f.</b> Provide the latitude and longitude of the project location. <a href="#">[help]</a>			
<ul style="list-style-type: none"> <li>Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)</li> </ul>			
46.0097 N. / -122.8484 W.			
<b>5g.</b> List the tax parcel number(s) for the project location. <a href="#">[help]</a>			
<ul style="list-style-type: none"> <li>The local county assessor's office can provide this information.</li> </ul>			
41071			
<b>5h.</b> Contact information for all adjoining property owners. (If you need more space, use <a href="#">JARPA Attachment C.</a> ) <a href="#">[help]</a>			
Name	Mailing Address	Tax Parcel # (if known)	
DNR Aquatic Lands			
<b>5i.</b> List all wetlands on or adjacent to the project location. <a href="#">[help]</a>			
None.			
<b>5j.</b> List all waterbodies (other than wetlands) on or adjacent to the project location. <a href="#">[help]</a>			
Columbia River			

<b>5k.</b> Is any part of the project area within a 100-year floodplain? <a href="#">[help]</a>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know
<b>5l.</b> Briefly describe the vegetation and habitat conditions on the property. <a href="#">[help]</a>
The riverbank on the project site is at a 1:1 slope or steeper with riprap 2 to 3 feet in diameter. There are scattered California indigo trees growing along the bank between the riprap. This species is considered a non-native species that is common along the riverbanks in the lower Columbia River.
<b>5m.</b> Describe how the property is currently used. <a href="#">[help]</a>
The terrestrial portion of the project area includes the 0.03-acre parcel that is currently not in use. This parcel is currently above the 100-year floodplain and is covered with compacted gravel.
<b>5n.</b> Describe how the adjacent properties are currently used. <a href="#">[help]</a>
The project site is on the east bank of the Columbia River in the central portion of the Port of Kalama and adjacent to the marina. East of the project site are a port access road and internal railroad tracks, Interstate 5, the busiest railway line on the west coast, and the City of Kalama. The project area and surrounding properties are zoned for heavy industrial activities. Nearby industries include a lumber mill with log storage yards, a chemical manufacturer, and warehouses.
<b>5o.</b> Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. <a href="#">[help]</a>
There are currently no structures on the property.
<b>5p.</b> Provide driving directions from the closest highway to the project location, and attach a map. <a href="#">[help]</a>
From Interstate 5, take Exit 30 and travel west on Oak Street. Take the first right and travel in a circle past the gas station. This becomes Hendrickson Drive. Continue south for approximately one mile. Just past the lumber yard and at the north end of the marina, pull off on the right into the gravel parking lot in front of the pedestrian walkway along the marina.

## Part 6–Project Description

<b>6a.</b> Briefly summarize the overall project. You can provide more detail in 6b. <a href="#">[help]</a>
The T-Barge Dock Project proposed at the Port of Kalama is intended to provide berthing and cargo loading and unloading for three to five commercial boats in the range of 40 to 65 feet long. A short pier and gangway will provide access to the dock for forklifts and crews.  After project construction, the Port will lease the dock to the local commercial company that delivers ship stores and transports crew members. Ship stores include inventory carried on-board a ship to meet its daily requirements, such as food, water, general supplies, medical supplies, safety supplies, spare parts, etc. Pedestrians and forklifts will use the pier and gangway for crew access and to safely and efficiently move ship supplies between the land and the moored vessels.  There will be no additional barge or ship traffic produced as a result of this project. This project will reduce fuel consumption and will reduce river miles travelled by the delivery boats.



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

The Port of Kalama is installing a dock to support water-dependent commerce. Currently, a local commercial company serves the shipping industry by delivering ship stores and transporting crew members with small vessels between land and the ships. The small vessels are temporarily moored at the Port of Kalama marina; however, there are not enough slips, so they cannot fully operate their business. Additionally, the Port has determined that their marina will serve recreational, not commercial uses. For these reasons, the Port proposes to provide separate mooring facilities.

Most shipments come from trucks delivering cargo from Seattle to Portland or Astoria and then they are delivered to ships by boat from Portland or Astoria to the ship's location somewhere between Portland and Astoria (102 river miles apart). Boats sometimes pick up cargo in Portland and have to deliver it to Astoria, and vice versa. There is currently no certainty where the cargo will be trucked and where the boat will have to travel from to pick up and deliver their cargo.

By having their truck deliveries and boat operations in Kalama, the tenant will have one definite, central location for truck deliveries between Portland and Astoria. If this project is constructed, truck cargo from Seattle will be delivered to Kalama, saving truck mileage. The Kalama dock and location will also save fuel, river miles, and crew time to deliver cargo to the ships. The following trips are common under existing conditions, and examples of boat distances and running times are as follows: Portland to Kalama is 54 river miles round trip and takes 5 hours, Longview to Kalama is 12 river miles round trip and takes 1 hour, Astoria to Kalama is 150 river miles round trip and takes 8 hours, and Portland to Astoria is 204 river miles round trip and takes 13 hours. It is common for boats to make the trip from Portland to Astoria to pick-up truck deliveries and deliver them to ships.

**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 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 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 type="checkbox"/> Land Clearing	<input type="checkbox"/> Stairs
<input type="checkbox"/> Boat Lift	<input checked="" 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 checked="" type="checkbox"/> Piling/Dolphin	
<input type="checkbox"/> Channel Modification	<input type="checkbox"/> Fishway	<input type="checkbox"/> Raft	

Other:

**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.

#### **ABOVE THE 100-YEAR FLOODPLAIN**

##### ***Upland Area***

Approximately 0.03 acres of the upland parcel adjacent to the dock will be used for staff vehicle parking and a truck loading/unloading area for cargo. This area is currently graveled and will be maintained as a graveled surface. Stormwater currently drains away from the river and toward the roadway, and the proposed project will maintain this flow direction.

#### **WITHIN THE 100-YEAR FLOODPLAIN**

##### ***Pier***

The proposed cast-in-place concrete wall abutment and concrete deck (90 square feet) will support the landward portion of the pier. Construction will require equipment such as excavators, dump trucks, concrete trucks, compaction machines, delivery trucks, and forklifts. The river level is lower than the work area, and BMPs will be in place so that uncured concrete will not be allowed to enter the water.

Access to the barge dock will be from a 12-foot wide, 49.5-foot long, stationary pier supported by seven, 18-inch-diameter steel pipe piles. Four of the piles will be located above OHW and three will be located below OHW. Pier framing will consist of steel beam stringers and a fully grated deck of about 516 square feet. The decking material will be specified during a later design phase and will have at least 25 percent functional grating. Pier components will likely be manufactured offsite, and assembled on site. A steel-beam pile cap will be welded to the top of the piles.

##### ***Gangway Ramp***

The 11 feet, 4-inches-wide by 100-foot-long gangway with a through-truss frame, hand rails, and deck grating made of aluminum. The decking material will be specified during a later design phase and will have at least 25 percent functional grating.

##### ***T-Barge Dock***

The floating structure is a "T" shaped pontoon that the Port will re-purpose. It is constructed entirely of steel with overall dimensions of about 171 feet by 67 feet with a depth of 12 feet. Its draft is between 6 and 9 feet, with a freeboard of between 3 and 6 feet. The main section's length is 151 by 20 feet, and the end tee is 67 by 20 feet for a total surface area of 4,360 square feet.

The pontoon is painted and is similar to a barge in appearance. It was originally built to transport floating sections for the new SR-520 Bridge from Grays Harbor to Lake Washington. Three 24-inch-diameter steel pipe spud piles will be used to anchor the T-barge. When the barge arrives, the spud piles will be lowered to sink into the substrate under their own weight, so they will not be driven into place. A steel-frame hoist structure and various small mechanical and electrical equipment will be mounted to the existing deck. The barge dock will be ballasted with either City water or sand to achieve the desired draft and freeboard. Water for ballast will not be taken from or released into the Columbia River.

When water levels are at MLLW, the depth from the bottom of the barge dock to the riverbed is estimated at a minimum of 4 feet at the northeast corner. Commercial boats using the dock will be approximately 44, 55, or 63 feet long with a 4.5-foot draft, so they have drafts that are shallower than the T-barge dock. Dredging will not be necessary to maintain water depths at this time. The Port has an existing permit for maintenance dredging in this area.

##### ***Utilities***

Lighting will be installed on the pier, gangway, and T-barge that will automatically turn on at night and will be directed at areas necessary for safe working conditions. There are existing street lights in the vicinity from Hendrickson Drive and from marina lighting.



A new 3-inch waterline and new electrical service will be extended from the south end of the marina and along Hendrickson Drive. Water and electrical services will extend along the pier and gangway and onto the barge dock. Electrical service will originate from a pole across the street. Potable water will originate from a water main located near the Port offices, southwest of the existing marina.

**Pier, Gangway, and Piling Installation**

The pier will be constructed onsite, and the gangway will be prefabricated, delivered and installed. A barge-mounted derrick crane will install the piles and will set the prefabricated gangway onto the pier and T-barge. An additional storage barge, tug boat, and small tender boat will likely be on the water during construction. It is anticipated that all seven pier piles will be installed with a vibratory hammer and then driven to depth and proofed for bearing capacity with an impact hammer. The three log-boom piles will be extracted and relocated 50 feet to the north using a vibratory hammer.

**Orphan Piles**

Approximately 61 orphan piles near the shoreline will be removed to construct the project.

**Log Boom and Log Storage Area**

Three, existing, 24-inch hollow steel piles and log boom on the south side of the existing log storage area will be moved 50 feet northward to create a space for the new T-barge, gangway, and pier. This will reduce the log storage area by about 11,000 square feet.

The Port estimates that the log storage area is used by the tenant at least 50 percent of the time. The log storage area will not be expanded in this location as long as the T-barge remains in place.

**PROJECT SUMMARY**

Structure	Dimensions (feet)	Area (square feet)	Decking Material
<b>Waterward of OHW</b>			
Barge Dock	(20' x 67') + (20' x 151')	4,360	Solid
Portion of Pier	12' wide (diagonal to shoreline)	300	100% Grated
Gangway	11'4" x 100' (12 ft overlap w/dock)	994	100% Grated
Move 3 Existing Piles	24" diameter	(9.4 - no net gain)	Not Applicable
Install 3 New Pier Piles	18" diameter	5.3	Not Applicable
Lower 3 Non-Driven New Spud Piles	24" diameter	9.4	Not Applicable
Reduce Log Storage Area	---	- 11,000	Not Applicable
Remove Approx. 61 Orphan Piles	1' diameter	- 61	Not Applicable
		<b>Net Area Waterward of OHW = - 5,340.1 sf</b>	
<b>Landward of OHW</b>			
Concrete Landing and Decking	---	90 sf	Solid
Portion of Pier	---	294 sf	100 % Grated
Install 4 New Piles	18" diameter	(7.1 sf beneath pier)	Solid
		<b>Net Area Landward of OHW = + 391 sf</b>	
<b>Net Area of Entire Project</b>	<b>= - 4,949 sf</b>		

Notes: ( ) = Not included in net area sum.

There will be 100% grating on the pier and gangway decks. Functional-grating area for the will be at least 25%.

### Waterward of OHW

The project has proposed new overwater impact areas from the pier, gangway, and T-barge and new piling of 5,668.7 square feet. Overwater area in the log-storage area will be reduced by -11,000 square feet and proposed piling removal by -8.8 square feet for a net reduction of -11,008.8 square feet. The net reduction of on-water and in-water habitat impacts waterward of OHW is -5,648.1 square feet.

### Landward of OHW

The project has proposed new impact areas for the concrete landing and a portion of the pier of 384 square feet. Proposed new piles equal 7.1 square feet. The net difference of the proposed project waterward of OHW is +391 square feet.

### Total Project

The proposed project will reduce the net in-water and overwater impacts by 4,601 square feet.

### **Construction Sequencing**

All construction will most likely be done in one continuous phase over 10 to 12 weeks. Pier piles will be driven before the pier is constructed, and the gangway cannot be installed until pier and T-barge float are in place. The contractor will determine the rest of the construction sequencing.

### **Concrete Details**

All concrete work will comply with the 2012 International Building Code and the 2013 Washington State Amendments (IBC). Formwork and falsework will be designed by professional engineer licensed in the state of Washington and approved by the Port of Kalama's project engineer of record. The formwork will be mortar-tight. Concrete forms will be pre-fabricated to the extent possible to minimize onsite construction.

The concrete abutment and wall will be above OHW and will be constructed when river levels are below the work area. Reinforcing steel will be placed inside the forms, and the forms and reinforcing steel will be inspected prior to placing concrete. Concrete will be delivered to the site, placed, and vibrated using hand-held vibration wands to ensure a homogeneous finish. Finishing, curing and form removal will be completed per the relevant codes and specifications.

Concrete and construction materials will not enter the water because BMPs will be implemented. A boom will be placed around the work area and near the shore surrounding the abutment structure to avoid impacts to the aquatic environment.

### **Pile Installation Details**

This project requires three existing 24-inch-diameter steel log-boom piles to be relocated, ten wooden orphan piles to be removed, and seven 18-inch-diameter hollow-steel piles to be installed to support the pier; three pier piles will be installed between OHW and MLLW, and four pier piles will be installed above OHW. Installing the 7 pier piles is estimated to occur over a period of seven days. Additionally, three 24-inch-diameter steel pipe spud piles will be used to anchor the T-barge. When the barge arrives, it will be moved into the plan location and anchored into place with the spud piles. The spud piles will not be driven, but will be lowered to sink into the substrate under their own weight.

It is anticipated that all seven pier piles will be installed with a vibratory hammer to tip elevations of about 20 feet below the mudline, then they will be driven for another 10 to 20 feet with an impact hammer to obtain bearing-capacity data (pile proofing). The designer estimates this will require an estimated 1,000 blows per pile. Each pile will also require impact-hammer proofing for about 60 minutes. A bubble curtain will be deployed when using the impact hammer to attenuate underwater sound-pressure levels (see Appendix B). No noise attenuation will be used during vibratory pile driving, because it does not generate enough noise to cause injury to listed fish or marine mammals.

A soft-start technique will be used for both vibratory and impact-hammer pile driving to allow aquatic species to leave the work area before full energy is used to drive piling. For vibratory pile driving, the contractor will initiate noise for 15 seconds at 40 to 60 percent reduced energy, followed by a 1-minute waiting period. This procedure will be repeated two additional times before full energy is applied. The soft-start procedure will be conducted prior to driving each pile if vibratory installation stops for more than 30 minutes. For impact driving, the contractor will be required to use an initial set of three strikes at 40 percent energy, followed by a 1-minute



waiting period, then two subsequent three-strike sets (NMFS 2012).

### Orphan Pile Removal

Orphan piles will be removed by vibrating the pile as it is extracted. If the pile breaks, the remaining portion will be removed if it is less than 2 feet below the sediment surface. Orphan piles will be taken to an approved disposal site because they may contain creosote.

### Secondary Project Features

Construction activities associated with this project include material staging, storage, and a temporary soil storage area for soils excavated from pier abutment construction. Construction materials and supplies will be stored either on the work barge or on the upland parcel.

Excavated soil from abutment construction will be stockpiled on the upland parcel until the area around the concrete wall abutment is backfilled. The estimated 60 to 70 cubic yards of excess soils will be covered with plastic to avoid erosion during precipitation events and will eventually be removed from the site to be placed on Port property. No traffic detours will be necessary.

### PROJECT TIMING

All construction will most likely be done in one continuous phase over 10 to 12 weeks. Pile driving and removal is the only proposed in-water work, which will take approximately 3 to 4 weeks. Most of the pile driving and all of the piling removal will be completed using the vibratory method, which does not cause injury to aquatic life. For this reason, all project work may occur during any time of the year.

**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:  Fall 2018  End Date:  Spring 2019   See JARPA Attachment D

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

\$1,000,000

**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

**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    Don't know

**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 <sup>1</sup>	Wetland type and rating category <sup>2</sup>	Impact area (sq. ft. or Acres)	Duration of impact <sup>3</sup>	Proposed mitigation type <sup>4</sup>	Wetland mitigation area (sq. ft. or acres)

<sup>1</sup> 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.

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

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

<sup>4</sup> 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. [\[help\]](#)

**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. [\[help\]](#)



## 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

The project footprint is designed to be as small as possible to fulfill the project purpose of mooring up to five service boats. The dock and pier will be placed within a shoreline environment that is already developed for recreational and industrial uses so that habitat impacts are not extended into undisturbed areas.

### **IMPACT AVOIDANCE AND MINIMIZATION MEASURES**

The project will be constructed to avoid and minimize impacts to habitats and species that may potentially occur in the vicinity of the project area. This will be accomplished by using the following measures:

#### **General**

- Stormwater runoff from the upland project area will continue to be directed away from the river where it will infiltrate.
- Conditions in local, state, and federal permits will be followed.
- Any stockpiled soils from concrete abutment excavation will either be hauled away the same day or covered with plastic until it is removed from the site.
- Disturbed soils from around the abutment will be stabilized by grading and compaction to avoid impacts to the river from erosion.

#### **In-Water**

- The T-barge dock, work boats, and the derrick barge, will not “ground out” at any time. Commercial boats moored at the barge dock have drafts are shallower than the T-barge dock.
- Contractors will have a spill containment and pollution control plan, and employees will be trained in its implementation.
- The contractor will maintain an oil-absorbing floating boom around in-water and overwater work areas.
- No debris will be allowed to enter the river from the barge, boats associated with construction, or moored boats.
- Pile driving with an impact hammer to proof piles will take place within a confined bubble curtain.
- A soft-start technique will be used for vibratory and impact-hammer pile driving to allow any aquatic species to leave the work area before full energy is used to drive the pile. The technique was explained previously in this section.
- Pile caps will be installed on all piling associated with this project to prevent perching by birds that feed on juvenile salmon.

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

Yes    No

**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    Don’t know

Beneficial effects of the project are primarily from reducing the log storage area by 11,000 square feet. This is a larger area than the overwater and on-water areas of the proposed project. A Habitat Equivalency Analysis was conducted according to the National Marine Fisheries Service guidelines, which quantifies habitat impacts and benefits for the project. The detailed results of the analysis are presented in the project's biological evaluation; however in summary, project benefits more than compensate for project impacts. These results were confirmed by NMFS representative, Shandra O'Haleck, during a conference call in March 2018. Therefore, the project is self-mitigating.

The project removes 10 orphan piles to create adequate space for the gangway and T-barge dock. There will also be fewer boat miles traveled on the river with a dock centrally located between Portland and Astoria, resulting in reduced water-quality impacts. Truck mileage will also be reduced because deliveries originate in Seattle and do not have to make the longer trips to Portland or Astoria docks.

**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 <sup>1</sup>	Impact location <sup>2</sup>	Duration of impact <sup>3</sup>	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
New Piles	Columbia River	Waterward of OHW	Permanent	---	14.7
Relocated Piles	Columbia River	Waterward of OHW	Permanent	---	0
Upland Piles	(riverbank)	Landward of OHW	Permanent	---	7.1
Underwater Noise from Pile Driving	Columbia River	Underwater	Vibratory: 7 days Impact: 2 days	---	1.1 square miles
Pier	Columbia River	Overwater	Permanent	---	300
Pier	(riverbank)	Landward of OHW	Permanent	---	294
Gangway	Columbia River	Overwater	Permanent	---	994
T-Barge Dock	Columbia River	On-water	Permanent	---	4,360

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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. [\[help\]](#)

No fill is proposed.

**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. [\[help\]](#)

No dredging is proposed for this project



## 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. <a href="#">[help]</a>			
Agency Name	Contact Name	Phone	Most Recent Date of Contact
NMFS	Shandra O’Haleck	(360) 753-9533	March 1, 2018
Corps – Portland District	Melody White	(503) 808-4041	January 20, 2016
Corps – Portland District	Margaret Chang	(503) 808-4041	January 20, 2016
USFWS	Terry Fredrick	(503) 231-6120	March 1, 2018
WDFW	Steve West	(360) 906-6720	March 1, 2018
Mark Person	City of Kalama	(360) 673-4561	March 1, 2018
Adam Smee	City of Kalama	(360) 673-3265	March 1, 2018
<b>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? <a href="#">[help]</a></b> <ul style="list-style-type: none"> <li>If <b>Yes</b>, list the parameter(s) below.</li> <li>If you don’t know, use Washington Department of Ecology’s Water Quality Assessment tools at: <a href="https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d">https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d</a>.</li> </ul>			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<p>The most recent 303(d) list shows water-quality impairments within the Columbia River near the project. At the project site and downstream (north) past Longview is an area listed as Category 5 (waters needing a total maximum daily load [TMDL]) for high water temperature and dissolved oxygen. Existing water quality in the project vicinity will have no effect on the project, and the project will have no effect on these water-quality parameters.</p>			
<b>9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? <a href="#">[help]</a></b> <ul style="list-style-type: none"> <li>Go to <a href="http://cfpub.epa.gov/surf/locate/index.cfm">http://cfpub.epa.gov/surf/locate/index.cfm</a> to help identify the HUC.</li> </ul>			
170800030306			
<b>9d. What Water Resource Inventory Area Number (WRIA #) is the project in? <a href="#">[help]</a></b> <ul style="list-style-type: none"> <li>Go to <a href="https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up">https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up</a> to find the WRIA #.</li> </ul>			
WRIA 27 (Kalama/Lewis watersheds)			
<b>9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? <a href="#">[help]</a></b> <ul style="list-style-type: none"> <li>Go to <a href="https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria">https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria</a> for the standards.</li> </ul>			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> 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: <https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases>.

Urban    Natural    Aquatic    Conservancy    Other: \_\_\_\_\_

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

- Go to <http://www.dnr.wa.gov/forest-practices-water-typing> 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   Not Applicable. There are no impervious surfaces or changes to stormwater conveyance proposed for this project.

Name of manual: \_\_\_\_\_

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

- **If Yes**, please describe below.

Yes    No

The most recent 303(d) website search showed no sediment-quality impairments in the vicinity.

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

Wood exports and fish canning have occurred in this general area, but the exact location is unknown.

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

- **If Yes**, attach it to your JARPA package.

Yes    No   A cultural resource assessment was conducted and is attached.



**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. [\[help\]](#)

State Priority Habitats and Federal and State Endangered, Threatened, Candidate, and Sensitive Species that have Primary Association with Habitat on or Adjacent to the Project Area.

Species or State Priority Habitat	State Status	Federal Status
<b>Fish</b>		
<b>Chinook Salmon</b> ( <i>Onchorhynchus tshawytscha</i> )		
Lower Columbia River Chinook ESU	Candidate	Threatened
Upper Willamette River Chinook ESU	Candidate	Threatened
Upper Columbia River Spring-run Chinook ESU	Candidate	Endangered
Snake River Spring-run Chinook ESU	Candidate	Threatened
Snake River Fall-run Chinook ESU	Candidate	Threatened
<b>Chum Salmon</b> ( <i>Onchorhynchus keta</i> )		
Columbia River Chum Salmon ESU	Candidate	Threatened
<b>Coho Salmon</b> ( <i>Onchorhynchus kisutch</i> )		
Lower Columbia River Coho Salmon ESU	Candidate	Threatened
<b>Sockeye Salmon</b> ( <i>Onchorhynchus nerka</i> )		
Snake River Sockeye DPS	Candidate	Endangered
<b>Steelhead</b> ( <i>Onchorhynchus mykiss</i> )		
Lower Columbia River Steelhead DPS	Threatened	Threatened
Upper Willamette River Steelhead DPS	Threatened	Threatened
Middle Columbia River Steelhead DPS	Threatened	Threatened
Upper Columbia River Steelhead DPS	Threatened	Threatened
Snake River Basin Steelhead DPS	Threatened	Endangered
<b>North American Green Sturgeon</b>		
<b>Southern DPS</b> ( <i>Acipenser medirostris</i> )	None	Threatened
<b>Eulachon</b> (Columbia River Smelt) Southern DPS ( <i>Thaleichthys pacificus</i> )	Candidate	Threatened
<b>Bull Trout</b> – Columbia River DPS ( <i>Salvelinus confluentus</i> )	Candidate	Threatened
<b>River Lamprey</b> ( <i>Lampetra ayresi</i> )	Candidate	Candidate
<b>Birds</b>		
<b>Western Grebe</b> ( <i>Aechmophorus occidentalis</i> )	Candidate	None
<b>Bald Eagle</b> ( <i>Haliaeetus leucocephalus</i> )	Sensitive	Species of Concern
<b>Purple Martin</b> ( <i>Progne subis</i> )	Candidate	None
<b>Priority Habitats</b>		
<b>Instream</b>	Priority Habitat	Not applicable
<b>Riparian</b>	Priority Habitat	Not applicable

**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. [\[help\]](#)

See table above.





**Part 11—Authorizing Signatures**

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

**11a. Applicant Signature (required)** [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. JM (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. JM (initial)

Tabitha Reeder    [Signature]    5-10-18  
 Applicant Printed Name    Applicant Signature    Date

**11b. Authorized Agent Signature** [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Nicole L. White    Nicole L. White    05/08/18  
 Authorized Agent Printed Name    Authorized Agent Signature    Date

**11c. Property Owner Signature (if not applicant)** [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

\_\_\_\_\_  
 Property Owner Printed Name    Property Owner Signature    Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 07/2017