



WASHINGTON STATE

Joint Aquatic Resources Permit Application (JARPA) Form^{1,2} [\[help\]](#)

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: _____

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) [\[help\]](#)

EAST FORK DEEP RIVER RESTORATION: PHASE I

Part 2—Applicant

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

2a. Name (Last, First, Middle)

Beyer, Chuck

2b. Organization (If applicable)

Wahkiakum County Department of Public Works

2c. Mailing Address (Street or PO Box)

P.O. Box 97

2d. City, State, Zip

Cathlamet, Washington 98612

2e. Phone (1)

360-795-3301

2f. Phone (2)

2g. Fax

(360) 795-0342

2h. E-mail

beyerc@co.wahkiakum.wa.us

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.
- 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 <https://www.oria.wa.gov/jarpa-forms>.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or 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.) [\[help\]](#)

3a. Name (Last, First, Middle)			
HORITA, JAY			
3b. Organization (If applicable)			
CREST: COLUMBIA RIVER ESTUARY STUDY TASKFORCE			
3c. Mailing Address (Street or PO Box)			
818 Commercial Street, Suite 203			
3d. City, State, Zip			
ASTORIA, OREGON 97103			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
	971-465-6774	503-325-0459	JHORITA@COLUMBIAESTUARY.ORG

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)			
Wahkiakum County Public Works Department			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
P.O. Box 97			
4d. City, State, Zip			
Cathlamet, WA 98612			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail
360-795-3301			beyerc@co.wahkiakum.wa.us

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 type="checkbox"/> Federal <input checked="" type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input 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]			
No exact single street address: East Fork Deep River is the primary reference for location. Coordinates provide the best location details, in addition to addresses listed Attachment A. For easy reference, this is one of the street addresses in the project area. 354 W DEEP RIVER RD			
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Naselle, WA 98638			
5d. County [help]			
Wahkiakum County			
5e. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
NE ¼ and SE ¼	17	10 North	08 West
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) 			
46.347308 N / -123.688012 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. 			
EVA & RON MALERICH 161008320001 161008330001 161008320003 DAVID VOGL 161008240001 GLENN M HOUSE 161008230001 161008230002			

BILL & ROSEMARY OATFIELD

171008410015
 171008410016
 171008410017
 171008410018
 171008440001

DEEP RIVER PROPERTIES, LLC

171008410019

All tax parcel information taken from [county webmaps](#)

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)
RICHARD & DELORES NIKKILA	17 WIRKKALA ROAD	161008210001
	Naselle, WA 98638	
MRS WALTER KANDOLL TRUST	N/A	161008240002
	Parcel directly east of project	
STEVEN A BASH	349 WEST DEEP RIVER ROAD	161008320002
	Naselle, WA 98638	
DARIN & CHARLENE DOW	345 WEST DEEP RIVER ROAD	171008410012
	Naselle, WA 98638	

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

The project and adjacent areas are primarily Freshwater Emergent Wetlands. The mapped wetlands are classified as:

- PEM1A (Palustrine Emergent Persistent Temporary Flooded)
- PEM1R (Palustrine Emergent Persistent Seasonally Flooded-Tidal)
- R4SBCx (Riverine Intermittent Streambed Seasonally Flooded Excavated)
- R3UBH (Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded)
- PFO1A (Palustrine Forested Broad-Leaved Deciduous Temporary Flooded).
-

The downstream main stem of Deep River is classified as Estuarine and Marine Deepwater habitat:

- E1UBL (Estuarine Subtidal Unconsolidated Bottom Subtidal).

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

This project is located on the East Fork of Deep River, in the small unincorporated community of Deep River, Washington. The 298-acre East Fork valley, now largely in agricultural production, is considered a low-gradient reach with 126 acres of converted historical tidal floodplain. Historical instream habitat includes 17 stream miles of the East Fork and its tributaries upstream.

The major tributaries forming the East Fork of Deep River are Person Creek and Hendrickson Creek which join just south of West Deep River Road. Both tributaries originate in the forested uplands of the catchment before

transitioning to pastureland in the valley floor. Many small unnamed tributaries and seeps contribute to East Fork Deep River providing flow and cold water refugia.

Downstream of the project area is the main stem of Deep River, which empties into Grays Bay and the Columbia River.

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 project area is focused at the confluence of the East Fork Deep River and the Deep River Mainstem and the contiguous natural valley bottom. It comprises ESH Waters of the State encompassed by managed pastures that transition into riparian and upland forests. Dominant plant species include willow (*Salix spp.*), alder (*Alnus rubra*), and invasive reed canary grass (*Phalaris arundinacea*). Agricultural usage of the lower valley has resulted in conversion of most of the valley bottom to pastureland, leaving limited native riparian vegetation. Where native riparian vegetation exists within the valley bottom, it is mostly in the form of shrubs and small trees, such as alders and willows.

The East Fork watershed is 4.9 square miles in size, with a valley floor largely in agricultural production and an upper watershed primarily in commercial timber production. The 298-acre East Fork valley is considered a low-gradient reach with 126 acres of converted historical tidal floodplain. There are road crossings over East Fork Deep River on Wirkkala Road and over Pearson Creek on West Deep River Road. There are many other stream crossings located within pasture areas used by landowners with bridges or culverts of varying sizes. The major tributaries forming the East Fork of Deep River are Pearson Creek and Hendrickson Creek which join just south of West Deep River Road. Both tributaries originate in the forested uplands of the catchment before transitioning to pastureland in the valley floor. Many small unnamed tributaries and seeps contribute to East Fork Deep River providing flow and cold water refugia. The East Fork has not previously received any restoration attention because it is cut off from the Deep River mainstem by a dike and culverts with tide gates, heavily limiting fish passage. These culverts and tide gates have been identified by Washington Department of Fish and Wildlife (WDFW) as fish passage barriers (site ID# 934499 934630 and 934498).

Deep River itself is a relatively short, low-gradient river that terminates in Reach B of the Columbia River estuary, at Grays Bay. The Grays River, which also terminates at Grays Bay, is one of the most productive salmon streams in the lower Columbia estuary. Extensive restoration efforts are underway in the Grays River watershed, including land acquisition, dike breaches in the tidal reaches, and extensive large wood additions in the headwaters.

NOTE: The landowners involved in this project area generally do not support extensive riparian plantings or large wood additions due to the associated loss of pastureland and potential for large wood to impede drainage.

Although fish passage is severely limited, the properties within the project boundary have numerous reaches of good spawning gravels (Pearson Creek) with canopy cover and in-stream structure. Habitat suitability for fish coincides with documented presence of ESA-listed salmonids including: coho, fall chum, and winter steelhead. Pacific lamprey and fall chinook salmon are presumed to be present in the East Fork of Deep River as well.

The East Fork meets the Deep River mainstem approximately 3.5 stream miles upstream of Columbia River. The confluence is blocked by a dike across the East Fork Valley, through which are five 48-inch culverts equipped with top-hinged tide gates. East Deep River Road parallels the mainstem on a dike down to State Route 4, and West Deep River Road parallels the mainstem on a dike on the other bank, also connecting to State Route 4.

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

The entirety of the project area within the East Fork Deep River valley is located on private land, except where County roads and roadway infrastructure exist within County right-of-way. County roads cross the East Fork once on the levee at its confluence with Deep River and four more times upstream.

The boundaries of this project encompass the lands of four property owners, all of whom CREST has worked with continuously through project design. These properties are predominantly used for pastureland.

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

The East Fork valley floor is predominantly utilized for cattle grazing and hay production, while the surrounding hillsides are largely dedicated to commercial timber production, with a smaller area designated as protected State land. The stream miles within these timberlands provide suitable spawning opportunities, contributing to the ecological value of the area.

The community in the East Fork valley comprises approximately 20 households, about half of which are retired, while eight actively engage in agricultural activities such as grazing and maintaining open pastureland. All residents depend on county roads for their primary access.

Properties neighboring the project site reflect this mixed-use landscape, with a combination of residential, agricultural areas, and infrastructure like roads and driveways. To ensure a collaborative approach, we will continue working closely with adjacent property owners to address project activities that may affect private lands or driveway connections.

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

This project will replace the five culverts and tide gates at the confluence of the main stem of Deep River (**MAIN STEM**) and the east fork of Deep River (**EAST FORK**). Future projects, currently in the design stages, plan to address additional culverts upstream that are partial to full barriers to fish passage.

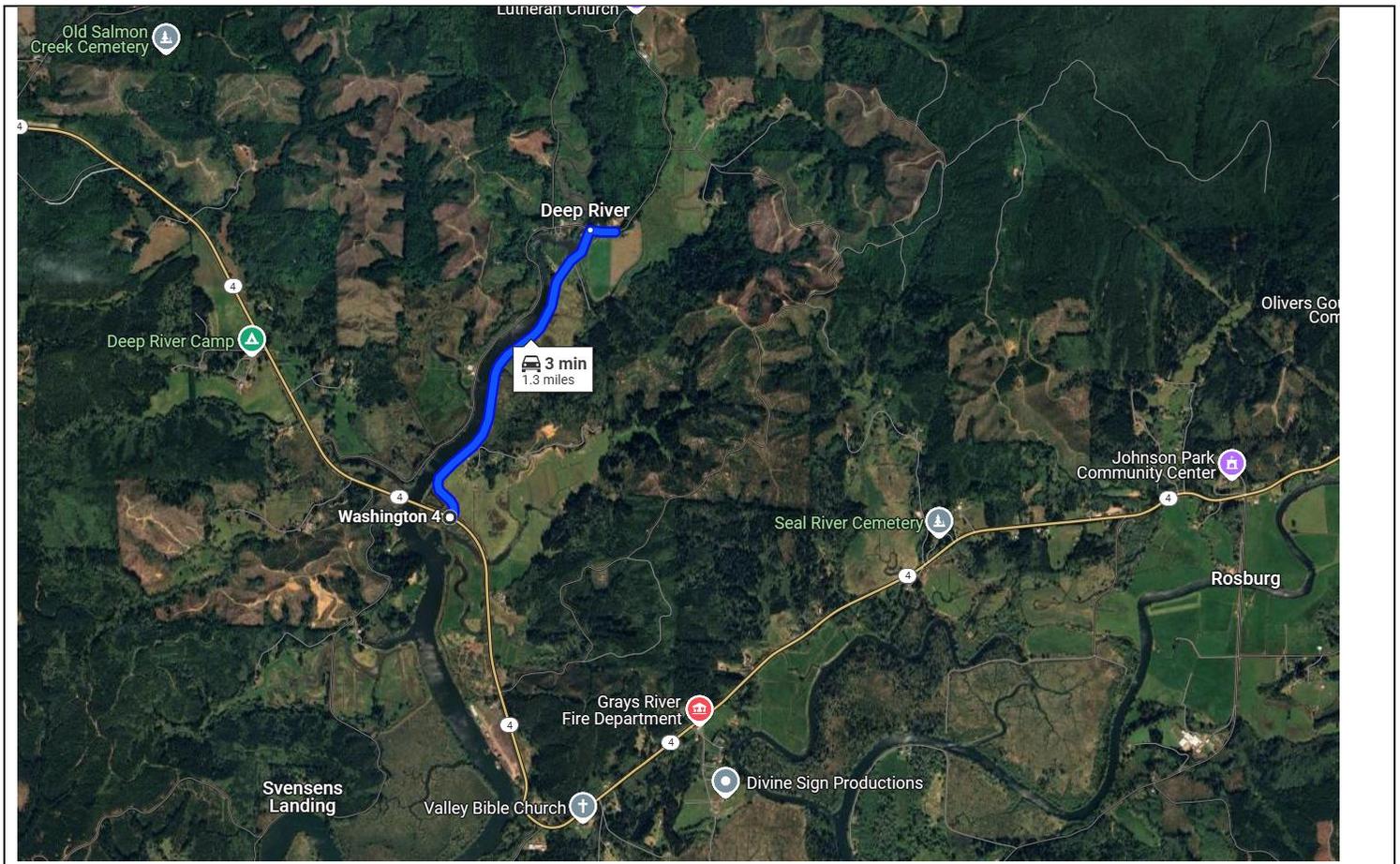
Each of the five culverts is equipped with aluminum top-hinged tide gates. The culverts are each 4 feet in diameter, 73 feet long, and made of corrugated metal. The culverts are arranged as two side-by-side pairs and one singleton. The culverts are too small to fully drain the East Fork during each tide cycle during rain events, resulting in backwater effects and flooding.

One of the five culverts collapsed in a sinkhole in 2018. It was filled with rock and gravel to prevent a catastrophic dike failure. A retention pond has formed against the dike on the upstream end of this culvert. The retention pond has largely filled with sediment.

As part of removing the existing bank of culverts and constructing the new box culvert in the dike, the project will raise the elevation of the dike and East Deep River Road to eliminate a low spot that overtops periodically. The project will raise the surface elevation of this section of dike from 10-11 feet NAVD88 to 14-15 feet NAVD88, high enough to prevent overtopping for at least several decades of sea-level rise, increasing climate resilience and reducing long-term maintenance costs.

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

From SR-4's bridge over Deep River, take E Deep River Road north to its junction with W Deep River Road. The project boundary encompasses the wetland and pasture areas to the E and SE of this junction.



Part 6–Project Description

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

The Deep River Connectivity project is a voluntary habitat restoration project intended to restore and improve estuary habitat conditions and fish passage connectivity within East Fork Deep River Valley, while balancing the needs of the working landscape. While this project is divided into three phases, this JARPA application is relevant for Phase I activities ONLY, which covers:

1. Replacement of culverts and tide gates under East Deep River Road
2. Raising of East Deep River Road’s elevation (to reduce overtopping)
3. Channel widening and floodplain benching of the East Fork of Deep River

All future mentions of “the project” refer to this Phase I work only and NOT the other phases.

FUNDING

This project has been vetted by three state and federal agencies and prioritized for grant funding. The agencies and grant programs include:

1. Environmental Protection Agency (Restore America’s Estuaries Watershed Grants Program)
2. Federal Highways Administration and Washington Department of Transportation (PROTECT Grants Program)
3. Washington State Recreation & Conservation Office (Salmon Recovery Funding Board).
4. National Fish & Wildlife Foundation (National Coast Resiliency Fund)

THE PROBLEMS

The existing East Fork Deep River culverts and tide gates have been identified by Washington Department of Fish and Wildlife (WDFW) as fish passage barriers (site ID# 934499 934630 and 934498). One of the five culverts collapsed in 2018, and the others may be at risk of failure as well.

Because of the poor state of these culverts and tide gates, fish and humans suffer. Flooding due to the failing infrastructure severely disrupts the lives of residents in the East Fork Deep River Valley.

THE SOLUTION

The existing 48" top-hinged tide gates and culverts will be replaced with muted tidal regulator tide gates, and open culverts. Removal of failing existing drainage infrastructure will improve fish passage and reduce the risk of catastrophic levee failure, in addition to reducing the frequency and severity of flooding in the valley. East Deep River Road will be raised

Upstream of the culverts, we will remove several constrictions in the East Fork that also contribute to flooding. The channel is severely incised in this section, with nearly vertical banks. As part of channel widening and floodplain benching, we will lay back the channel banks and create habitat benches that will support native herbaceous wetland species and provide additional flood capacity. These channel modifications will provide more edge and wetland habitat, with more food resource production for fish.

Fish surveys indicate that several ESA-listed salmonids (chum, coho, chinook, cutthroat trout, steelhead) exist within both the Main Stem and East Fork of Deep River. With fish passage barriers (existing tide gates and culverts) removed and channel modifications for improved rearing habitat, we will likely see a speedy reappearance of our cherished fish – and the ecological benefits that follow.

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

THE NEEDS

At its core, this project benefits fish *and* people. The quote below, taken from one of our landowner acknowledgement forms, summarizes the human needs for performing this project. The Oatfields live in the East Fork Deep River valley and write:

“The East Fork valley is our home. We enjoy the quiet, the wildlife, and the rich history of our Deep River community. It is a special place to live but it is increasingly underwater. Every winter, rain fills up the valley floor during every big storm. The farm fields disappear under the flood, the cattle hunt for scarce high ground, and the roads that connect us to our jobs, schools, medical facilities, and other services become unpassable for hours to days at a time. We have requested help for years and none has come, until now.”

As previously mentioned, the existing East Fork Deep River culverts and tide gates have been identified by Washington Department of Fish and Wildlife (WDFW) as fish passage barriers (site ID# 934499 934630 and 934498). One of the five culverts collapsed in 2018, and one or more may be at risk of failure. These culverts and tide gates, along with the incised channels upstream, contribute to the flooding mentioned above.

This project also fits into the restoration activities of nearby areas. Deep River has received far less restoration attention than the downstream Grays River, largely because its salmon runs have been dramatically reduced for many decades due to fish passage barriers and habitat loss. That is beginning to change. Columbia Land Trust (The Land Trust) has made several acquisitions of diked tidal habitat in recent years, and breached dikes on one property. The Land Trust and Washington Department of Fish and Wildlife (WDFW) are currently working on tide gate replacement/removal projects on the lower mainstem and there is a large acquisition effort underway, less than one mile downstream from the East Fork confluence. The East

Fork has not previously received *any* restoration attention because it is cut off from the mainstem by the culverts and tide gates, virtually eliminating fish passage. The tide gates must be addressed before any restoration upstream can be financially justified. Once fish passage is restored to the East Fork, state salmon grants will be available for upstream habitat improvements.

TIDE GATES & CULVERTS

The five existing 48" culverts with top-hinged tide gates will be replaced by a new larger structure consisting of three, 12x12 foot pre-cast concrete box culverts, each fitted with 10x10 foot side-hinged tide gates controlled by a Muted Tidal Regulator (MTR) control system. MTRs hold the tide gate fully open on the entire ebb tide cycle, until a pre-set upstream water surface elevation is reached. Current designs propose a pre-set water surface elevation of 4.5' NAVD 88, which will prevent most flooding of private land *while* maintaining fish passage criteria (including water velocities below 2 ft/sec) more than 50% of the time. While the replacement tide gates will still be a partial fish barrier, this solution is the only one that was accepted by all parties, including the valley's residents.

Removal and replacement of the failing existing drainage infrastructure will improve fish passage between the Main Stem of Deep River and its East Fork, increase hydraulic capacity to drain flood waters out of East Fork Deep River valley, and reduce the risk of catastrophic levee failure.

ROAD ELEVATION RAISING

The project will also raise the elevation of the dike and East Deep River Road to eliminate a low spot that currently overtops periodically. The project will raise the surface elevation of this section of dike from 10-11 feet NAVD88 to 14-15 feet NAVD88, high enough to prevent overtopping for at least several decades of sea-level rise, increasing climate resilience and reducing long-term maintenance costs. East Deep River Road will remain open to traffic during this time While East Deep River Road will be closed to traffic during this time, traffic may use the nearby West Deep River Road instead. As an added benefit, we will improve roadway safety infrastructure by installing guardrails on this stretch of the road.

NOTE: We have performed geotechnical analysis on the dike and East Deep River Road. From our findings, it is anticipated that the dike will settle as much as 1.5 vertical feet after project construction. Our designs acknowledge this probable settlement. As a compensatory measure, final grading and asphaltting will be delayed at least six months after initial construction to correct for this settlement.

CHANNEL WIDENING AND FLOODPLAIN BENCHING

There are significant channel constrictions midway between E Deep River Rd and Wirkkala Road. This reach of the East Fork Deep River channel has become heavily constricted due to sediment deposition and encroachment of vegetation, reducing the channel width and depth to less than 2 feet in some locations. The banks are severely incised and in some portions are nearly vertical. Targeted excavation to enlarge the channel in these locations will improve drainage and reduce flooding at Wirkkala Road to improve the reliability of access for residents. Additionally, this grading work has been designed to create and expand floodplain benches and off-channel habitat within the range of tidal inundation. This will increase aquatic habitat area and riparian vegetation.

LANDOWNER BUY-IN

The Oatfield household, mentioned at the beginning of this section, write at the end of their letter:

"Since 2021, CREST has been working with landowners in the valley and with Wahkiakum County to design a

comprehensive approach to reduce flooding in the valley while improving passage and conditions for fish, especially salmon. There has been a lot of back-and-forth, and every landowner has had to give up something but has also stood firm on their own priorities. We have all signed on to the project because it will finally reduce the flooding that has plagued our valley for decades. No other solution seems feasible.”

We and the landowners are grateful to you for the time it takes to review this application.

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 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 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 checked="" type="checkbox"/> Channel Modification	<input checked="" type="checkbox"/> Fishway	<input type="checkbox"/> Raft	

- Other: Voluntary Habitat Restoration, Muted Tidal Regulator Installation (advanced tide gate that allows fish passage while providing flood protection), Riparian and wetland habitat enhancement.

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.

OVERVIEW

The existing culverts and tide gates will be removed and replaced with three 12x12 foot pre-cast concrete box culverts each fitted with 10x10 foot side-hinged tide gates controlled by a Muted Tidal Regulator (MTR) control system. These MTR structures have been specifically chosen for their ability to provide fish passage and flood protection. Road elevations will be raised to reduce flooding risks, and floodplain benches will be created to improve habitat and flood capacity. An extensive native seeding and planting plan will occur throughout the project area where soil disturbance occurs. All work areas will be protected using appropriate Erosion and Sediment Control Best Management Practices. A Stormwater Pollution and Prevention Plan will be produced, maintained, and updated throughout construction to ensure short-term impacts from this project are minimized to the maximum extent practicable. Isolating the work area from existing waterbodies and wetlands will be performed at low tide and accompanied by fish and red surveys/salvage to avoid any impacts to fish species. The SWPPP will be designed and implemented using WSDOT standard plans for site preservation and erosion control measures along with equivalent Best Management Practices listed in the Stormwater Management Manual for Western Washington.

All equipment utilized on the project site to perform “in-water work” will be equipped with biodegradable hydraulic fluids, and will be inspected prior to delivery, upon arrival, and daily throughout the duration of the project for leaks and/or maintenance needs. All excavators and heavy equipment will be equipped with low ground pressure tracks. Temporary traffic control will be established prior to start of construction activities. Traffic control items include full-time portable message signs, illuminated stop signs, barriers, additional signage, etc. Lane closure is based on WSDOT standard plan K-20.40-00.

All equipment used for in-water work within the existing ordinary high water mark (OHWM) level of East Fork Deep River shall use only biodegradable vegetable-based hydraulic fluids. Equipment used outside of the existing OHWM is not required to use biodegradable vegetable-based hydraulic fluids. Equipment used for this project shall be free of external petroleum-based products while working near any surface water or wetland. Accumulation of soils or debris shall be removed from the drive mechanisms (wheels, tracks, tires, etc.) and undercarriage of equipment prior to working below the OHWM. Equipment shall be checked at the beginning of each work shift for leaks, and any repairs shall be completed prior to commencing work activities. No equipment shall be stored overnight within 100 feet of any wetted channel. Routine inspections will ensure equipment is free of leaks and excess debris before use near water.

See plan sets page G-05 for the site plan and overview of all construction activities.

DETAILS ON EACH PROJECT ELEMENT

CULVERT, FISHWAY, AND MUTED TIDAL REGULATOR INSTALLATION

- **Construction methods:**

Install traffic control signage and barricades, work area isolation via installation of sheet pile cofferdams (SHEET ESC-01), dewater site and remove existing culverts and tide gates with excavators and haul off-site to an approved disposal facility, install geogrid reinforced granular building underneath the tide gate and wing walls (SHEET C-04), the manufacturer of the MTR tide gates (Nehalem Marine Manufacturing) will install pre-cast concrete box culverts and MTR tide gates. Installation of the culvert, wingwalls, and headwalls per plan and profile will be accomplished with a truck mounted crane. Install

rock and scour protection (2.5 ft diameter) for roadway embankment. See SHEETS C-04 TO C-06 for more details on the MTR tide gate installation and related activities. Once fully installed, the sheet pile cofferdams during low tide, and water will return to the area.

- **Further impact reduction (SHEETS G-06 TO ESC-04):**

Turbidity curtains and compost socks will be used around staging and stockpile areas. Access routes and construction entrances for this work are either on or from E and W Deep River Rd. Clearing and riparian limits will be marked with flagging. All quarry spalls and gravel will be underlain with Geotech fabric and removed when the project is finished.

A dewatering system will be installed at the culverts to direct flow away from the culvert work area when necessary. Sheet pile coffer dams will be used to isolate and dewater the culvert replacement area. The area just upstream of the work area in East Fork will undergo fish exclusion and be managed for turbidity with a series of turbidity curtains. Water will then be pumped into a sediment bag and downstream into a series of coffer dams, and finally Deep River.

- **Equipment used:**

Construction cranes, haul trucks, excavator with hydraulic breaker for targeted demolition, sheet pile cofferdams and. Heavy machinery will utilize low ground pressure tracks to reduce soil compaction.

- **Nearest waterbody:**

This work will be in the western boundary of the project area, closest to the Main Stem of Deep River. Staging areas will be on the other side of the dike, in the open field adjacent to E Deep River Rd and located away from waterbodies

ROAD (ROADWAY IMPROVEMENTS)

- **Construction methods:**

Remove existing roadbed at varying depths (minimum 1 ft) for roughly 600 ft of E Deep River Rd and haul off-site to an approved disposal facility. Lay construction geotextile fabric and construct new raised roadway by adding a minimum 1 ft of crushed surfacing base course topped with a minimum 4 inches of crushed surfacing top course and asphalt paving. The paving and base course materials and design are based on guidance from WSDOT. Roadway and paved surfaces will be constructed using dump trucks, vibratory steel drum compactor, and paver. We will install guardrails for increased roadway safety in the vicinity of the proposed tide gate structure. Road embankments will be built with rock for scour and erosion protection with a minimum 1:2 ft grade. All removed road surface materials will be kept separate and sent to a TBD permitted disposal site. All present utilities will be protected and supported in place.

- **Further impact reduction:**

A series of turbidity curtains in Deep River and compost socks will be used for areas with road work. Together with the sheet pile cofferdams mentioned in the above section, the entire stretch of the work area adjacent to Deep River will be isolated and managed for turbidity.

- **Equipment used:**

Construction cranes, haul trucks, excavator with hydraulic breaker for targeted demolition, dozers, asphalt pavers, compaction rollers.

- **Nearest waterbody:**

This work be completed in the western boundary of the project area, closest to the Main Stem of Deep River and on E Deep River Rd. Staging areas will be on the other side of the dike, in the open field adjacent to E Deep River Rd and located away from waterbodies.

BANK STABILIZATION & CHANNEL MODIFICATION

- **Construction methods:**

Channel enhancement will involve clearing and grubbing techniques as well as the excavation of accreted materials, combined with the haul-off of materials. SHEET G-06 shows the network of access roads, construction entrances, bridges, and Best Management Practices (BMP's) that will stabilize the areas that excavators will operate from. This sheet also shows the three areas of floodplain benching, one area of excavation for flood storage, and the channel widening along the East Fork. On and adjacent to the dike that holds up E Deep River Rd, we will install pier wood structures to promote bank stability and habitat complexity (SHEET C-07).

To reposition logs at the very southern boundary of the project area, we will use an excavator balanced on crane mats to relieve minor channel constrictions on the East Fork.

- **Further impact reduction:**

Where possible, equipment will avoid and or replant some of the larger shrub and herbaceous species to minimize the removal of onsite native plants and aggregates. Our staging area for equipment, temporary and stabilized access roads and bridges, and communication with landowners will prevent unintended impacts to wetlands and uplands alike.

Revegetation of the banks and disturbed areas will occur immediately after individual earthwork activities conclude. Revegetation will consist of native grass seeding, mulching, as well as the planting of native herbaceous and woody species as appropriate to the elevation of the restored area. Site conditions will be carefully monitored, and significant supplemental planting will occur in the fall to boost the revegetation effort. CREST will handle the planning, scheduling, species list, and stewardship of all plantings.

SHEET ESC-01 shows the project's network of Best Management Practices (BMP's) including silt fences, compost socks, dewatering pumps and diversion cofferdams. A dewatering area will be on the E side of the project boundary, with a dewatering pump and sediment bag to direct flow downstream of the staging area. This network of diversion and cofferdams will be used as necessary to direct flow around sensitive construction zones.

Three temporary structures will facilitate and reduce the impacts of the movement of materials and equipment.

- The first is a POTENTIAL temporary bridge crossing that may need to be constructed if the existing culvert crossing is not capable of bearing the load of construction equipment. The bridge design consists of ecology blocks or wood timber abutments supporting a bridge (made of wood, rail car beds, or steel sheets) up to 80 ft long. The abutments will sit on high banks with sufficient load-bearing capacity to prevent bank sloughing or collapse. If the existing culvert is damaged, the construction contractor will replace it at their expense. Two of these potential bridge crossings exist. Please see SHEET G-06 for placements.
- The second is a temporary access road, which will involve excavating the top layer of soil to reach more stable sub-surface soils, laying Geotech fabric, and filling to grade with gravel. Vegetation removal will be minimized by marking clearing limits. All temporary access road materials will be removed, and the remaining soil will be scarified at the end of the project. This temporary access road will be primarily in the eastern portion of the project area. A stabilized construction entrance will allow equipment to enter these access roads.
- The third is a temporary riparian access, extending from W Deep River Rd near the intersection with E Deep River Rd and stretching south to the culvert replacement staging area and continuing south along the East Fork channel to the southern boundary of the project site. The access will be 15-20 ft wide and the edges of the road will be marked with wood lathes. This access path will be scarified as well after construction is complete.

- **Equipment used:**

Excavators, dozers, wheel loaders and dump trucks, graders, lowbed trailers, hydroseeders. All construction rigs will use low-pressure technologies on soft/sensitive soils and biodegradable fluids.

- **Nearest waterbody:**

Floodplain benching will occur in two areas. The first is just upstream of the new culvert and tide gates, on the eastern bank of the East Fork. The second area is near the northern boundary of the project area, where the East Fork is closest to W Deep River Rd. Channel widening will start also in this

second area and extend along the East Fork channel to the eastern boundary of the project area. See SHEET G-05 for a spatial representation of these habitat actions.

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: July 15, 2026 End Date: September 30, 2026 See JARPA Attachment D
Planting/revegetation occurs outside the IWWP and does not involve in-water work

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

\$4,400,742.00

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

- **If yes**, list each agency providing funds.

Yes No Don't know

Salmon Recovery Funding Board (Washington State Recreation & Conservation Office) – mixed federal/state funding

EPA - Restore America's Estuaries – Watershed Grants Program

Federal Highway Administration via WSDOT – PROTECT grants

National Fish & Wildlife Foundation – National Coast Resiliency Fund (federal)

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 restoration project will have short term, limited duration impacts that will result in long term benefits for fish and people. The project goal is to improve the function of the wetlands in and upstream of the project area through improved hydrology and restored fish passage to the East Fork of Deep River.

BOUNDARIES

Project boundaries will be staked out and clearly marked with high visibility fencing to ensure that the excavation footprint has been limited to the minimum size necessary to complete the project. Tree and shrub protection fencing will be installed.

DEWATERING

The first dewatering area will be on the E side of the project boundary, with a dewatering pump and sediment bag to direct flow downstream of the staging area. A network of diversion and coffer dams will also be used as necessary to direct flow around sensitive construction zones. A second dewatering system will be installed at the culverts to direct flow away from the culvert work area when necessary. Sheet pile coffer dams will be used to isolate and dewater the culvert replacement area.

EQUIPMENT

Low ground pressure construction equipment with vegetable oil hydraulics will be used to reduce the impacts to wetland areas. Where possible, equipment will avoid and or replant some of the larger shrub and herbaceous species to minimize the removal of onsite native plants and aggregates. Our staging area for equipment, temporary and stabilized access roads and bridges, and communication with landowners will prevent unintended impacts to wetlands and uplands alike.

BEST MANAGEMENT PRACTICES

During culvert removal, silt curtains will be placed in the main stem of Deep River to further isolate construction impacts. Other best management practices (mulch and hay, compost socks, sand filled supersacks/meter bags, and sheet pile coffer dams) will be installed around staging areas, culvert removal areas, and floodplain benching areas to protect adjacent wetlands and waterbodies.

RESTORATION

All disturbed areas will immediately be reseeded with native grasses. Native riparian and intertidal zone plants will be installed at the appropriate elevations immediately after completion of construction activities. Site conditions will be carefully monitored, and supplemental planting will occur in the fall once the rains have arrived to boost the revegetation effort.

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

Yes No Don't know

The restoration project will have short term, limited duration impacts that will result in long term benefits for fish and people. The project goal is to improve the function of the wetlands in and upstream of the project area through improved hydrology and restored fish passage to the East Fork of Deep River. Permanent impacts include the thin spread layer of soil proposed on the Oatfield and Malerich lower hayfields, adjacent to the tide gate system. This thin spread of no more than 3" deep will ensure positive drainage and prevent fish stranding, which is a problem currently at the hayfields where depressional areas retain water even after flood waters recede.

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

Yes No Don't know

The restoration project will have short term, limited duration impacts, which will be contained to the project area using the best management practices discussed in this application.

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 **RATING IS PENDING** 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

The long-term ecological lift that will result from this voluntary habitat restoration project significantly outweighs the short and long-term impacts making it a self-mitigating project. The installation of a self-regulating tide gate will increase hydrologic connectivity to the river and associated wetlands. This will cause a net increase in sediment and organic matter transport and increase habitat opportunity for aquatic organisms including but not limited to migrating juvenile and adult ESA listed salmonids.

Permanent impacts are largely associated with restoration grading/thin-spread intended to maintain wetland hydrology and reduce fish stranding. The project is designed to achieve a net gain of wetland functions through floodplain rehabilitation, re-establishment, and native revegetation. The result will be long-term benefits to wetland habitat complexity and hydrology within the project area.

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

We are not proposing a compensatory mitigation plan.

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)
FILL Temporary access roads, stabilized bridges, staging areas and construction entrances	Wetland A, Wetland B	Palustrine / Riverine (Category pending—rating in progress)	1.43 acres	3 months	R	1.43 acres
FILL Cobble for expanded floodplains and gravel	Wetland A Wetland B	Palustrine / Riverine (Category pending—	0.08 acres	Permanent	R	0.08 acres

for areas of fill along roadway embankment		rating in progress)				
EXCAVATE Floodplain benching	Wetland A Wetland B	Palustrine / Riverine (Category pending—rating in progress)	2.15 acres	Permanent	R	2.15 acres
FILL Pasture crowning with spoil materials from channel widening	Wetland B	Palustrine / Riverine (Category pending—rating in progress)	18.6 acres	Permanent	R	18.6 acres
FILL Wood structures for habitat complexity and bank stability	Wetland A	Palustrine / Riverine (Category pending—rating in progress)	0.04 acres	Permanent	R	0.04 acres
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: <u>N/A</u>						
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]						

The project is designed to avoid and minimize permanent wetland impacts and achieve **no net loss of wetland area and function**. Temporary construction impacts (up to ~3 months during the IWWP) will be restored following construction, and permanently disturbed areas will be rehabilitated/re-established through grading to design and native revegetation. Wetland categories are pending final confirmation; however, impacts and restoration/rehabilitation are fully quantified by area and will be implemented within the impact footprint as shown in the plans.

Temporary access roads, stabilized bridges, staging areas and construction entrances:

The temporary access roads, staging areas, and construction entrances will be constructed on geotech fabric with clean fill from a permitted dealer using an excavator and vibratory steel roller drum, on the easternmost and northwesternmost areas of the project boundary (SHEET G-06). Turbidity curtains and compost socks will be used as necessary around staging and stockpile areas. Clearing and riparian limits will be marked with flagging. All quarry spalls and gravel will be underlain with Geotech fabric and removed when the project is finished. All temporary materials will be removed at project completion and areas returned to design grade and revegetated.

Streambed gravel and cobble for expanded floodplains

The source of all aggregate materials (scour protection rock, quarry spalls, cobble) will be delivered to the site from a nearby approved rock quarry. All materials will be placed with low-ground pressure construction equipment (haul trucks and excavators) using vegetable oil hydraulics to reduce impacts to wetlands. See SHEET G-05 for areas highlighted in purple, which indicate channel widening areas that involve placing streambed gravel and cobble. SHEET C-08 AND C-10 shows the existing and finished grades of these areas. As with all work in riparian zones, we will clearly mark access routes with flagging and use crane mats where necessary to reduce soil and wetland disturbance.

Wood structures for habitat complexity and bank stability

SHEET C-01 AND C-04 show the grading plan of the culvert and tide gate area. The six brown icons on the map indicate the locations where we will install wood structures in the banks. At the bottom of the sheet, there are three diagrams, together showing the orientation of these structures. They will be placed using excavators, operating from the closest stabilized bank or from E Deep River Rd.

Thin-Spread placement on lower pastures for fish stranding reduction

Thin-spread is designed to maintain existing wetland/pasture conditions and improve drainage; final grades will be matched to surrounding elevations and will not create new upland areas.

Native spoil materials from channel widening activities (see 7j below) will be reused onsite as a thin-spread layer in low-lying hayfield depressions (Oatfield and Malerich fields). Depressions in these fields currently pond and can leave isolated shallow-water pockets during drawdown, increasing the risk of juvenile fish stranding. Thin-spread placement will establish positive surface drainage and reduce disconnected ponding while maintaining agricultural use. Material will be placed at a shallow, uniform depth (about 3.5 inches loose, settling to 2.5 inches or less) and graded to match surrounding elevations, with limits minimized to the smallest area needed.

Disturbed areas will be stabilized and revegetated per project BMP's. The spoil originates from tidal areas and will be placed in adjacent tidal areas without exceeding OHWM elevations. Please see the attached Debit/Credit form for more details.

NOTE:

E Deep River Rd will undergo road elevation raising, which falls into the category of FILL activities. However, these activities primarily within existing roadway prism and outside delineated wetland boundaries, but adjacent

to wetlands (located above the tide gates and culverts) and are in the vicinity of wetlands. Please see SECTION 6e “ROAD (ROADWAY IMPROVEMENTS)” for details on how we designed these activities to protect wetlands.

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. [\[help\]](#)

Floodplain benching

This will involve clearing and grubbing, followed by excavation of accreted materials for floodplain benching in the areas shown in pink thatching on G-05. Excavation will be completed using excavators and haul trucks operating from stabilized access routes. Approximately 7,429 cubic yards (CY) of material will be excavated from the channel widening, floodplain benching, and flood storage excavation areas. Excavated native material will be **reused onsite** within the designated placement areas (e.g., pasture thin-spread) to support positive drainage and reduce fish stranding risk; any material not suitable for reuse will be hauled to an approved disposal facility in accordance with County and permit requirements. Work areas will be clearly flagged, and crane mats will be used where necessary to minimize soil and wetland disturbance.

Dewatering pumps during excavation activities

Temporary dewatering and flow diversion measures may be used as needed to keep excavation areas isolated and dry. Dewatering discharge will be filtered (sediment bag or similar) and routed to a stabilized/vegetated area consistent with ESC plans and permit conditions; all temporary dewatering/diversion equipment will be removed after construction. Fish exclusion netting will be used where required and managed per project BMPs.

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 two non-wetland waterbodies on or adjacent to this project area are the Mainstem and East Fork of Deep River. In addition to the protections already mentioned in above sections of this permit, protections to these waterbodies include:

- CREST Project Manager or other qualified Wahkiakum County and/or CREST staff will be onsite during construction to ensure correct location(s) and level(s) of disturbance does not exceed what is proposed or acceptable.
- All excavated material will be removed and placed as directed by CREST with prior approval from landowners. No material placement will exceed wetland fill thresholds.
- High visibility orange fencing to ensure that excavation footprints will be limited to the minimum required to replace culverts and modify channels/floodplain
- In water work areas at the culvert replacements will be isolated from Mainstem of Deep River by a sheet pile coffer dam and silt curtains.
- All excavation activities will be performed at low tide in the dry and, to the maximum extent possible, from existing roadways.

- Strategic placement of construction entrances, bridges, and roads were chosen to reduce unnecessary equipment tracking.
- Dewatering and diversion areas will reduce impacts during active excavation. Discharge will be filtered through sediment bags and other BMP's before it leaves the site.
- Compost socks, seeding, and mulching will be used to stabilize disturbed soils.
- All disturbed areas outside of OHWM will immediately be mulched and reseeded with native grasses upon completion, in addition to further native planting efforts. Plant monitoring will occur in the fall once rains have arrived to boost the revegetation effort.
- Turbidity measurements will be taken at least daily during earthwork activities, and BMP's will be adjusted if turbidity changes over the threshold are detected. All DEQ water quality standards that pertain to this project will be adhered to.

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

This is a voluntary habitat restoration project whose ecological benefits significantly surpass the adverse wetland impacts, making it a self-mitigating project. This restoration project will have short term, limited duration impacts that will result in long-term benefits for fish and people. The project goal is to improve the function of the wetlands and waterbodies in and upstream of the project area through improved hydrology and restored fish passage to the East Fork of Deep River. As a voluntary habitat restoration project without any permanent loss or negative impacts to waterbodies, the project does not necessitate mitigation.

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. [\[help\]](#)

N/A
Please see SECTION 7g for justification

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 waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
FILL Place rock for scour protection along road embankment and tide gates	East Fork Deep River	In water	Permanent	230 CY	6,098 sq. ft.
TEMPORARY WORK AREA ISOLATION Sheet Pile Cofferdam	East Fork Deep River	In water	3 months during IWWP	N/A (temporary installation/removal)	9,944 sq. ft.
FILL Culvert and Tide gate installation	East Fork Deep River	In water	Permanent	129 CY	1,742 sq. ft.

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. [\[help\]](#)

Permanent fill totals 359 cubic yards. All rock will be purchased from a local, permitted quarry. The tide gate structure (consisting of concrete box culverts and metal tide gate doors) will be assembled and installed by the manufacturer (Nehalem Marine Manufacturing).

See SHEET C-04 and C-07 (dotted areas) for exact locations of fill material placement:

- Scour rock (2.5 ft. diameter) will be placed on the downstream northern end of the culvert and tide gate area. All scour protection rock will be placed at low tide via excavators and haul trucks operating from E Deep River Rd.
- Stream cobble and gravel will be placed to improve habitat conditions along expanded floodplain areas. Cobble consists of round (river run) or sub angular rock and mimics natural stream rock. This rock will also be placed at low tide via excavators and haul trucks operating from temporary access routes and W Deep River Rd.

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. [\[help\]](#)

Floodplain benching

This will involve clearing, grubbing, and excavating streambank soil with excavators, along with hauling off these materials with haul trucks.

SHEET G-05 identifies the locations of:

- Floodplain benching areas: (highlighted in PURPLE)
- Channel widening along the East Fork (highlighted in PURPLE along the channel)
- Excavation site for flood storage near the culverts and tide gates (highlighted in ORANGE next to E Deep River Rd)
- Realignment and grading connection channel immediately upstream and downstream of new MTR tide gates (highlighted in BLUE)

Existing and finished grades for these areas are detailed on SHEET C-08 and C-10. These grades have been deliberately selected to reduce Reed canary grass and Himalayan blackberry and promote the success of native obligate wetland vegetation.

Access roads, construction entrances, bridges, and Best Management Practices (BMPs) are outlined on SHEET ESC-01 to stabilize work areas. Access routes will be marked with flagging, and crane mats will be used as needed. Haul trucks and excavators will operate from the closest stabilized bank or E Deep River Rd during low tide "in the dry" to reduce turbidity and other impacts. Low ground pressure construction equipment with vegetable oil hydraulics will be utilized. Excavated suitable native soils will be placed on pastures (see section 7i "THIN SPREAD PLACEMENT" for more information) in coordination with the private property owners. Any unsuitable material will be hauled to an approved disposal facility in accordance with County and permit requirements.

8h. Have you prepared a Water Quality Monitoring Plan (WQMP) for all in-water work (below ordinary high water), over water work or discharges to waters of the state?

Yes No

If NO describe the monitoring that you will be conducting including parameters, equipment and locations, or explain why monitoring will not be necessary. [\[help\]](#)

Water quality will be monitored in accordance with the 401 WQC. A monitoring plan will be detailed in the SWPPP and note that the applicant is prepared to monitor daily at a minimum, or more as directed by regulatory agencies in the conditions of our permits with protocols for immediate response to any exceedances.

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
Wahkiakum County Public Works Department	Paul Lacy	lacyp@co.wahkiakum.wa.us	January 2026
Washington Department of Fish and Wildlife (WDFW)	Isaac Holowatz	isaac.holowatz@dfw.wa.gov	January 2026
Washington Dept. of Ecology	Brook Swenson	bswe461@ECY.WA.GOV	January 2026
WSDOT	Rob Klug	robert.klug@wsdot.wa.gov	January 2026
RCO SRFB	John Foltz	john.foltz@rco.wa.gov	January 2026
U.S. Army Corps of Engineers	Owen Weller	owen.weller@usace.army.mil	January 2026
<p>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]</p> <ul style="list-style-type: none"> • If Yes, list the parameter(s) below. <p>If you don’t know, use Washington Department of Ecology’s Water Quality Assessment tools at:</p>			

https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d			
<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 			
<p>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.</p>			
<p>REGION 17 PACIFIC NORTHWEST</p> <ul style="list-style-type: none"> HUC 12-170800060402 			
<p>9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [help] Go to https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up to find the WRIA #.</p>			
<ul style="list-style-type: none"> WRIA 25: Grays - Elochoman watershed 			
<p>9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help] Go to https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria for the standards.</p>			
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable 			
<p>9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]</p> <ul style="list-style-type: none"> If you don't know, contact the local planning department. <p>For more information, go to: https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases.</p>			
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Natural <input type="checkbox"/> Aquatic <input type="checkbox"/> Conservancy <input type="checkbox"/> Other: _____ 			
<p>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.</p>			
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Shoreline <input checked="" type="checkbox"/> Fish <input type="checkbox"/> Non-Fish Perennial <input type="checkbox"/> Non-Fish Seasonal 			
<p>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.</p>			
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 			
<p>Name of manual: _____</p>			
<p>9i. Does the project site have known contaminated sediment? [help] If Yes, please describe below.</p>			
<ul style="list-style-type: none"> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 			

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

The properties involved in this project were used historically and presently for mixed agricultural and pasturelands. Timber activities were also present historically. The current collection of culverts and tide gates were installed in the 1950's.

9k. Is the project located in or adjacent to a designated state or federal contaminated site or clean-up site. (e.g. MTCA or CERCLA)?

If **Yes**, provide any additional details below.

Yes No

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

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

• Yes No

9m. 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. [\[help\]](#)

Coho salmon (*Oncorhynchus kisutch*) and chum salmon (*Oncorhynchus keta*) have been documented in the East Fork in recent years but in low numbers and uneven distribution, presumably limited by existing passage barriers.

Following project completion, passage will be dramatically improved for the above species and winter steelhead (*Oncorhynchus mykiss*) – all Threatened under the Endangered Species Act, as well as Pacific lamprey (*Entosphenus tridentatus*). According to WDFW's SalmonScape, ESA-listed fall chinook (*Oncorhynchus tshawytscha*) have also been documented in the project vicinity.

Passage into the lower, tidal portions of the East Fork will also be improved for juvenile salmonids, both those originating within the Deep River watershed and those out-migrating juveniles moving down the Columbia River that seek off-channel tidal habitat for foraging and rearing before entering the Pacific Ocean.

9n. 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 listed in the WDFW Priority Habitats and Species List that occur in the vicinity of the project area include:

- Roosevelt Elk (*Cervus elaphus roosevelti*), Willapa Herd, wintering range
- Little Brown Bat (*Myotis lucifugus*) and Yuma myotis (*Myotis yumanensis*)
- Wintering waterfowl (will not be affected by summertime construction activities)

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.oria.wa.gov/opas/>.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.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 <https://ecology.wa.gov/regulations-permits/SEPA-environmental-review>.

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

A SEPA determination is pending with WAHAKIAKUM COUNTY PUBLIC WORKS DEPARTMENT (SEPA lead agency). The expected decision date is TBD - Q1 2026.

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](#)

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

Authorization to impact waters of the state, including wetlands (Check this box if the proposed impacts are to waters not subject to the federal Clean Water Act)

FEDERAL AND TRIBAL GOVERNMENT

United States Department of the Army (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:

For projects or bridges over waters of the United States, contact the U.S. Coast Guard at:

Bridge Permit: D13-SMB-D13-BRIDGES@uscg.mil

Private Aids to Navigation (or other non-bridge permits): D13-SMB-D13-PATON@uscg.mil

United States Environmental Protection Agency:

Section 401 Water Quality Certification (discharges into waters of the U.S.) on tribal lands where tribes do not have treatment as a state (TAS)

Tribal Permits: (Check with the tribe to see if there are other tribal permits, e.g., Tribal Environmental Protection Act, Shoreline Permits, Hydraulic Project Permits, or other in addition to CWA Section 401 WQC)

Section 401 Water Quality Certification (discharges into waters of the U.S.) where the tribe has treatment as a state (TAS).

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. _____ (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. _____ (initial)

CHUCK BEYER

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.

JAY HORITA

Authorized Agent Printed Name

Jay Horita

Authorized Agent Signature

1/14/2026

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.

SEE ATTACHMENT A FOR ALL SIGNATURES

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. 09/2018