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of Engineers ®
Seattle District

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Agency reference #:
Tax Parcel #(s):

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

# 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 Ilwaco East Bulkhead Resilience Project (Project)	

## Part 2-Applicant

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

	•			
iddle)				
Manager)				
olicable)				
2c. Mailing Address (Street or PO Box)				
PO Box 307				
2d. City, State, Zip				
<b>2f.</b> Phone (2)	<b>2g.</b> Fax	<b>2h.</b> E-mail		
	(360)642-3148	tlofstrom@portofilwaco.org		
	Manager)  Dicable)  Street or PO Box)	Manager)  Dicable)  Street or PO Box)  2f. Phone (2)  2g. Fax		

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

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<sup>&</sup>lt;sup>1</sup>Additional forms may be required for the following permits:

<sup>•</sup> 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.

<sup>&</sup>lt;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.

# **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, M	iddle)		
England, Victoria Ren	ee		
<b>3b.</b> Organization (If ap	plicable)		
Moffatt & Nichol			
3c. Mailing Address (S	Street or PO Box)		
600 University Street,	Suite 610		
<b>3d.</b> City, State, Zip			
Seattle, WA, 98101			
<b>3e.</b> Phone (1)	<b>3f.</b> Phone (2)	<b>3g.</b> Fax	<b>3h.</b> E-mail
(206) 622-0222			vengland@moffattnichol.com
<ul> <li>☐ There are multiple upeach additional prop</li> <li>☒ Your Project is on Decontact the DNR at the DNR</li></ul>	pland property owners. operty owners. operty owner. epartment of Natural Re (360) 902-1100 to determ	esources (DNR)-manage mine aquatic land owner	ents. (Skip to Part 5.) Flow and fill out <u>JARPA Attachment A</u> for Ed aquatic lands. If you don't know, Frship. If yes, complete <u>JARPA Attachment</u>
L_to apply for the Ac  4a. Name (Last, First, M	quatic Use Authorization	<u>.                                      </u>	
Ta: Name (Last, First, M	iddie)		
<b>4b.</b> Organization (If ap	plicable)		
<b>4c.</b> Mailing Address (S	Street or PO Box)		
3	,		
<b>4d.</b> City, State, Zip			
<b>4e.</b> Phone (1)	<b>4f.</b> Phone (2)	<b>4g.</b> Fax	4h. E-mail

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# Part 5—Project Location(s)

Identify	ina	information	about the	property	v or pro	perties	where the	Pro	iect will	occur.	[help]

☐ There are multiple Project locations (e.g. linear Projects). Complete the section below and use <u>JARPA</u> <u>Attachment B</u> for each additional Project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]				
□ Private				
☐ Federal				
□ Publicly owned (state, or expression)	county, city, special districts like s	schools, ports, etc.)		
☐ Tribal				
□ Department of Natura	l Resources (DNR) – mana	aged aquatic lands (Complete s	JARPA Attachment E)	
<b>5b.</b> Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]				
117 Howerton Avenue Southeast				
<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.) [help]				
Ilwaco, WA 98624				
5d. County [help]				
Pacific County				
<b>5e.</b> Provide the section, township, and range for the Project location. [help]				
1/4 Section	Section	Township	Range	
	33/34	10N	11W	
EC 5 11 11 1 111 1				

#### **5f.** Provide the latitude and longitude of the Project location. [help]

• Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83)

46.30442 N Lat. / -124.03852 W long.

**5g.** List the tax parcel number(s) for the Project location. [help]

• The local county assessor's office can provide this information.

Owner	Parcel Number(s)
Port of Ilwaco	73048003011, 73048003009
State of Washington	73031013000

**5h.** Contact information for all adjoining property owners. (If you need more space, use <u>JARPA Attachment C</u>.) [help]

Name	Mailing Address	Tax Parcel # (if known)
Port of Ilwaco	PO Box 307	7304803011, 7303104000,
	Ilwaco, WA 98624	73031011001, 73048003114

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5i. List all wetlands on or adjacent to the Project location. [help]
Not applicable
5j. List all waterbodies (other than wetlands) on or adjacent to the Project location. [help]
Baker Bay
<b>5k.</b> Is any part of the Project area within a 100-year floodplain? [help]
⊠ Yes □ No □ Don't know
51. Briefly describe the vegetation and habitat conditions on the property. [help]

Vegetation and terrestrial habitat conditions are limited within the Project area. The site is in an industrial area within an active marina that serves recreational boating and commercial fishing vessels and is largely devoid of terrestrial vegetation. The Project would occur on an existing wharf and associated bulkhead wall, retaining wall, and rip rap shoreline. Little to no terrestrial and riparian habitat occurs here. The mudline at the base of the existing bulkhead is largely unvegetated and consists of a silty sand, sandy silt slope with rip rap extending on the shore slope to the north and south of the bulkhead. The upland adjacent to the bulkhead is a paved driveway servicing the Safe Coast Seafood facility. Existing vegetation consists of short-statured ruderal species behind the existing bulkhead wall and in viable spaces along the rip rap shoreline. Upland vegetation observed along the shoreline during a 2022 site survey included clover species (*Trifolium species*), Japanese knotweed (*Polygonum cuspidatum*), varios grasses, dandelion (*tatxasum officinale*), and creeping buttercup (*Ranunculus repens*) (GeoEngineers 2022). There is no eelgrass on or adjacent to the Project site (GeoEngineers, 2022).

A creosote timber revetment wall is located along the toe of the north slip slope and derelict creosote piles and cross members are located within the slip adjacent to the bulkhead. The marina is periodically dredged for maintenance to maintain operational draft for the vessels using the marina. The marina dredging is permitted under a separate permit.

#### **5m.** Describe how the property is currently used. [help]

The Project vicinity generally consists of a marina used for year-round moorage of recreational and commercial fishing vessels, upland commercial buildings, and a boatyard. The Project site occurs at a commercial fishing wharf (herein referred to as 'wharf') (Figure 1, Sheets 1 and 2) located within the active Port of Ilwaco Marina (marina). The marina is mostly enclosed by upland to the north, east and southeast, a rubble breakwater to the south, and upland and a jetty to the west and southwest. The jetty and breakwater bound the entrance to the marina (Figure 1, Sheet 1). The wharf is an earth filled structure on the east side and pile supported on the west side. The wharf is protected by a creosote-treated timber bulkhead (to be replaced) along the eastern limits of the wharf (Figure 1, Sheets 1 through 4). The Port of Ilwaco Marina is located waterward of the existing bulkhead. To the north of the bulkhead wall, the shoreline is protected by a low timber retaining wall and large log (Figure 1). To the south of the bulkhead wall, shoreline protection consists of rip rap and concrete rubble (Figure 1). The Safe Coast Seafoods buildings are located on the wharf (Figure 1).

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Figure 1. Project Location Aerial

**5n.** Describe how the adjacent properties are currently used. [help]

The operating Ilwaco Marina is located to the waterside of the bulkhead. The marina is home to commercial and recreational fishing vessels and other recreational vessels. The marina is a busy and important destination for commercial fisheries as it is the first port of call from the mouth of the Columbia River. Safe Coast Seafood facilities and entrance driveway are located to the west and upland of the bulkhead. Waterfront Way and commercial storefronts are located on the upland to the north.

**50.** Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]

The Project site is currently occupied by a creosote-treated timber and steel cable tieback bulkhead that is in disrepair and leaning waterward, at risk of falling into the Ilwaco Marina slip to the east of the bulkhead (Figure 2). Monitoring for continued movement of the bulkhead was initiated in November 2022. Subsequent monthly monitoring events have recorded continued movement of the bulkhead face waterward by as much as ¼ inch in one month at one measuring station along the bulkhead. The failure of the bulkhead would undermine the foundations of the adjacent Safe Coast Seafood buildings, risking potential structural damage and worker/marina user safety if bulkhead failure occurs before it can be replaced. The existing wharf floods during king tides and storm events and is susceptible to sea level rise (Figure 3). There is a rip rap shoreline (Figure 4) to the south of the bulkhead wall and a timber retaining wall (Figure 5) to the north of the bulkhead wall. The retaining wall to the north of the bulkhead consists of creosote-treated timber pilings and horizontal features and is non-functional in its current state due to a gap behind the wall.

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Figure 2. Damaged Bulkhead Wall



Figure 3. Typical Flooding During Storms and King Tides

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Figure 4. Riprap Shoreline to the South of the bulkhead Wall



Figure 5. Retaining Wall to the North of the Bulkhead Wall

The driveway adjacent to the bulkhead is currently closed for all but pedestrian access due to recommended load limitations based on observed movement of the bulkhead and roadway settlement resulting from the bulkhead moving waterward. This roadway was a secondary access for loading and unloading of equipment and cargo when it was operational. Closure of this access to all but pedestrian use negatively impacts the operations of the seafood facilities.

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**5p.** Provide driving directions from the closest highway to the Project location, and attach a map. [help]

- From US 101 North traveling to the west
- In Ilwaco, turn left onto Elizabeth Ave SE
- Turn right onto Howerton Ave SE
- The site is located to the south of the intersection of Howerton Ave SE and Waterfront Way.

# Part 6-Project Description

**6a.** Briefly summarize the overall Project. You can provide more detail in 6b. [help]

The proposed Port of Ilwaco East Bulkhead Resilience Project (herein referred to as the 'Project') would consist of three primary elements;

- 1. Replacing the failing east bulkhead with an anchored steel sheetpile bulkhead (Preferred Alternative)
- 2. Repairing slope protection north and south of the bulkhead an raising top of slope at the head of the slip approximately 1.5 feet to accommodate future sea level rise resilience.
- 3. Paving and regrading the upland wharf area (access driveway) directly landward of the bulkhead to mitigate the effects of sea level rise.

As part of the above elements, creosote-treated timber that configures the external wall of the existing bulkhead and retaining wall will be removed along with select derelict creosote-treated piles next to the bulkhead. Additional derelict creosote piles and cross members will be removed from the slip adjacent to the bulkhead as mitigation for Project impacts resulting from drainage rock fill placement between the existing bulkhead and the new bulkhead necessary to maintain water pressure equilibrium on both sides of the bulkhead. The removal of creosote from the marine environment will also mitigate for impacts associated with the riprap shoreline protection that is proposed to replace the derelict creosote treated timber revetment/retaining wall and associated elements. A fish mix gravel layer will be placed between HTL and the toe of the riprap on the surface of the rip rap slope protection at the head of the slip to provide beach nourishment and habitat improvements for fish passing through the marina as mitigation for Project impacts. Additionally, an approximately 2,510 sf area of derelict timber floats floating timber debris will be removed from the south portion of the marina as mitigation for Project impacts.

Several alternatives were considered prior to identifying the preferred alternative. The following is a summary of the alternatives considered and how they were evaluated as the Project was developed.

#### No Action

- The existing creosote treated timber bulkhead is actively failing with observed movement of up to 0.3 inch since monitoring began in November 2022.
- Left as-is, the bulkhead will eventually fail, which will result in:
  - Permanent access removal by permanently blocking the access driveway adjacent to the bulkhead,
  - Potential damage to buildings/building foundations,
  - Life/safety issue for Safe Coast Seafood workers and marina tenants,
  - Inability for Safe Coast Seafood to maintain operations resulting in loss of income and revenue for this small community.
  - Obstructing a portion of marina (adjacent slip) and making it unusable.
- Removal of bulkhead prior to construction of new bulkhead wall
  - No bulkhead as-builts are available to identify how the existing bulkhead was constructed.
     Associated unknowns increase the risk of removing the structure prior to replacement.

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- Removing the existing structure prior to replacement poses a high risk of slope failure and damage to:
  - the access drive.
  - Safe Coast building foundations, and
  - adjacent marina slip (including obstructing access to parts of the marina and potential damage to float structures).
- Bulkhead failure would pose unacceptable risks to life/safety for Safe Coast Seafood workers and marina tenants.

#### Sheetpile bulkhead placement behind existing bulkhead

- No as-builts: The bulkhead appears to be supported by cable tie backs, possibly anchored to deadman piles behind/shoreward of the bulkhead. There is a potential for:
  - Increased risk of failure if sheet piles were driven behind the existing wall, severing the support provided by the cable tiebacks.
  - Unknown obstructions that could damage or impede sheetpile installation, increasing cost, delays and potential risk of existing slope failure.
- The Project area is restricted by the continued business need for the adjacent access drive and the close proximity of the facility buildings and infrastructure. Space limitations also pose constructability challenges relative to pile and cap placement for a new bulkhead.

#### Cantilever bulkhead waterward of the existing bulkhead

- The cantilever option placed waterward of the existing bulkhead would have essentially the same impacts to marine habitat as the Preferred Alternative and would also require placement of filter rock backfill in the space between the new and the existing bulkhead.
- The placement of the cantilever and Preferred Alternative is dictated by the
  profile of the existing bulkhead which is leaning waterward by as much as 10 degrees in places
  and the need for a usable temporary berth area to replace the berth area rendered unusable by
  the deteriorated and unstable nature of the existing bulkhead.
- The cantilever option would require more steel as the bulkhead sheetpiles would be both longer and thicker to provide the necessary slope support at the site. The requirement for more steel will result in a higher cost to the Port.

#### Preferred Alternative – Anchored Sheetpile Bulkhead

- The Preferred Alternative will result in commensurate environmental impacts (approximately the same footprint, backfill volume, etc.) as the cantilever bulkhead alternative, but will be a more economical solution for the Port.
- The proposed placement of the bulkhead is controlled by the waterward lean of the existing bulkhead face and Safe Coast's need to replace the existing unusable temporary berth area with a usable temporary berth to support the facility's operations.
- The size of the space/void between existing and replacement bulkheads results from the way
  the bulkhead leans waterward and the need for a usable berth area to replace existing one for
  Safe Coast Seafood operations.

The Project also includes increasing the top of slope elevation of the shoreline adjacent to the bulkhead to the north by approximately 1.5 feet to elevation +14 feet MLLW. As part of that work, the existing creosote treated timber revetment that provides limited shore protection to that slop will be removed and replaced with a layer of riprap under a layer fish mix rock as shore protection. Alternatives considered include the following.

- **No Action** This would leave deteriorating creosote treated timber features in the marine environment and would not provide any preparation for future sea level rise protections.
- Replacement with a stone or concrete revetment Placement of a new revetment would likely result in additional benthic/shoreline impacts as the structure would likely occupy a larger footprint.
- Nature based shoreline protection/slope modification This alternative could not be
  accommodated while still maintaining access and operations in both the marina slip and the temporary
  berthing area along the Safe Coast bulkhead as the regraded slope required would limit marina slip
  access significantly.
- **Preferred Alternative** The preferred alternative incorporates an increase to the top of slope elevation as part of sea level rise resilience planning and continued operation of the marina slip and accommodates the replacement of the temporary berthing area along the replacement bulkhead. Rip

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rap shore protection will be placed with a fish mix cover layer that is beneficial to fish passing through the marina.

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

The proposed Project is required for improved the safety, efficiency, and reliable use of the wharf. The Port is a key hub for commercial fishing, seafood and aquaculture processing, and recreation activities that greatly benefit the regional economy. The commercial fishing wharf, operated by Safe Coast Seafoods, is one of the most active in the state, landing roughly \$14 million in commercial seafood each year. Repair of the bulkhead wall is critical to ongoing operations at Safe Coast Seafoods. In its current condition, the bulkhead is in serious structural condition and at risk of failing. Recent biweekly and monthly measurements have been completed to monitor ongoing movement of the bulkhead. The monitoring has recorded movement along 13 monitoring points along the face of the bulkhead ranging from approximately 0.06 inch to up to 0.31 inch waterward i since monitoring began in November 2022. The monitoring indicates that the bulkhead is the process of active failure. Frequent flooding due to high water levels from "king tides" and severe winter storm surges further threaten the structural capacity of the bulkhead.

Bulkhead failure would shut down cargo operations at the Port and negatively impact a wide variety of businesses in maritime and non-maritime sectors including Safe Coast Seafoods. The shutdown of the Safe Coast site due to failure of the bulkhead would lead to a series of economic impacts for many more workers and businesses and the region. Bulkhead failure would also adversely affect the Port of Ilwaco Marina operations, likely fully blocking at least one slip from use and potentially causing damage to adjacent float structures and tenant vessels. Until this Project is completed, the facility is capacity-limited and at risk. The main access driveway to Safe Coast Seafoods has been blocked based on recommended load limitations in an effort to minimize vibration and load resulting from vehicles and machinery using the driveway located adjacent to the failing bulkhead. Without the Project, the eventual closure of the wharf will have cascading negative transportation and economic impacts for the region.

The Project would also serve the following purposes and provide the following benefits:

- The replacement bulkhead will serve as the initial phase to increase the facility's climate change/sea level rise resiliency and will help protect wharf facilities from flooding. The bulkhead will be designed to accommodate the planned increase to wharf/Safe Coast facility ground floor elevations in the future.
- The top of the embankment elevation to the north of the bulkhead will be raised to approximately +14 feet (mean lower low water) MLLW and the existing creosote-treated retaining wall will be replaced with rip rap to improve shoreline protection. The increase to top of bank elevation will mitigate sea level rise impacts between the bulkhead and the marina access pier to the east.
- Re-grading and re-paving of the upland area behind the bulkhead wall will facilitate positive drainage away from the Safe Coast Seafoods buildings and help protect the facilities during flood events.
- The bulkhead replacement would prevent the shoreline from failing into a portion of the active Port of Ilwaco Marina, which would impact operations in the marina and potentially damage adjacent float structures and tenant vessels, if any, present at the time of failure.
- The new bulkhead will be designed to accommodate the temporary mooring of fishing vessels which will allow vessels to unload/load equipment and product and improve efficiencies at the Safe Coast Seafoods facility. Under existing conditions, the timber bulkhead is used for temporary mooring but cannot currently be used for loading/unloading of vessels due to its existing poor, unstable, deteriorating condition.
- The Project will allow trucks to drive safely on the bulkhead again, which will improve the efficiency of cargo transfer operations and improve the port's competitiveness. The adjacent roadway has been closed to vehicle access due to load limitations recommended based on the poor condition of the

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existing bulkhead, including measurements exhibiting ongoing movement of the failing bulkhead waterward as observed during monitoring episodes from November 2022 to the present.

- The removal of creosote-treated wood (north slip revetment, derelict piles and cross members, and portions of the existing bulkhead as safely able) from the marine environment will provide water quality benefits.
- Removal of derelict timber floats and other timber debris present in the south portion of the marina as part of project mitigation. This will remove approximately 2,510 SF of existing overwater coverage from the marina.
- Placement of a layer of fish mix gravel over the rip rap shoreline protection to be placed on the slope at the head of the adjacent slip.

	1					
6c. Indicate the Project category. (Check all that apply) [help]						
□ F	Residential   Instituti	esidential   Institutional   Transportation   Recreation				
	Environmental Enhancement					
6d. Indicate the major elem	ents of your Project. (Check all	that apply) [help]				
☐ Aquaculture	☐ Culvert	□ Float	☐ Retaining Wall			
⊠ Bank Stabilization	☐ Dam / Weir	☐ Floating Home	(upland)			
☐ Boat House	☐ Dike / Levee / Jetty	☐ Geotechnical Survey	⊠ Road			
☐ Boat Launch	□ Ditch	☐ Land Clearing	☐ Scientific  Measurement Device			
☐ Boat Lift	□ Dock / Pier		☐ Stairs			
☐ Bridge	☐ Dredging	☐ Mining	☐ Stormwater facility			
⊠ Bulkhead	☐ Fence	☐ Outfall Structure	☐ Swimming Pool			
☐ Buoy	☐ Ferry Terminal	□ Piling/Dolphin	☐ Utility Line			
☐ Channel Modification	□ Fishway	□ Raft	,			
☐ Other:						

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- **6e.** Describe how you plan to construct each Project element checked in 6d. Include specific construction methods and equipment to be used. [help]
  - Identify where each element will occur in relation to the nearest waterbody.
  - Indicate which activities are within the 100-year floodplain.

The work will occur within the Ilwaco Marina basin, located along the northeast shoreline in Baker Bay, and along the adjacent shoreline at the Safe Coast Seafoods facility (Sheets 1 through 3, attached).

#### **Bulkhead Replacement**

Construction sequencing for the proposed bulkhead replacement will likely be as follows:

- Localized demolition of the existing bulkhead wall (Sheet 4)
- Installation of the new steel sheet pile wall just waterward off the existing bulkhead. (Sheet 5)
- Placement of drainage rock between the existing bulkhead wall and new bulkhead wall (Sheet 7)

The majority of the existing timber bulkhead will be abandoned in place behind the replacement bulkhead in order to protect the existing buildings at the Safe Coast Seafoods facility, as complete removal of the existing timber bulkhead will undermine the stability of the soil behind the bulkhead and the adjacent building foundations threatening Safe Coast buildings, infrastructure, and operations. Portions of the existing creosote-treated bulkhead will be removed as feasible. Localized bulkhead demolition will likely consist of removal of the rotten top several feet of the existing creosote-treated timber piles above the timber wale location. This local demolition will take place above mean higher high water (MHHW). In addition, there may be localized notching of the bulkhead wall to accommodate the installation of the new tie-back ground anchors. Approximately twelve (12) 12-inch diameter creosote treated timber piles and three (3) 12-inch diameter steel pipe piles that are located directly waterward of the existing timber bulkhead will be removed. These piles will be removed by either pulling them out directly using a chain or with a vibratory hammer depending on the Contractors preferred means and methods. The piles will be cut at the mudline if complete removal is not possible or the piles break. Upland demolition will consist of removal of the existing pavement and surface features. (Sheets 1 through 4)

Post-localized demolition, a new steel sheet pile bulkhead wall will be installed in front of the existing timber bulkhead. The bulkhead wall will not increase in length. The top elevation of the new bulkhead wall will be approximately three feet (ft) higher than the existing top of bulkhead to accommodate for high tides and sea level rise. It is anticipated that the steel sheet piles will be driven using a vibratory hammer. The option for impact proofing will also be included in the event that difficult driving conditions are encountered. The sheet pile wall will be approximately 225 linear feet (lf) and the sheet pile tip elevation will be approximately -40 to -50 feet MLLW. The top of the bulkhead pile cap will be set at an elevation of +14.0 feet MLLW. (Sheet 5 through 7)

The replacement bulkhead will include approximately 20 grouted ground anchors extending from the cast-in-place concrete pile caps down to the bedrock layer below the site. The grouted ground anchors will be either high strength steel strands or steel bars that are connected to the pile caps and driven at an approximately 1:1 angle to elevation -70 to -80 feet MLLW. The anchor tie backs will be grouted for a minimum of 25 feet into the underlying siltstone unit (top elevation approximately -57 feet MLLW). The ground anchors will be installed using either land-based equipment or from a barge depending on the Contractors preferred means and methods. The anchor holes will be drilled with a full-length casing. All drill spoils will be contained and prevented from entering marine waters. The anchor holes will be filled with grout using a tremie tube and then pressure grouted after the anchor tendons are installed. The anchors will be tensioned after all anchors have been installed and have reached the required grout and concrete strengths. The cast-in-place concrete pile

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cap will then be completed. The pile caps will be cast-in place in the dry and uncured concrete will not be allowed to come in contact with waters of Baker Bay. (Sheet 7)

The sheet pile placement in front of the existing bulkhead will result in an approximately 2- to 5-foot space between the existing bulkhead and the new bulkhead sheet piles (Sheet 7). The area between the existing structure and the new bulkhead will be backfilled with drainage rock to allow for water to flow in and out of the soil supporting the Safe Coast Seafood facility. It is anticipated that approximately 450 cubic yards of free draining drainage rock backfill will be placed between the existing timber bulkhead and the replacement bulkhead (Table 1). The drainage rock will likely be placed using a clamshell operating from a barge. The clean drainage rock will be obtained from a commercial supplier. This placement will minimize the risk of slope failure that removing the existing structure would exacerbate. The drainage rock placement in the space between the existing and replacement bulkhead structures will minimize additional pressure from trapped groundwater behind the new bulkhead.

The new bulkhead (including drain rock installation area) and pile cap will have a footprint of approximately 1,400 square feet (sf) in marine waters (measured below the high tide line [HTL]) (Table 1). Of the overall footprint in marine waters, 1,000 sf will come into contact with the bottom substrate and have benthic habitat impacts.

#### **Slope Protection**

Approximately 350 sf (approximately 14 cubic yards [cy]) of concrete debris shore protection from the shoreline to the south of the bulkhead wall will be removed to accommodate the bulkhead wall replacement (Sheet 4 and 5, Table 1). Approximately sixteen (16) 12-inch diameter creosote timber piles associated with the existing timber retaining wall will be removed from the shoreline along the north end of the bulkhead wall. The existing creosote-treated timber retaining wall to the north of the bulkhead will be completely removed. The associated piles will be removed by either pulling them out using a chain or with a vibratory hammer depending on the Contractors preferred means and methods. The piles will be cut at the mudline if complete removal is not possible or the piles break during removal.

The small area of concrete rubble shore protection (350 sf, 14 cy) that will be removed from the south portion of the Project to accommodate installation of the new bulkhead will be replaced with approximately 35 cy of riprap in the same 350 sf area to maintain slope stability (Table 1). Of the 35 cy placed along the shoreline, 30 cy will be placed below the HTL (Table 1).

One hundred ninety-eight (198) cy (2,200 sf) of riprap, 172 cy (1850 sf) of which occurs below the HTL, will be placed on the embankment to the north of the new bulkhead to replace the existing creosote treated timber retaining wall and provide shore protection (Sheets 4 through 6, Sheet 8, Table 1). The rip rap slope protection will serve as grade transitions from the vertical bulkhead structure to the adjacent sloped shorelines to the north and south. A layer of fish mix rock will be placed over the riprap located below HTL to provide fish habitat. The embankment height will be increased to an elevation of approximately +14.0 feet, MLLW between the bulkhead and the marina access pier to the east. The purpose of the increased embankment height is to mitigate the effects of sea level rise.

#### Paving and Grading

Upland paving and grading will be completed behind the bulkhead wall to mitigate sea level rise following construction of the new bulkhead (Sheet 6). The driveway will be regraded and repaved with structural fill base course and asphalt pavement. This will consist of 8,000 sf of asphalt repaving. The upland area will be re-graded and re-paved to maintain positive drainage away from the Safe Coast Seafoods buildings. The

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bulkhead will be outfitted with scuppers to allow rainwater to flow into the marina rather than pooling along the driveway or draining toward the Safe Coast facilities.

#### Fill Impacts, Derelict Structure and Creosote Removal

Approximately twenty eight (28) creosote-treated timber piles (12-inch diameter) and three (3) steel piles (12-inch diameter) will be removed adjacent to the existing bulkhead and as part of the north shoreline rehabilitation. In addition, the Port proposes to remove approximately thirty-six (36) 12-inch diameter derelict creosote- treated timber piles and 3 creosote-treated timber pile caps as mitigation for the fill and benthic habitat impacts created by the placement of the new bulkhead wall in front of the existing structure. This will result in approximately 64 total creosote-treated timber piles and 3 steel piles being removed along with approximately 70 If of creosote treated timber retaining wall, and 40 If of creosote treated timber pile caps. (Sheets 3 and 4).

A derelict timber structure approximately 2,510 sf in area will be removed as part of the mitigation for Project impacts. This will result in decreasing overwater coverage in the south portion of the marina at the location of the existing derelict timber structure. (Sheet 9)

Approximately 1,400 sf of fill below the HTL will result from the placement of the new bulkhead and drainage rock backfill (Table 1). Of the overall footprint, 1,000 sf will come into contact with the bottom substrate and result in benthic habitat impacts.

North shoreline riprap placement will occur in a 2,200 sf area, 1,850 sf of which occurs below the HTL and would result in benthic habitat impacts (Table 1). Approximately 750 sf of this will occur waterward of the existing retaining wall. A 6-inch layer of fish mix gravel will be placed below HTL to provide beach nourishment and improved habitat for fish passing through the marina.

South shoreline riprap placement will not result in any additional benthic habitat impacts (Table 1). The removal of approximately sixty-four (64) 12-inch creosote-treated timber piles, three (3) 12-inch steel piles, 70 If of timber retaining wall, and 40 If of derelict creosote-treated timber pile caps, will restore approximately 165 sf of benthic habitat (Table 1) and remove approximately 34 tons of creosote from the marine environment.

Table 1. Approximate Fill Impacts

A stable	Fill below	Fill below	Fill above	Fill above
Activity	HTL (sf)	HTL (cy)	HTL (sf)	HTL (cy)
Bulkhead wall and shoreline protection installation				
Sheetpile installation	400 sf	8o cy	o sf	о су
Bulkhead drainage rock placement	1,000 sf	450 cy	o sf	о су
Rip-rap shore protection and Fish Mix placement (north				
shoreline)	1,850 sf	172 CY	350 sf	26 cy
Concrete rubble removal (south shoreline)	-350 sf	-14 cy	-50 sf	-2 cy
Rip-rap replacement (south shoreline)	350 sf	30 cy	50 sf	5 cy
Subtotal	3,250 sf	718 cy	350 sf	29 cy
Structure removal				
Pile removal adjacent to existing bulkhead	-12 sf	-6 cy	o sf	о су
North shoreline- retaining wall removal	-85 sf	-12 cy	o sf	о су
Derelict pile/timber removal	-68 sf	-12 cy	o sf	о су
Derelict Timber Structure/Debris Removal -South	-2,510 sf	350.67	o sf	0.67
Marina	-2,510 51	-350 cy	0.51	о су
Subtotal	-2,675 sf	-380 су	o sf	о су
Creosote removal from the Environment	34 tons			

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6f. What are the anticipated start and end dates for Project construction? (Month/Year) [help]
<ul> <li>If the Project will be constructed in phases or stages, use <u>JARPA Attachment D</u> to list the start and end dates of each phase or stage.</li> </ul>
Start Date: November 2024 End Date: February 2025   See JARPA Attachment D
<b>6g.</b> Fair market value of the Project, including materials, labor, machine rentals, etc. [help]
\$3.5 million
6h. Will any portion of the Project receive federal funding? [help]
If yes, list each agency providing funds.
Part 7–Wetlands: Impacts and Mitigation
$\square$ 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]
No wetlands within the Project area (GeoEngineers 2022). This section is not applicable
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
<b>7e.</b> 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
<b>7g.</b> Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [help]

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<b>7h.</b> 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 value as a wetland deliner and 2 Ecology wetland category with the JARPA package. <sup>3</sup> Indicate the days, months 4 Creation (C), Re-establish	ation report. based on current West or years the wetland w	tern Washington or Ea	astern Washington	Wetland Rating Sy	vstem. Provide the v	•
Page number(s) for	similar information	on in the mitigat	ion plan, if av	ailable:		
<b>7i.</b> For all filling acticubic yards that	vities identified ir will be used, and	•				e amount in
<b>7j.</b> For all excavatin cubic yards you	g activities identi will remove, and				, type and amo	ount of material in
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]						
<ul> <li>☑ Check here if there are waterbodies on or adjacent to the Project area. (If there are none, skip to Part 9.)</li> </ul>						
8a. Describe how the Project is designed to avoid and minimize adverse impacts to the aquatic environment.						
	[help] □ Not applicable					

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The Project will take place in the water and along the shoreline in the west portion of the Port of Ilwaco Marina which is located along the northeast shore of Baker Bay in Ilwaco, Washington.

The paving and regrading portions of the Project will all occur at the top of the shoreline in the dry. The bulkhead sheetpile wall caps will be cast in place and uncured concrete will not be allowed to come into contact with surface waters. The shoreline rip rap replacement will be placed in the dry to the extent practicable. The bulkhead demolition, placement of the new bulkhead, and appurtenances will be accomplished using equipment operated from a barge(s).

The following best management practices (BMP's) will be implemented for this Project:

#### **General BMPs**

- Containment booms will be used to surround in-water work areas or separate embankment work from surface water. The booms will serve to contain and collect any oily material and/or floating debris potentially released during construction. Oil-absorbent materials will be employed immediately if visible product is observed. Accumulated debris will be collected daily and disposed of at a permitted upland site approved by the owner.
- 2. Hydraulic water jets will not be used to install piles.
- 3. Water quality standards and procedures that limit the impact of pollutants will be observed.
- 4. Land-based staging areas for activities, such as storage of machinery, equipment, materials, and stockpiled soils will be established landward of the top of bank. A silt fence will be installed around the perimeter of the upland work areas and locations where machinery, materials, and stockpiled soils are situated. Any temporary stockpiles will be covered and bermed when not in use.
- 5. All permit requirements will be followed during demolition and construction activities.

#### In, Over, and Near Water BMPs

- 1. In-water construction activities will comply with the in-water construction window (anticipated to be November 1 through February 28)
- 2. Typical construction BMPs for working in, over, and near water will be applied, including activities such as the following.
  - a. Checking equipment for leaks and other problems that could result in the discharge of petroleum-based products or other material into waters of Baker Bay.
  - b. Corrective actions will be taken in the event of any discharge of oil, fuel, or chemicals into the water, including
    - i. Containment and cleanup efforts will begin immediately upon discovery of the spill and will be completed in an expeditious manner in accordance with all local, state, and federal regulations. Cleanup will include proper disposal of any spilled material and used cleanup material.
    - ii. The cause of the spill will be ascertained, and appropriate actions taken to prevent further incidents or environmental damage.

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- iii. Spills will be reported to Ecology Southwest Regional Spill Response Office pursuant to WAC 173-303-145 and WAC 173-182-260.
- 3. Work barges will not be allowed to ground out.
- 4. Excess or waste materials will not be disposed of or abandoned waterward of ordinary high water or allowed to enter waters of the state. Waste materials will be disposed of in an appropriate manner consistent with applicable local, state, and federal regulations.
- 5. Demolition and construction materials will not be stored where wave action or upland runoff can cause materials to enter surface waters.
- 6. Oil-absorbent materials will be present on site for use in the event of a spill or if any oil product is observed in the water.

#### Pile Removal and Installation BMPs

Pile removal BMPs will be applied, including activities such as the following:

- 1. Removal of creosote-treated piles will be conducted consistent with the BMPs established in EPA Region 10, Best Management Practices for Piling Removal and Placement in Washington State, dated February 18, 2016 (EPA 2016).
- 2. While creosote-treated piles are being removed, a containment boom will surround the work area to contain and collect any floating debris and sheen. Debris will be retrieved and disposed of properly.
- 3. The piles will be dislodged with a vibratory hammer when possible and will not be intentionally broken by twisting or bending.
- 4. The piles will be removed in a single, slow, and continuous motion in order to minimize sediment disturbance and turbidity in the water column.
- 5. If a pile breaks above or below the mudline, it will be cut or pushed in the sediment consistent with agency-approved BMPs (USACE, DNR, Ecology and EPA).
- 6. Removed piles, stubs, and associated sediments (if any) will be contained on a barge. If piles are placed directly on the barge and not in a container, the storage area will consist of a row of hay or straw bales, filter fabric, or similar material placed around the perimeter of the barge.
- 7. All creosote-treated material, pile stubs, and associated sediments (if any) will be disposed of by the contractor in a landfill approved to accept those types of materials.
- 8. Steel piling will be installed with a vibratory hammer when possible. Impact hammering will start with light tapping, then increase to full force gradually.
- 9. A bubble curtain and one or more other noise attenuation methods will be used during impact installation or proofing of all steel piling.
- 10. Pile-driving will commence with a soft start procedure (ramping up) in order to alert nearby wildlife, allowing them to move out of the area prior to construction activities. For impact pile driving, contractors will be required to provide an initial set of strikes from the hammer at reduced percent energy, each

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strike followed by no less than a 30-second waiting period. This procedure will be conducted a total of two times before impact pile driving begins.

- 11. Use of a wood cushion block or other sound-reducing method shall be implemented if impact pile driving is to be employed. The use of wood cushion blocks during construction will result in a reduction in underwater noise.
- 12. To avoid impacts to marine mammals, an exclusion zone will be monitored during and immediately before pile driving activities. The exclusion zone will include the entire marina area shoreward of the breakwaters. Although ESA-listed species, including Southern Resident killer whales and humpback whales are not anticipated to occur within the marina where noise impacts could occur, this avoidance measure would provide further protections against potential noise impacts to these species.
- 13. During pile driving activities a qualified observer will monitor the exclusion zone, if any marine mammals are observed within the exclusion zone, all in-water Project activities shall cease. Project activities shall not commence or continue until the marine mammal has either been observed having left the exclusion zone, or at least 15 minutes have passed since the last sighting whereby it is assumed the marine mammal has voluntarily left the exclusion zone.

#### Overwater Concrete Placement Minimization and Concrete Placement BMPs

The Project has been designed to minimize the placement of concrete overwater. Where possible, pre-cast concrete elements will be used. On-site concrete placement, where needed, will follow appropriate BMPs, including the following:

- 1. Wet concrete will not contact surface waters.
- 2. Forms for any concrete structure will be constructed to prevent leaching of wet concrete.
- 3. Concrete process water will not be allowed to enter the water. Any process water/contact water will be routed to a contained area for treatment and will be disposed of at an upland location.

8b. Will your Project impact a waterbody or the area around a waterbody? [help]

☑ Yes □ No

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8c.		•	u prepare dies? [ <u>hel</u>	ed a mitigation plan to compensate for the Project's adverse impacts to non-wetland		
	If Yes, submit the plan with the JARPA package and answer 8d.					
	•	If No,	or Not app	licable, explain below why a mitigation plan should not be required.		
	$\boxtimes$	Yes	□ No	☐ Don't know		

The Project site has limited habitat function and value in its current condition due to the site's location in the busy Port of Ilwaco marina and its use as a temporary berth area by Safe Coast Seafoods. Additionally, the marina, including the Project site, is periodically dredged (under a separate permit) to maintain draft for the vessels using the marina and there are derelict creosote-treated timber piles and structures remaining in the slip adjacent to the existing bulkhead and a creosote-treated timber revetment at the head of the north slope (toe of slope). As such, the site should be considered disturbed in its existing condition.

The proposed Project will have localized impacts that will be minimized to the extent practicable with the BMPs summarized in 8a. Installation of the bulkhead wall, drainage rock, and rip rap will result in approximately 3,250 sf and 718 cy of fill in marine waters (measured below the HTL) (See Table under 8e). Approximately 3,250 sf of the fill in marine waters would come into contact with the bottom substrate and result in benthic habitat impacts. Impacts to the marine environment have been limited to the extent practicable through avoidance, minimization and reduction of impacts and the remaining impacts are mitigated through compensatory mitigation included in the Project action.

#### **Avoidance and Minimization**

The Project proposes to avoid and minimize impacts to habitat to the extent practicable by removing targeted piles (including creosote treated timber) and existing bulkhead features to accommodate placement of the bulkhead as close as possible to the existing bulkhead, minimizing new over water coverage, drainage rock fill placement volume, and benthic impacts to the extent practicable.

The BMPs summarized in 8a will be implemented during Project demolition and construction activities to avoid and minimize environmental impacts from the Project work. All permit requirements will be followed.

#### **Compensatory Mitigation**

Derelict creosote piles and structures present in the adjacent slip will be removed, restoring 165 sf of benthic habitat and removing approximately 34 tons of creosote from the marine environment which will improve the habitat conditions of the marina and lift its value from current conditions. The creosote treated timber revetment and debris present at the head of the adjacent slip will be removed and riprap will be placed as shore protection associated with raising the elevation of the top of the slope as part of sea level rise resilience. The north slip riprap area will be surfaced with fish mix rock to improve the habitat over the area of new riprap placed from the HTL down.

Additionally, floating timber debris will be removed from the south portion of the marina as part of the Project mitigation. This will remove approximately 2,510 sf of overwater coverage currently present in that portion of the marina.

Fill and benthic habitat impacts are anticipated to be offset by the removal of steel piles, and creosote-treated wood (piles, structures, and revetment), and floating debris from the marine environment and placement of a layer of fish mix over the riprap shore protection to be placed at the head of the slip as beach nourishment. The removal of approximately sixty-four (64) 12-inch creosote timber piles, three (3) 12-inch steel piles, 70 If of timber retaining wall, 2,510 sf of floating timber debris and 40 If of derelict timber pile caps, will restore approximately 2,675 sf of benthic habitat and remove approximately = 34 tons of creosote from the marine

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environment (Table 8e). The removal of creosote-treated wood is anticipated to provide both water quality and benthic habitat improvements. A layer of fish mix rock/gravel (approximately 34 cy) will be placed over the portion of riprap placed below the HTL at the head of the slip to improve habitat and provide beach nourishment to that portion of shoreline. A Mitigation Sequencing and No Net Loss Narrative are included in this permit submittal.

- **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]

See response to 8c. The Project site should be considered disturbed habitat in its present state as it is periodically dredged (under a separate permit) for marina maintenance and creosote treated timber piles and features are present in the slip adjacent to the bulkhead and the head of the slip. Additional mitigation will be provided with removal of the derelict floats and timber from the south portion of the marina and placement of a layer of fish mix over the slope stabilization riprap at the head of the bulkhead slip. The proposed mitigation will lift the habitat value and function at the Project site through removal of creosote and overwater coverage from the marine environment and placement of fish mix along the slope at the head of the slip as beach nourishment.

The removal of creosote-treated wood would result in water quality and benthic habitat improvements that would be anticipated to offset potential adverse Project impacts. No additional mitigation is anticipated to be required.

**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
Creosote-treated timber pile removal/demolition for bulkhead replacement	Ilwaco Marina/Baker Bay	In-water, benthic habitat	Permanent	-6	-12
Creosote-treated timber retaining wall removal	Ilwaco Marina/Baker Bay	In-water, benthic habitat	Permanent	-12	-85
Derelict creosote treated timber pile/timber removal	Ilwaco Marina/Baker Bay	In-water, benthic habitat	Permanent	-12	-68
Floating timber debris removal	Ilwaco Marina/Baker Bay	In-water, overwater coverage	Permanent	-350	-2,510
Sheetpile installation	Ilwaco	In-water,	Permanent	80	400
Drainage Rock (behind bulkhead)	Marina/Baker Bay	benthic habitat	Permanent	450	1,00
Rip-rap replacement & fish mix (north shoreline)	Ilwaco Marina/Baker Bay	in-water, benthic habitat	Permanent	172	1,850
Rip-rap replacement (south shoreline)	Ilwaco	In-water,	Permanent	30	350
Rubble/rip-rap removal (south shoreline)	Marina/Baker Bay	benthic habitat	Permanent	-14	-350

<sup>&</sup>lt;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>3</sup> Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

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<sup>&</sup>lt;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.

**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]

450 cy of clean structural fill and base coarse material will be used to repave and regrade the driveway adjacent to the bulkhead will be obtained from a commercial supplier. All of the repaving/regrading work will be completed onshore of the wharf and will not come into contact with waters of the marina/Baker Bay.

The clean, free draining gravel backfill (450 cy) that would be placed in the space created between the new bulkhead sheet piles and the existing bulkhead will be obtained from a commercial supplier. Similarly, the angular rip rap material to replace the slope protection to the north and south of the bulkhead will be obtained from a commercial supplier.

Approximately 172 cy of rip rap slope protection will replace the creosote treated timber revetment at the head of the slip and clean fish mix sand and gravel would be placed below HTL in an approximately 6-inch layer over the riprap. This material will be obtained from a commercial supplier.

**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]

-NA-

#### 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]

,	, 0	•	
Agency Name	Contact Name	Phone	Most Recent Date of Contact
USACE	Brad Johnson	(503) 808-4383	September 7, 2022
USACE	Kate Mott	(360)480-6921	November 10, 2022
USACE	Kinsey Friesen	(503)808-4378	May 5 2023
MARAD	Kristine Gilson	(202) 366-1939	June 7, 2023
WDFW	Lauren Bauernschmidt	(360) 480-2558	June 8, 2023
EPA	Sarah Burgess		January 23, 2023
Ecology	Zach Meyer	(360)481-9885	April 13, 2023
City of Ilwaco	Holly Beller	(360) 642-3145	April 14, 2023
USFWS	Mitch Dennis	(564)-669-0716	May 23, 2023
NOAA	Tom Hausman		March 15, 2023

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

- If Yes, list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: <a href="https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d">https://ecology.wa.gov/Water-Shorelines/Water-improvement/Assessment-of-state-waters-303d</a>.

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⊠ Yes □ No
The Ilwaco Marina waters (Baker Bay) are listed as a Category 5 Water for Fecal Coliform.
<ul> <li>9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the Project in? [help]</li> <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>
1708000605
9d. What Water Resource Inventory Area Number (WRIA #) is the Project in? [help]
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 #.
24 - Willapa
<b>9e.</b> Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [help]
<ul> <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>
⊠ Yes □ No □ Not applicable
<ul> <li>9f. If the Project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [help]</li> <li>If you don't know, contact the local planning department.</li> <li>For more information, go to: <a href="https://ecology.wa.gov/Water-Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases">https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases</a>.</li> </ul>
☐ Urban ☐ Natural ☐ Aquatic ☐ Conservancy ☒ Other: <u>High Intensity</u>
<ul> <li>9g. What is the Washington Department of Natural Resources Water Type? [help]</li> <li>Go to <a href="http://www.dnr.wa.gov/forest-practices-water-typing">http://www.dnr.wa.gov/forest-practices-water-typing</a> for the Forest Practices Water Typing System.</li> </ul>
⊠ Shoreline □ Fish □ Non-Fish Perennial □ Non-Fish Seasonal
<ul> <li>9h. Will this Project be designed to meet the Washington Department of Ecology's most current stormwater manual? [help]</li> <li>If No, provide the name of the manual your Project is designed to meet.</li> </ul>
Name of Manual.
<ul><li>9i. Does the Project site have known contaminated sediment? [help]</li><li>If Yes, please describe below.</li></ul>
□ Yes ⊠ No
9j. If you know what the property was used for in the past, describe below. [help]
The Ilwaco marina area has been used for commercial and recreation fishing for more than 100 years. The Safe Coast "peninsula" was originally occupied by a dock that accommodated a train track for timber shipping. Safe Coast Seafood was previously operated by Jessie's Ilwaco Fish Company and historically occupied by a cannery.
<ul> <li>9k. Has a cultural resource (archaeological) survey been performed on the Project area? [help]</li> <li>If Yes, attach it to your JARPA package.</li> </ul>

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⊠ Yes	□ No			

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**91.** 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]

The species in the table below have the potential to occur within the Project vicinity. See the attached Biological Evaluation for additional information.

**ESA-Listed Species with Potential to Occur Within the Project Action Area** 

Species	ESU/DPS	Scientific Name	Agency	Federal Status	Critical Habitat
Chinook	Lower Columbia River ESU	Oncorhynchus tshawytcha	NMFS	Threatened	Occurs in Project
Salmon	Snake River fall-run ESU			Threatened	Area
	Snake River spring/summer-run ESU			Threatened	
	Upper Columbia River spring-run ESU			Endangered	
	Upper Willamette River ESU			Threatened	
Chum Salmon	Columbia River ESU	O. keta	NMFS	Threatened	Occurs in Project Area
Coho Salmon	Lower Columbia River ESU	O. kisutch	NMFS	Threatened	Occurs in Project Area
Sockeye Salmon	Snake River ESU	O. nerka	NMFS	Endangered	Occurs in Project Area
Steelhead	Lower Columbia River DPS	Onocorhynchus	NMFS	Threatened	Occurs in Project - Area
	Middle Columbia River DPS	myskiss		Threatened	
	Snake River Basin DPS			Threatened	
	Upper Columbia River DPS			Threatened	
	Upper Willamette River DPS			Threatened	
Green sturgeon	Southern DPS	Acipenser medirostris	NMFS	Threatened	Occurs in Project Area
Eulachon	Southern DPS	Thaleichthys pacificus	NMFS	Threatened	Occurs in Project Area
Sea turtles	Leatherback	Dermochelys coriacea	NMFS	Endangered	None in Project Area
Killer Whale	Southern Resident	Orcincus orca	NMFS	Endangered	None in Project Area
Humpback Whale	Central America DPS	Megaptera novaeangliae	NMFS	Endangered	None in Project Area
	Mexico DPS			Threatened	None in Project Area
Bull Trout	N/A	Salvelinus confluentus	USFWS	Threatened	None in Project Area
Western Snowy Plover	N/A	Charadrius nivosus nivosus	USFWS	Threatened	None in Project Area
Marbled Murrelet	N/A	Brachyramphus marmoratus	USFWS	Threatened	None in Project Area
Streaked Horned Lark	N/A	Eremophila alpestris strigata	USFWS	Threatened	None in Project Area

**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]

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The following Washington Department of Fish and Wildlife Priority Habitats and Species could occur in the Project vicinity.

- Coho Salmon (Oncorhynchus kisutch)
- Winter Steelhead (Oncorhynchus mykiss)
- Fall Chum (Oncorhynchus keta)
- Fall Chinook (Oncorhynchus tshawytscha)
- Marbled Murrelet (*Brachyramphus marmoratus*)
- Shorebird concentrations
- Waterfowl concentrations
- Wetlands
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Purple martin (*Progne subis*)

# Part 10-SEPA Compliance and Permits

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

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

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]				
For more information about SEPA, go to <a href="https://ecology.wa.gov/regulations-permits/SEPA-environmental-review">https://ecology.wa.gov/regulations-permits/SEPA-environmental-review</a> .				
$\square$ A copy of the SEPA determination or letter of exemption is included with this application.				
oxtimes A SEPA determination is pending with City of Ilwaco (lead agency). The expected decision date is .				
☐ I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]				
☐ This Project is exempt (choose type of exemption below).				
<ul> <li>□ Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?</li> <li>□ Other:</li> </ul>				
☐ 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				

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Washington Department of Fish and Wildlife:				
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       □ Non-Federally Regulated Waters				
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: <a href="mailto:d13-pf-d13bridges@uscg.mil">d13-pf-d13bridges@uscg.mil</a>				
☐ Bridge Permit ☐ Private Aids to Navigation (or other non-bridge permits)				
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)				
<b>Tribal Permits:</b> (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).				

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# 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)

Tracy Lofstrom
Applicant Printed Name

Applicant Signature

101	30	1/7	2
4/	0	1	_
-			

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.

Victoria England

Authorized Agent Printed Name

Authorized Agent Signature

July 3, 2023

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.

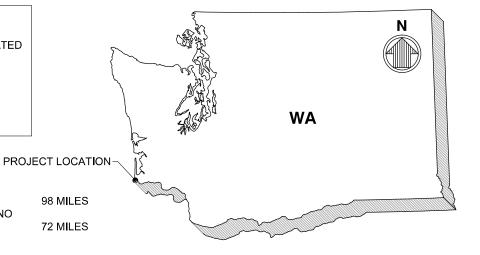
If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2018

TIDAL DATUM:

BASED ON NOAA TIDAL STATION NO. 9440581, IN US FEET. HTL/OHW DELINEATED BY GEOENGINEERS DECEMBER, 2022.

LEVELS:

MHHW: +8.07' MHW: +7.37' MLW: 1.35' MLLW: +0.00' OHW (DELINEATED): APPROX. +11.50'



DIRECTIONS TO SITE FROM SEATTLE:

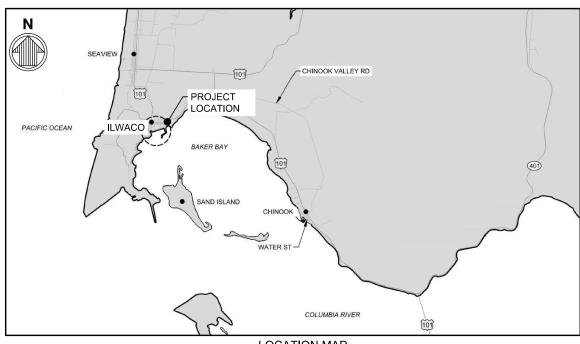
1. I-5 S, US-101, WA-8 AND US-12 TO WA-107 S/S MAIN ST IN MONTESANO

2. TAKE US-101 TO ILWACO

3. ARRIVE AT PROJECT SITE

PROJECT ADDRESS: PORT OF ILWACO

117 HOWERTON AVE SE ILWACO, WA 98624 VICINITY MAP



LOCATION MAP

APPLICANT:

PORT OF ILWACO

ADJACENT PROPERTY OWNERS:

1) PORT OF ILWACO

LOCATION:

ION: PORT OF ILWACO

117 HOWERTON AVE SE ILWACO, WA 98624 46.30442 N, -124.03852 W

LAT/LONG:

DATUM:

MLLW

SHEET: 1 OF 9 DATE: JUNE 2023

PROPOSED PROJECT: PORT OF ILWACO EAST BULKHEAD RESILIENCE PROJECT

IN: BAKER BAY NEAR/AT: ILWACO

COUNTY: PACIFIC SEC: 33/34 T: 10 N R: 11 W



ADJACENT PROPERTY OWNERS: 1. CITY OF ILWACO

2. STATE OF WASHINGTON
3. STARLIGHT ONE LLC.

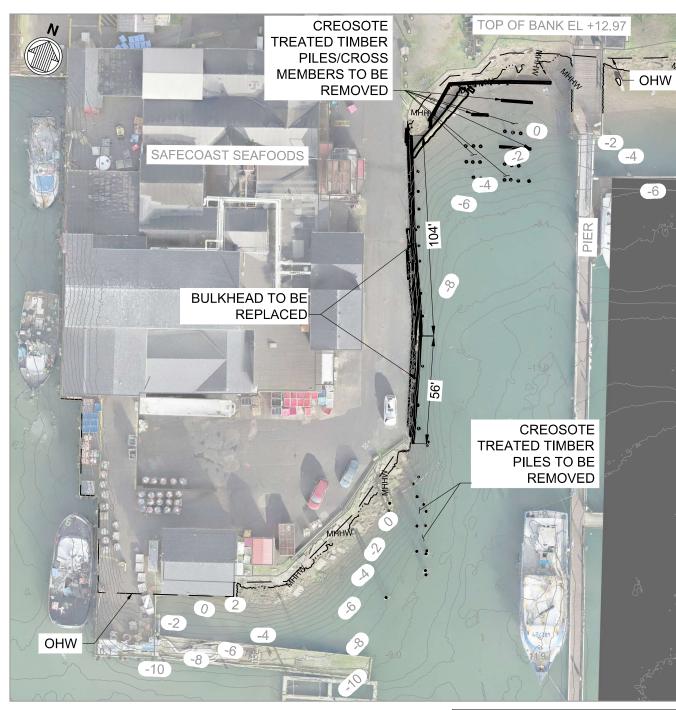
#### Parcel Map

APPLICATION BY: Port of Ilwaco

AT: ILWACO

COUNTY: PACIFIC SHEET 2 OF 9

DATE: JUNE 2023



**LEGEND** 

PILES

PLAN - EXISTING CONDITIONS

SCALE: 1" = 50'

CREOSOTE-TREATED REVETMENT (TO BE REMOVED)
CREOSOTE-TREATED LOG (TO BE REMOVED)
BULKHEAD (TO BE REMOVED)

LEVELS: MHHW: +8.07' MLW: 1.35' OHW (DELINEATED):

MHW: +7.37' MLLW: +0.00' FED): APPROX. +11.50'



SCALE: 1"=50'

APPLICANT:

PORT OF ILWACO

ADJACENT PROPERTY OWNERS:

1) PORT OF ILWACO

LOCATION: PORT OF ILWACO

117 HOWERTON AVE SE ILWACO, WA 98624

LAT/LONG: 46.30442 N, -124.03852 W

DATUM: MLLW

SHEET: 3 OF 9 DATE: JUNE 2023

PROPOSED PROJECT: PORT OF ILWACO EAST BULKHEAD RESILIENCE PROJECT

IN: BAKER BAY
NEAR/AT: ILWACO

COUNTY: PACIFIC SEC: 33/34 T: 10 N R: 11 W

NEAR/AT: ILWACO

COUNTY: PACIFIC

T: 10 N

SEC: 33/34

STATE: WA

R: 11 W

PORT OF ILWACO

DATUM:

SHEET: 4

MLLW

OF 9 DATE: JUNE 2023

SHEET: 5

OF 9 <u>DATE:</u> JUNE 2023

SEC: 33/34

T: 10 N

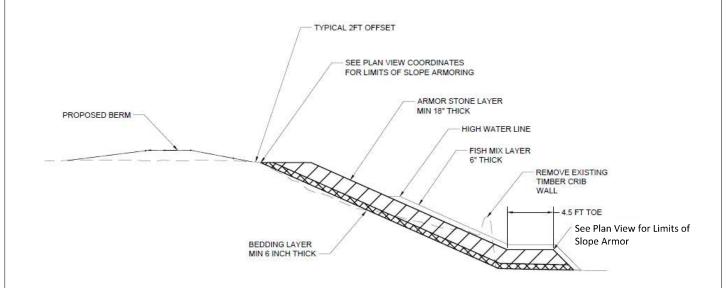
R: 11 W

File: Q: \SEA \213282\20 CADD \\_Active \\_Permit\\_Sheetset\213282\_F4

39'

**OHW** 

File: Q: \SEA \213282 \20 CADD \\_Active \\_Permit\\_Sheetset\213282\_F5





APPLICANT: LOCATION: PORT OF ILWACO PROPOSED PROJECT: PORT OF ILWACO PORT OF ILWACO 117 HOWERTON AVE SE EAST BULKHEAD RESILIENCE PROJECT ILWACO, WA 98624 ADJACENT PROPERTY OWNERS: LAT/LONG: 46.30442 N, -124.03852 W IN: BAKER BAY NEAR/AT: ILWACO PORT OF ILWACO COUNTY: PACIFIC DATUM: STATE: WA MLLW SEC: 33/34 T: 10 N R: 11 W SHEET: 8 OF 9 <u>DATE:</u> JUNE 2023



DATUM:

SHEET:

MLLW

9 OF 9

DATE: JUNE, 2023

NEAR/AT: PORT OF ILWACO

T: 10 N

COUNTY: PACIFIC

SEC: 33/34

STATE: WA

R: 11 W

0-15F41213282121 GISImans1213282 IlwacoEigura

# WASHINGTON STATE Joint Aquatic Resources Pern

# US Army Corp of Engineers Seattle District

WASHINGTON STATE	Seattle [
t Aquatic Resources Perm	it
Application (JARPA) [help]	

# Attachment E: Aquatic Use Authorization on Department of Natural Resources (DNR)-managed aquatic lands [help]

AGENCY USE ONLY
Date received:;   Town
☐ Application Fee Received; ☐ Fee N/A
☐ New Application; ☐ Renewal Application
Type/Prefix #:; NaturE Use Code:
LM Initials & BP#:
RE Assets Finance BP#:
New Application Number:
Trust(s):; County:
AQR Plate #(s):
Gov Lot #(s):
Tax Parcel #(s):
i

Complete this attachment and submit it with the completed JARPA form <u>only</u> if you are applying for an Aquatic Use Authorization with DNR. Call (360) 902-1100 or visit <a href="http://www.dnr.wa.gov/programs-and-services/aquatics/leasing-and-land-transactions">http://www.dnr.wa.gov/programs-and-services/aquatics/leasing-and-land-transactions</a> for more information.

- DNR recommends you discuss your proposal with a DNR land manager before applying for regulatory permits. Contact your regional land manager for more information on potential permit and survey requirements. You can find your regional land manager by calling (360) 902-1100 or going to <a href="http://www.dnr.wa.gov/programs-and-services/aquatics/aquatic-districts-and-land-managers-map">http://www.dnr.wa.gov/programs-and-services/aquatics/aquatic-districts-and-land-managers-map</a>.
   [help]
- The applicant may not begin work on DNR-managed aquatic lands until DNR grants an Aquatic Use Authorization.
- Include a \$25 non-refundable application processing fee, payable to the "Washington Department of Natural Resources." (Contact your Land Manager to determine if and when you are required to pay this fee.) [help]

DNR may reject the application at any time prior to issuing the applicant an Aquatic Use Authorization. [help] Use black or blue ink to enter answers in white spaces below.

1. Applicant Name (Last, First, Middle)			
Lofstrom, Tracy			
2. Project Name (A name for your project that y	rou create. Examples: Smith's Dock or Seabrook Lane Development) [help]		
Port of Ilwaco East Bulkhead Resilience Pr	roject (Project)		
3. Phone Number and Email			
(360) 642-3143, tlofstrom@portofilwaco.org			
<b>4.</b> Which of the following applies to Applicant? Check one and, if applicable, attach the written authority – bylaws, power of attorney, etc. [help]			
☐ Corporation	□ Individual		
☐ Limited Partnership	☐ Marital Community (Identify spouse):		
☐ General Partnership			
☐ Limited Liability Company	⊠ Government Agency		
Home State of Registration:	☐ Other (Please Explain):		
-			

5.	Washington UBI (Unified Business Identifier) number, if applicable: [help]	
6.	Are you aware of any existing or previously expired Aquatic Use Authorizations at the project location	?
	☐ Yes ☒ No ☐ Don't know	
	If Yes, Authorization number(s):	
7.	Do you intend to sublease the property to someone else?	
	☐ Yes   ⊠ No	
	If Yes, contact your Land Manager to discuss subleasing.	
8.	If fill material was used previously on DNR-managed aquatic lands, describe below the type of fill ma and the purpose for using it. [help]	terial
int Pic	n 1968, the filling in of the former tidelands made the former Pioneer Packing Company cannery platform to a peninsula at the northwest corner of the mooring basin (USC&GS 1968;USGS 1969). The former Pioneer Packing Company cannery became Jessie's Ilwaco Fish Company in 1961, and the property is some to Safe Coast Seafoods.	
To	o be completed by DNR and a copy returned to the applicant.	
Sigi	gnature for projects on DNR-managed aquatic lands:	
	oplicant must obtain the signature of DNR Aquatics District Manager OR Assistant Division Manager if the oject is located on DNR-managed aquatic lands.	ne
Dep pur	a designated representative of the Dept. of Natural Resources, am aware that the project is being properts. of Natural Resources-managed aquatic lands and agree that the applicant or his/her representative irsue the necessary regulatory permits. My signature does not authorize the use of DNR-managed aquands for this project.	may

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 ORIA-16-016 rev. 10/2016

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