





DEPARTMENT OF STATE LANDS BEND FIELD OFFICE

## APPLICATION TO CREATE AND PURCHASE NEW LANDS WITHIN A STATE-OWNED WATERWAY (SUBMERGED/SUBMERSIBLE LANDS) \*

Please print clearly.

Applicant Name(s): Port of Astoria					Phone: 503-741-3300	
Address:	dress: 422 Gateway Ave. Suite 100				Fax:	
City:	Astoria		State: OR		E-mail: mmcgrath@portofastoria.com Zip Code: 97103	
I (we) hereby	make applicat	tion to fill-in a	and subsequent	tly purcha	se the State-ov	vned waterway
that is adjacer	nt to the follow	ving described	upland prope	rty:		
County		Section	Township	Range	Tax Lot	Acres (to be filled in)
Clatsop (	County	13	8N	10W	810130000100	1.5
(Attach additional sheets if necessary)					Total Acres	1.5
Submerged [	Submersibl	above include le  Subme ds created is	rged & Subme	ersible 🗹		☐ Not Sure ☐
•		iewed for Ren I Fill Permit nu		•	ng? YES of being drafted - JPA to be	
Describe the	-	rpose of crea	ting New Lar	ıds:		
,						

<sup>\*</sup> Attach with this application a map and a description of the New Lands to be created.

\* **Application fee** for the creation and subsequent request to purchase New Lands is \$1,000. Application fee must be received for application to be considered complete.

#### **PROCEDURES**

Please read the procedures below on completing a request for: 1) permission to fill and create New Lands within a State-owned waterway, and2) creating New Lands, and3) purchasing New Lands after creation:

#### 1: Permission to Create New Lands: ORS 274.905 - 274.940, OAR 141-068

- a) Any person requesting to create New Lands from State-owned submerged and submersible lands shall meet with the Department staff to discuss the proposed project and use before submitting an application to the Department. This meeting may be in person or through other means acceptable to the Department. The Department may invite other government entities to take part in a pre-application meeting.
- b) Submission of this application indicates the request of an entity (Public Body or private individual) to create New Lands within a State-owned waterway and meets the obligations of OAR 141-068. NOTE: This application IS NOT an application for approval of removal and fill work within waters of the state. Any approved application to create New Lands may also require a Removal and Fill Permit from the Department using a separate application and following a separate process per ORS 196 & OAR 141-85.
- c) Upon submission, this application will be given consideration by the Department, including evaluation of the financial, natural, cultural, navigational, recreational, and impacts on public access to the waterway as a result of the fill. All applications are subject to a public process to receive comments on the project. Adjacent property owners, interested parties, lessee's (if applicable), tribal, federal, state, and local agencies, port districts, watershed councils, national estuary programs, and soil and water districts are notified during the evaluation. Any significant comments received as a result of this process must be addressed prior to approval. Creation of New Lands will not be approved without the approval of the owner of the adjoining or opposite upland on the same side of the body of water (ORS 274.920).
- d) After the public review process and internal evaluation of the New Lands creation request are complete, the Department will decide on whether to recommend to the State Land Board approval of the fill. State Land Board approval is required for the <u>purchase</u> of New Lands subsequent to their creation. The Department will seek Land Board approval for creation and subsequent purchase together in one request. Written notice of approval or denial will be provided to the applicant.

#### 2: Creating New Lands

- a) New Lands may be created only with written approval from the Department.
- And as applicable, separately attaining a removal and fill permit from the Department.
- c) Creating the new lands must be done in such a manner that all removal and fill permit requirements are met.
- d) Any mitigation fees required relating to the removal and fill permitting process do not apply to the purchase of the New Lands once they are created.

#### 3: Purchasing the New Lands

- a) Once the New Lands have been created, the creator of the New Land has the opportunity to purchase the New Land from the Department. ORS 274.925 through 274.937 discuss the rights of a public body or private individual to purchase New Lands.
- b) The Department will require the applicant to obtain a survey by a licensed surveyor, at their own cost, of the New Lands to define the area of State-owned waterway to be purchased.

- c) The sale of New Lands shall be a negotiated sale subject to the provisions of OAR 141-068-0110. A negotiated sale may require an appraisal of the New Lands created at the applicant's expense.
- d) Based on the results of the public review process, the Department reserves the right to require a quit-claim deed or access easement for the submerged and/or submersible lands adjacent to the New Lands created (OAR 141-068-0080) to maintain public trust values.
- e) If the New Lands are not purchased within the time period required by ORS 274.925 through ORS 274.937, then "... the department may sell, lease or trade new lands created upon submersible or submerged lands owned by the state in the same manner as provided for lands acquired as an investment for the Common School Fund in ORS 274.085 or ORS chapter 273." (ORS 274.915(2))

ACKNOWLEDGMENT: By signing this application, I agree that I have read and fully understand

the procedures above, and all sections of this	application.	
I acknowledge that this application is for the pusubsequent purchase of the New Lands.	urpose of filling in a state-	owned waterway and
☑ I have conducted a pre-application meeting wi	th a DSL employee.	
☑ I acknowledge that this request will be taken to request includes the intent to purchase the New La	o the State Land Board fo ands.	r review and approval if the
☑ I acknowledge that filling in a State-Owned wa ORS196 & OAR 141-085.	terway may require a Re	moval and Fill Permit per
☑ I acknowledge that purchase of New Lands creeasement for the submerged and/or submersible I 068-0090).	eated may require a quit- ands adjacent to the New	claim deed or access Lands created (OAR 141-
✓ I have included a map and description for the l with the \$1,000.00 non-refundable application feet right to reject this application at any time before cr	The Department of State	Lands (DSL) reserves the
I acknowledge that a lease, sale or trade of the	e New Lands created may	occur if not purchased within
the time period prescribed by ORS 274.915.		\$1,000 application fee to be paid via online payment porta after submittal
MUNE Coult-	10-12-23	

Date

Send completed application and fee to: Oregon Department of State Lands Real Property Program 1645 NE Forbes Rd., Ste. 112 Bend, Or 97701

Applicant's Signature

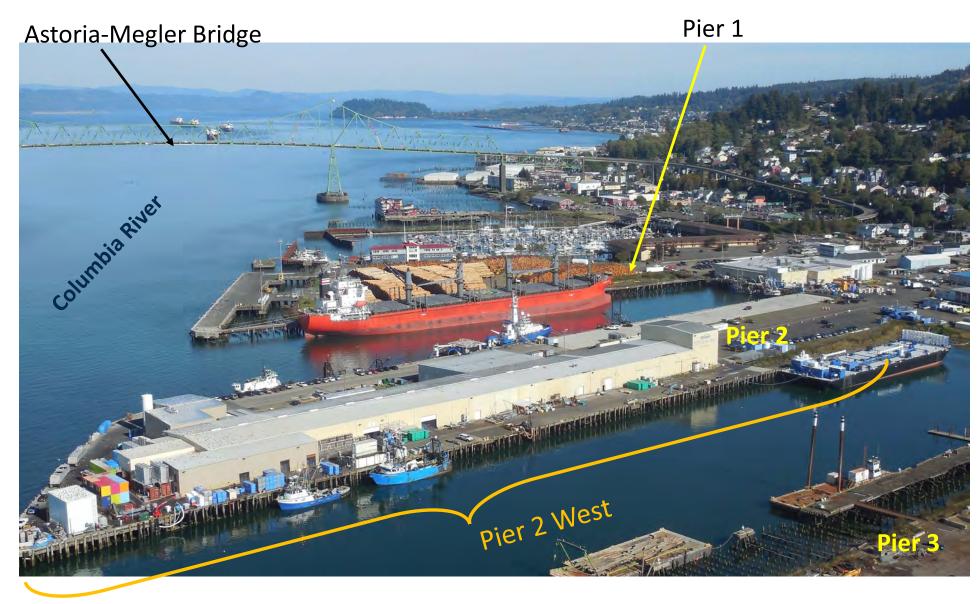
#### **DEFINITIONS**

**Submerged Lands:** Lands lying below the line of ordinary low water of all navigable waters within the boundaries of this state as heretofore or hereafter established, whether such waters are tidal or nontidal. (ORS 274.005).

**Submersible Lands:** Lands lying between the line of ordinary high water and the line of ordinary low water of all navigable waters and all islands, shore lands or other such lands held by or granted to this state by virtue of her sovereignty, wherever applicable, within the boundaries of this state as heretofore or hereafter established, whether such waters or lands are tidal or nontidal. [1967 c.421 §98 and 1967 c.616 §13; 1969 c.594 §31; 1991 c.217 §3; 2003 c.253 §20] (ORS 274.005)

**New Lands:** Those lands protruding above the line of ordinary high water, whether or not connected with the adjoining or opposite upland or riparian lands on the same side of the body of water that were created upon submersible or submerged lands by artificial fill or deposit on or after May 28, 1963. (ORS 274.905(2)(a)).

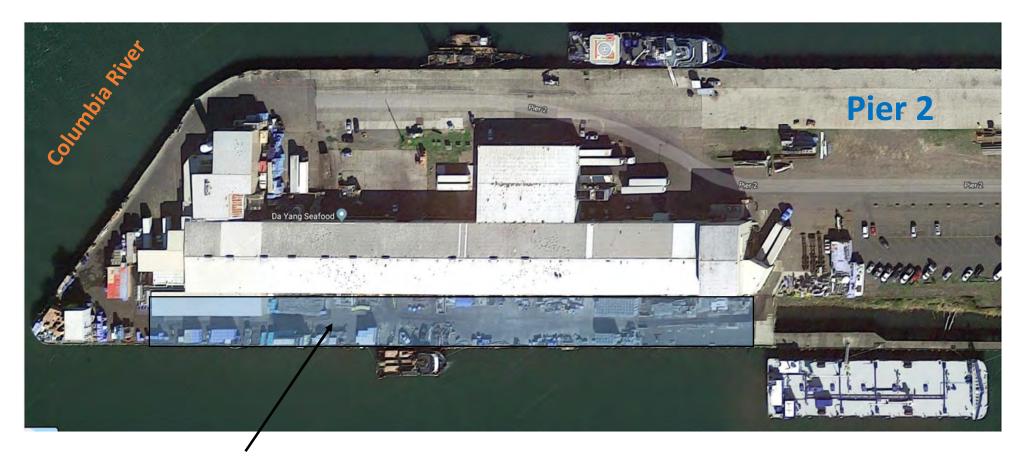
**Public Body:** means the State of Oregon or any port organized under the laws of this state or any dock commission of any city of this state. [1963 c.376 §1; 1967 c.421 §175; 1973 c.328 §1; 2015 c.804 §1]



Aerial View of Pier 2 West



Aerial View of Pier 2 West - Semi-Opaque Blue Box is an Approximation of the Area and Location of the New Land



Blue box indicates the area of new land to be created.

The total area of new land is approximately 1.5 acres.

A formal survey & legal description should be ready by mid-November 2023. However, the boundary of the parcel and its size will not change substantially from that represented here.

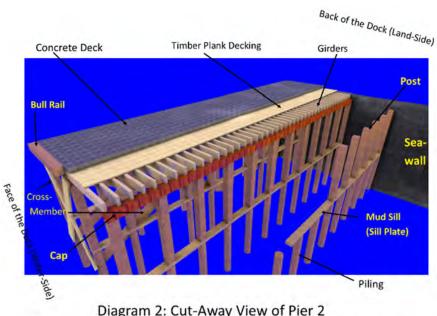
### APPLICATION TO CREATE AND PURCHASE NEW LANDS WITHIN A STATE-OWNED WATERWAY - SUPPLEMENT

Port of Astoria – Pier 2 West Rehabilitation

The purpose of the new lands is to rehabilitate Pier 2 West at the Port of Astoria. The best rehabilitation option consists of a new steel sheet pile wall installed at the face of the existing dock; thus, the existing dock would be completely removed and replaced by seawall and backfill. The size of the existing pier would not increase. The purpose of this Supplement is to provide background information on Pier 2 West and summarize the rationale as to why this is the best rehabilitation option.

#### 1. Pier 2 West Overview

Pier 2 West is an elevated timber dock fronting a finger of land. Below is a diagram illustrating how the dock is currently structured. Originally built in the 1940s (Whittington & Hoffman, 2019, p. 1), Pier 2 West is an elevated timber dock fronting a finger of land and retained by a vertical timber and steel bulkhead wall. The bulkhead wall extends along the back (east) edge of the timber dock and runs the full length of the dock along Pier 2 West. A long, pre-engineered steel framed warehouse building, along with multiple building additions, is located on the fill behind the bulkhead wall. It is estimated that the last major renovation work was completed in the 1960s.



This diagram is intended only to impart a general understanding of the Pier 2 West structure for purposes of the PiDP grant review process.

It is not entirely to scale and is not based on engineering drawings.

#### 2. Condition of Pier 2 West

This section outlines the current condition of the dock and provides detailed explanation as to why the pier must be rehabilitated soon.

Pier 2 West is in very poor condition – both the dock and seawall. Sixty-two percent of the bents were rated as "Urgent" or "Critical" by the Oregon Dept of Transportation in 2017. Weight restrictions were imposed and sections of the dock cordoned off and prohibited from use because of bearing loss. Thirty-one percent of the posts need to be replaced. Eight hundred and forty discrete areas of the dock have suffered bearing loss. Localized seawall failures have caused sudden, catastrophic subsidence (very similar to a sinkhole) on the west side of the warehouse, damaging capital infrastructure, interrupting production, and necessitating immediate, expensive repairs. "Together, the ground subsidence and deteriorating dock are negatively impacting tenant operations and pose increasing risk to the users and the warehouse structures in the vicinity" (KPFF, 2021a, p. 2-3).

From an operational standpoint, the holes in the deck pose the greatest interference to operations. The holes may develop over time or appear suddenly. Regardless, the only current option is to cover the holes with large steel plates to distribute the loads over adjoining areas of the dock so that operations may continue. As the Port's engineering consultants have stated, Pier 2 West is in poor condition and has little to no remaining design life (Id., p. 4).

This project began in 2019 when the Port retained an engineering firm to investigate settling issues with the Pier 2 warehouse that were suspected to have some nexus to the condition of the pier and/or seawall. The conclusion of the engineers is that the most likely cause of the settling is the condition of the existing seawall/bulkhead wall (GRI, 2020, p.1; Whittington & Hoffman, 2019, p. 7, 12). The seawall is less than four feet from the west side of the warehouse. The seawall is corroded and flaking, section loss has occurred, portions are out of plumb, and the top of the wall appears to have rotated outward (Whittington & Hoffman, 2019, p. 14). Although FEMA reported that the seawall is 17 feet deep, no substantiation for this assertion could be located and KPFF was unable to determine the exact depth of the wall. No evidence of tie-back anchors was apparent (Id., p. 4). Original drawings of the seawall could not be located. Based on the available information, it appears that the seawall is corroded to the point of structural failure; even if the wall retains some structural integrity, the wall's inadequate embedment (Id.) and lack of tie-back anchors render the wall compromised to a degree that continued reliance on the wall is ill-advised.

Further, KPFF noted that the existing timber dock appears to be providing lateral support for the seawall (Shanahan & Ready, 2021, p. 2; Whittington & Hoffman, 2019, p. 4). In other words, the seawall failure has very likely progressed to the point that the dock is supporting the seawall. Even in excellent condition, the dock is not designed for such loads; the seawall should be independently stable. Therefore, if the failure of the seawall is the main contributor to the ground subsidence, and the seawall has failed to a point that the dock is providing some of the lateral support to the seawall, then the progressive failure of the dock is also contributing to the ground subsidence on Pier 2 (Id., p. 7).

In sum, the Port's engineering consultant has confirmed that both the dock and the existing seawall are failing.

#### 3. The Economic Importance of Pier 2 West

The economic importance of Pier 2 West is outlined in the brochure attached to this Supplement (below).

#### 4. Rehabilitation Option Analysis

The selected rehab option is to install a new full height seawall at the face of the existing dock and then backfill behind it, thus creating new land. This is the best option for the reasons discussed in this section.

#### A. Safety

The existing dock has insufficient capacity to resist code-level seismic ground movements. Soil liquefaction and lateral spread would lead to the failure of the existing seawall, the existing elevated timber dock, and the adjacent building foundation.

Of the design alternatives posited and evaluated by the engineering consultant, only the selected option adequately addresses seismic vulnerabilities; it is the only practicable solution that will facilitate the complete design of improvements for code-level seismically induced forces and ground movements (i.e., soil liquefaction and lateral spreading). This is so because only this option allows for the full required ground soil improvements outside the existing footprint of the warehouse building ("ground improvement" refers to densification or strengthening of a volume of soil designed to stabilize subsurface conditions). Moving the seawall closer to the warehouse (i.e., a new seawall that is not installed at the face of the existing dock) renders the available space insufficient to install the required ground improvements (KPFF 2021c, pgs. 7-10).

#### **B. Ground Subsidence**

A seawall that is closer to the warehouse increases the risk of ground subsidence during construction because of the proximity of the new seawall to the existing warehouse foundation (west side); impact pile drivers and vibratory hammers typically cause nearby ground to consolidate and settle, which would likely cause significant [additional] settlement of the already-subsiding western line of warehouse footings. (see KPFF, 2021c, p. 8). The selected option minimizes the potential for such damage to existing infrastructure, as compared to the other options.

#### C. Stormwater Collection

The selected option is the only option that can ensure the long-term collection - and therefore the proper treatment - of 100% of stormwater runoff from the west side of the warehouse and pier. Other options involve an above-water pile-supported deck with inherent structural characteristics that make it very difficult to collect 100% of the

stormwater runoff, which would result in untreated runoff being discharged into the waters of the Columbia River (KPFF 2021b, p. 8; KPFF 2021c, p.9).

#### D. Environmental Damage

Although all feasible rehabilitation options will inevitably generate environmental effects during construction, only the selected option eliminates long-term, ongoing environmental effects associated with annual observation, maintenance, and repair activities of the over-water pile-supported dock. All observation, maintenance and repair activities for this option will occur at the finished grade of the fill and will not involve work in the waters of the Columbia River. Further, other options leave stormwater and other utility improvements hanging beneath the dock structure, exposed to wind, waves, and brackish water - all of which degrade the utility infrastructure much faster than below-ground utilities and thereby increase the risk of discharge of contaminants to the Columbia River should a failure occur.

#### E. Ongoing Maintenance

The selected option is the least expensive option over the long-term horizon in terms of ongoing maintenance requirements. For the existing pier, those costs are substantial. A reduction in long-term maintenance costs will result in greater financial independence of the Port, which will, in turn, benefit the state with a corresponding reduction in dependence on state assistance for those needs. This will also benefit the state by providing a more enduring source for the economic benefits detailed in the Brochure below.

Additionally, the selected option is the least expensive in terms of environmental costs: not only is this the only option that guarantees collection of 100% of stormwater runoff (KPFF 2021c, p.9), but only this option eliminates all the environmental effects associated with regular maintenance and repair activities of a pile-supported dock. As to the latter, annual maintenance work generates CO<sub>2</sub> emissions from engine exhaust (cranes, vessels, transport trucks, etc.), additional road miles from commercial suppliers of the necessary materials for maintenance activities, and the associated consequential increase in road accidents & injuries.

#### F. Risk of Cost Overruns

Because other rehab options involve the installation of new piles within the footprint of the existing pier, construction delays and budget exceedances caused by sub-surface ground obstructions are a significant risk (KPFF 2021a, p. 8). The selected option minimizes this risk because the new seawall will be installed at the perimeter – outer boundary – of the pier footprint where sub-surface obstructions are least likely to be found.

#### 5. Environmental Permitting

The Port has retained the services of an environmental permitting consultant with extensive experience in securing the necessary permits for marine projects of this type. The Joint Permit Application will be submitted to the Corps and DSL within the 1st quarter 2024 timeframe. Along with the JPA, the Port will submit a Mitigation Plan that will detail the required compensatory measures. The consultant has already commenced working on this Plan and some potential compensatory mitigation sites have already been identified.

#### REFERENCES

- GRI. (2020). Port of Astoria, Pier 2 West Preliminary Design GRI Scope and Fee, Prepared by GRI for KPFF. Memorandum from GRI to KPFF, December 11, 2020.
- KPFF. (2021a). Port of Astoria Pier 2 West Rehabilitation Alternatives Analysis Report. KPFF Consulting Engineers, Inc. April 7, 2021.
- KPFF. (2021b). Port of Astoria, Pier 2 West Rehabilitation, DRAFT Project Design Alternatives Memorandum. KPFF Consulting Engineers, Inc. June 4, 2021.
- KPFF. (2021c). Port of Astoria, Pier 2 West Rehabilitation, Project Design Alternatives Memorandum. KPFF Consulting Engineers, Inc. August 27, 2021.
- Shanahan, M. & Ready, S. (2021). *Preliminary Geotechnical Consultation Memo, Pier 2 West Bulkhead and Dock Rehabilitation Alternatives Analysis*. Memorandum from GRI to KPFF. KPFF Consulting Engineer, Inc. March 31, 2021.
- Whittington, S. & Hoffman, M. (2019). *Structural Assessment of Port of Astoria Facility Pier 2 West*. KPFF Consulting Engineers, Inc. December 18, 2019.

- Pier 2 West alone pours \$132.8 million every year into the Oregon economy. Yet catastrophic failure of Pier 2 West is a very real possibility. Such failure will eliminate all the economic assets and exacerbate the liabilities outlined in this brochure. Rehabilitation will ensure the safety of the workers on the dock and the ongoing reliability and efficiency of fish processing operations.
- Seafood is the largest traded food commodity in the world. More than 3 billion people in the world rely on wild-caught and farmed seafood as a significant source of animal protein. Sustainable seafood is the most environmentally efficient source of protein on the planet. Pier 2 West has consistently produced millions of pounds per year of sustainable, wild-caught seafood (about 84 million lbs in 2019).
- Rehabilitation of the pier supports equitable development and is consistent with Oregon's Equity Framework. It will prevent the crippling of the local economy by providing critical investment in a historically and currently underserved community thereby mitigating the disadvantages of this rural, economically disconnected area.
- Pier 2 West revitalization will enable the Port to fully benefit from its primary competitive advantage proximity to the Pacific Ocean while mitigating several disadvantages: lack of rail, limited acreage, and inordinate dredging burden. These disadvantages make it very difficult for the Port to establish itself as a cargo terminal. The new pier will be the Port's primary means to surmount these disadvantages and continue its mission as an engine of economic growth.





# PORT OF ASTORIA PIER 2 WEST REHABILITATION

**Economic Strength for the Future** 



National Marine Fisheries Service (2022). Fisheries of the United States, 2020. U.S.
 Department of Commerce, NOAA Current Fishery Statistics No. 2020. Available at: https://www.fisheries.noaa.gov/national/sustainable-fisheries-fisheries-united-states
 Johnson, Jerry. "Fiscal and Economic Impact Analysis of the Repair and Rehab of Pier 2

Johnson, Jerry. "Fiscal and Economic Impact Analysis of the Repair and Rehab of Pier. West." Johnson Economics, June 10, 2021

World Wildlife Fund. (n.d.). https://www.worldwildlife.org/industries/sustainable-seafood
 Understanding Sustainable Seafood. (n.d.). NOAA Fisheries, National Oceanic and

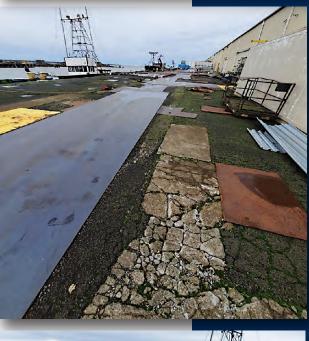
Atmospheric Administration, U.S. Department of Commerce. https://www.fisheries.noaa.gov/insight/understanding-sustainable-seafood











## PORT OF ASTORIA PIER 2 WEST REHABILITATION

Economic Strength for the Future

- RANK: Astoria was ranked 6th in the nation for pounds of fish landed in 2020. Pier 2 West operations account for half of those landed fish. If the pier fails, it is unlikely that Astoria would ever recover its ranking.
- PRESERVE ECONOMIC OUTPUT: Annual recurring output of Pier 2 West fish processing operations is \$101.2 million for Clatsop County and \$132.8 million state-wide.
- RETAIN AND CREATE JOBS: Over a ten-year period, 2,837 county jobs will be retained or created as a result of Pier 2 West operations (4,676 jobs statewide). These operations will also yield \$134.6 million in gross payroll (\$256.2 million state-wide). Rehabilitation will enable Pier 2 West fish processors to create an additional 50-75 full-time jobs.
- ASSURE TAX REVENUE: Ongoing operations over the next twenty years are expected to result in \$79 million in federal taxes paid and \$36 million in local and state taxes paid.
- PREVENT CLIMATE DAMAGE: Rehabilitation of the pier will prevent the forced relocation of the pier's two fish processors. Failure of the pier would result in substantial increases in large truck miles, generating an additional 25,000 metric tons of greenhouse gas emissions over the next 30 years at an estimated climate cost of almost \$26 million.

- **INCREASE SAFETY:** The dilapidated condition of the existing dock presents an ever-increasing hazard to dock workers and commercial fishermen. Pier rehab will ensure a safe working environment for decades to come.
- CREATE RESILIENCE: The new pier will be far more resilient to natural disasters, greatly increasing the likelihood that vessel berthing and off-loading infrastructure will possess sufficient structural integrity to support disaster recovery efforts.
- SAVE TIMBER RESOURCES: The existing pier consists of over 1.6 million pounds of Douglas Fir timber – all of which must be replaced at regular intervals. The new design will be free from this dependence on precious timber resources for its maintenance.
- ENVIRONMENTALLY RESPONSIBLE: The new pier will reduce contamination in the Columbia River by removing 250,000 square feet of treated piling and other timber components in contact with the river.
- SUPPORT COMPETITIVE ADVANTAGE: The new pier will substantially reduce maintenance expenses and ensure a long-lasting source of revenue from sustainable commerce, thereby greatly enhancing the Port of Astoria's competitive advantage. The additional funds made available will enable more investment in other self-sustaining business lines that complement and support the seafood processors on Pier 2 West.

