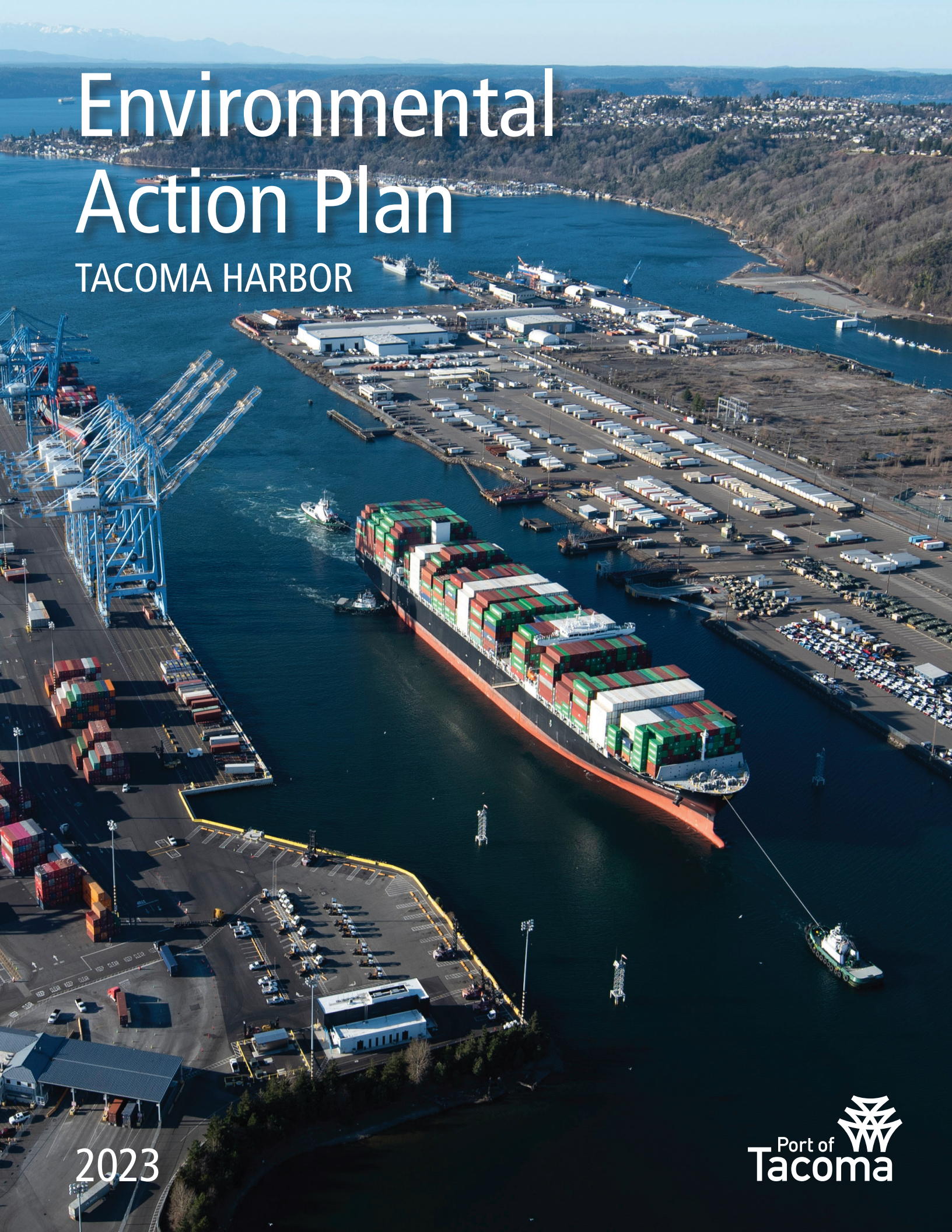
Environmental Action Plan

TACOMA HARBOR



2023

Port of Tacoma

Mission

The Port of Tacoma makes strategic investments in our harbor and community to promote prosperity, trade and jobs, while protecting and enhancing our environment.

Environmental Leadership Goal

Protect and enhance the environment of Commencement Bay and the Puyallup River by cleaning up contaminated land, improving habitat and water quality, and minimizing air emissions from Port operations.

INTRODUCTION

In 2015, the Ports of Tacoma and Seattle formed a partnership called The Northwest Seaport Alliance (NWSA). The NWSA markets and manages the container, breakbulk, auto, and some bulk terminals in Tacoma and Seattle. The success of the Port of Tacoma and the NWSA are intertwined—Port and NWSA staff work closely together on projects and initiatives in support of organizational missions and goals, including environmental programs.

Environmental leadership is integrated into all aspects of the Port, from development activities to ongoing operations. We proactively support and execute programs that go above and beyond regulations and continue to invest in, employ best practices, and work strategically to fulfill our environmental goals.

This Environmental Action Plan (EAP) lays out the high priority actions the Port and NWSA will take in the Tacoma harbor over the next several years to meet the environmental goals as outlined in the Port's Strategic Plan:

- Reduce the air and climate pollution generated by Port and tenant activities.
- Invest in projects that improve the quality of stormwater runoff from Port properties, embody best practices, and empower our tenants to comply with complex permits.
- Remediate (clean up) contaminated Port properties in a manner that ensures protection of human health and the environment while enabling economic development.
- Create wetland opportunities and improve fish habitat independent of regulatory obligation.

Consolidating the strategies and actions of the Port's environmental programs into this comprehensive EAP provides a clear and concise way to track and measure our progress and to communicate with the community.

ENVIRONMENTAL LEADERSHIP STRATEGIES

Environmental stewardship is integrated into all aspects of the organization, from our development activities to the ongoing operations of the Port and our customers. We operate according to the following strategies:

EL-1

Remediate contaminated Port properties in a manner that ensures protection of human health and the environment while enabling economic development.

EL-2

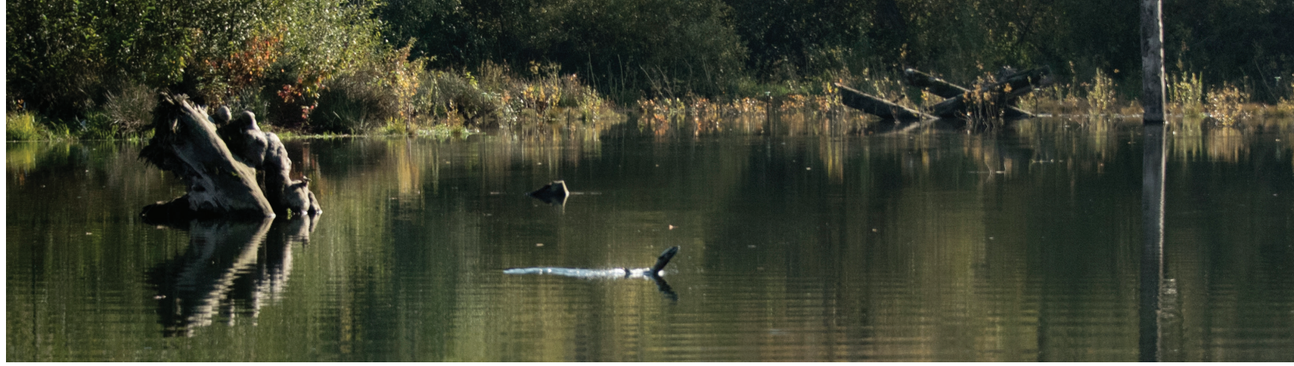
Reduce the air and climate pollution generated by Port and tenant activities while protecting their operations from the impacts of climate change.

EL-3

Invest in projects that improve the quality of stormwater runoff from Port properties, embody best practices and empower our tenants to comply with complex permits.

EL-4

Create wetland opportunities and improve fish habitat independent of regulatory obligation.



ENVIRONMENTAL FOCUS AREAS

The actions outlined in this EAP are divided into five environmental focus areas, each including an outline of the key strategies and actions, a timeline, and graphic representation of co-benefits.

Clean Air & Climate

Phase out emissions from seaport-related activities by 2050, or sooner, supporting cleaner air for our local communities and fulfilling our shared responsibility to help limit global temperature rise to 1.5°C.

Water Quality

Protect and enhance the environment of the Puyallup River and Commencement Bay by continuing to improve water quality and stormwater runoff from Port-owned properties.

Cleanup & Remediation

Remediate and clean up Port-owned land that has been contaminated by previous owners and uses, transforming old industrial sites into usable properties to attract new business and jobs to our region.

Habitat Restoration

The Port is committed to the creation, enhancement and restoration of wetlands and habitat for fish and wildlife.

Resiliency

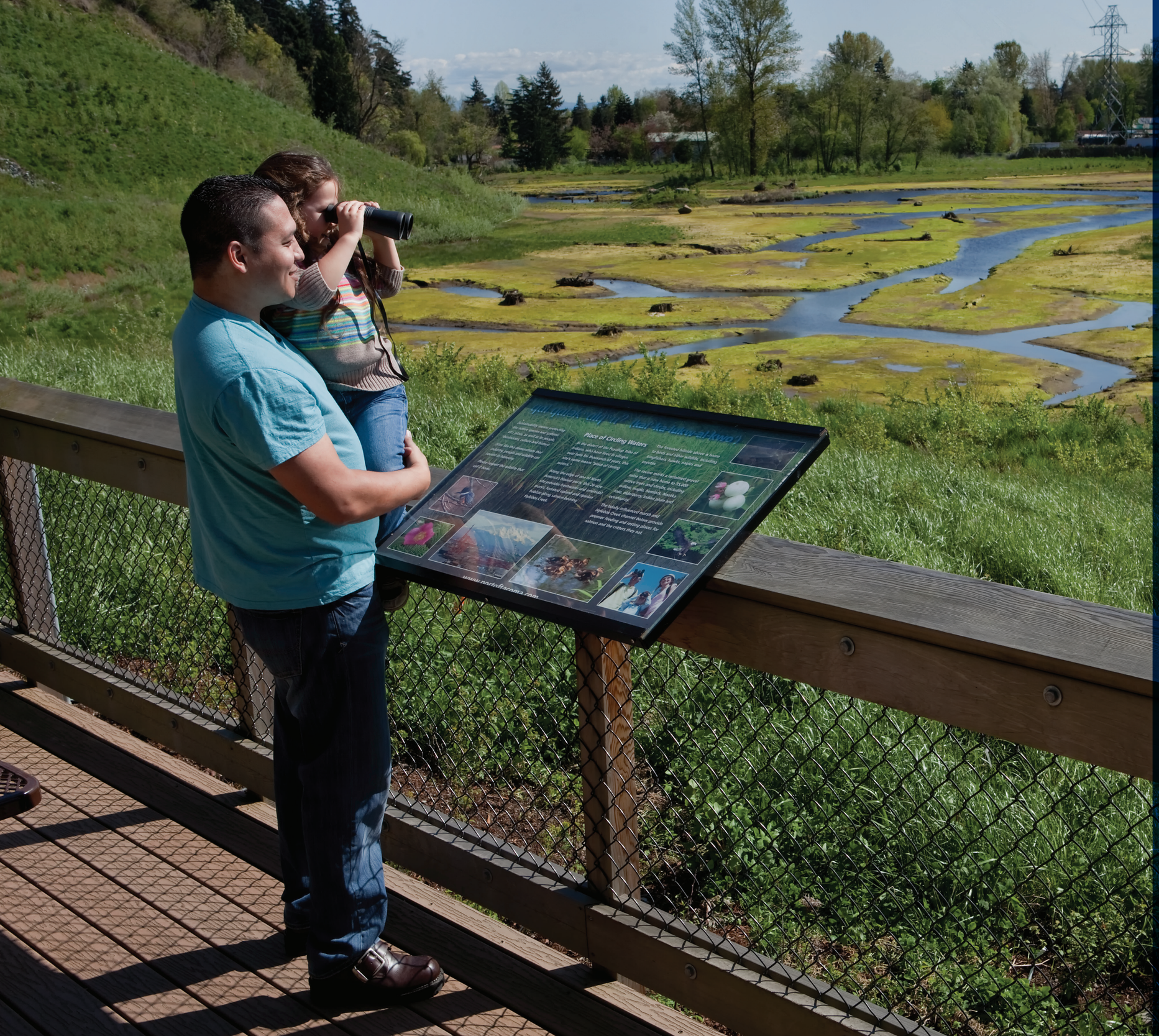
Protect the health and safety of our employees, labor partners, customers, community, and operations while protecting our assets against natural and climate-related threats, including sea-level rise.

IDENTIFYING CO-BENEFITS

Co-benefits from the Port's environmental actions can help improve the environment and make a difference in the lives of people that work or live near the port and throughout our region.

Examples of co-benefits include:

- Air quality
- Energy conservation
- Fish & Wildlife
- Health
- Operational cost savings
- Partnerships
- Pollution reduction
- Reduced congestion
- Water quality



ENVIRONMENTAL ACCOMPLISHMENTS

- Cleaned-up/remediated more than 1,100 acres of historically contaminated properties
- More than 215 acres of land turned into habitat sites and open space, creating critical habitat for fish and wildlife.
- Significantly reduced stormwater pollutant levels through innovative treatment systems on Port-owned properties and terminals.
- The NWSA Clean Trucks Program requires all trucks serving our international container terminals to have a 2007, or newer, engine and provides incentives to assist with the purchase of lower emission trucks.
- The first marine shore power infrastructure in the Pacific Northwest installed at the TOTE terminal in Tacoma in 2010.
- Construction started in 2022 on shore power infrastructure at the Husky Terminal in Tacoma.
- Created the Upper Clear Creek Mitigation Bank—the first of its kind in the Puyallup River watershed and second joint wetland and fish conservation bank in Washington state.
- The Port took a lead role in remediating four waterways in Commencement Bay, leading to three being delisted as Superfund sites (the fourth expected in 2023).
- Six electric terminal tractors are now operating in the South Intermodal Yard in Tacoma, replacing previous diesel-powered versions.

Clean Air & Climate

To phase out emissions from seaport-related activities by 2050 or sooner, in partnership with The Northwest Seaport Alliance.

Cost Range

Low = <$100K

Medium = $100k-500k

High = >$500k

Co-Benefits

- Air quality
- Health
- Pollution reduction
- Energy conservation
- Operational cost savings
- Reduced congestion
- Fish & wildlife
- Partnerships
- Water quality

	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Install infrastructure needed to support adoption of zero-emission technologies							
Action: Complete the South Harbor Electrification Roadmap	■					Medium	
Action: Install EV charging stations on Port properties						High	
Port administration building (One Sitcum Way)	■						
Port maintenance building	■						
Port terminal EB-1		■					
Port North Intermodal Yard			■				
Strategy: Transition Port fleet to zero-emission vehicles by 2050							
Action: Complete Sustainable Fleet Plan	■					Low	
Action: Purchase zero-emission vehicles		■	■	■	■	High	
Strategy: Increase energy efficiency/clean energy usage in existing Port buildings and facilities							
Action: Complete a Sustainable Building Policy	■	■	■			Low	
Action: Conduct energy audits/assessments of Port-owned buildings	■	■	■			Low	
Action: Make emergency efficiency improvements at Port-owned buildings	■	■	■			Medium	
LED lighting upgrades at Fabulich Center	■						
LED lighting upgrades at Maintenance yard	■						
Strategy: Install and require shore power usage at international container terminals							
Action: Install shore power at Husky Terminal	■	■				High	
Action: Require capable vessels to connect to shore power	■	■	■	■	■	Low	
Action: Design shore power at Washington United Terminal	■	■				Low	

Clean Air & Climate *CONTINUED*

To phase out emissions from seaport-related activities by 2050 or sooner, in partnership with The Northwest Seaport Alliance.

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Co-Benefits

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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Reduce emissions from diesel drayage truck fleet (independent truckers/companies)							
Action: Scrap and replace >50 trucks through the Scrap & Replace Program	■	■				High	
Action: Implement the Clean Truck Program at domestic terminals	■	■	■			High	
Strategy: Transition to zero-emission drayage trucks (independent trucks/companies)							
Action: Develop a regional Decarbonizing Drayage Roadmap	■					Medium	
Action: Demonstrate >10 zero/near-zero emission trucks (Tacoma/Seattle)	■	■	■			High	
Strategy: Transition to zero/near-zero emission cargo handling equipment							
Action: Demonstrate >25 zero/near-zero emission cargo handling equipment (Tacoma/Seattle)	■	■	■			High	
Strategy: Support efforts to reduce emissions from locomotives							
Action: Support one locomotive upgrade project (Tier 3 emission standards or better)	■	■	■			High	
Strategy: Support efforts to reduce emissions from assist tugs							
Action: Support deployment of a hybrid or zero emission tug	■	■	■			High	
Strategy: Advocate for policies and funding supporting port clean air and climate work							
Action: Advocate for stronger international emission reduction policies/standards for ocean-going vessels	■	■	■	■	■	Medium	
Action: Advocate for increased state/federal funding for port emission reduction initiatives	■	■	■	■	■	Medium	
Strategy: Increase engagement with near port communities on clean air and climate actions							
Action: Publish "Ports Clean Air Quarterly" e-newsletter	■	■	■	■	■	Low	
Action: Publish Ports Clean Air & Climate webpage	■					Low	
Action: Implement community engagement plan around air quality and climate topics	■	■	■	■	■	Medium	

Water Quality

Protect and enhance the environment of Commencement Bay and the Puyallup River by continuing to improve water quality and stormwater runoff from Port properties, in partnership with The Northwest Seaport Alliance.

Cost Range

Low = <$100K

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Co-Benefits

- Air quality
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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Investing in projects that improve the quality of stormwater runoff from Port properties, implementing best practices and empowering our tenants to comply with complex permits.							
Action: Identify/document municipal stormwater permit infrastructure ownership and maintenance obligations						Low	
Establish a GIS database of Tideflats infrastructure (ownership and easements)							
Action: Complete Stormwater Infrastructure Comprehensive Plan						Medium	
Pursue grant funding from Pierce County Flood Control Zone							
Complete Infrastructure Assessment and 10-year maintenance plan							
Negotiate/finalize new agreements with City of Tacoma and City of Fife							
Action: Implement Stormwater Operations and Maintenance Program						Medium	
Finalize Ops/Maintenance Manual and Program							
Action: Implement annual Ditch Management Program						Medium	
Finalize Ditch Management Plan with agency partners							
Manage Bullfrog junction ditch segment to minimize urban flooding							
Action: Research and install stormwater treatment systems as needed						High	
Action: Document existing MS4 conveyance and treatment systems						Low	
Update best management practices playbook to show all types of treatment systems and performance data							
Complete property easement, covenant, ownership database and map							
Action: Design and implement innovative and cost-effective stormwater treatment systems on Port-developed properties						Medium	
Action: Proactively seek grant funding, state and federal, to support stormwater quality actions						Low	

Cleanup & Remediation

Remediate and clean up historically contaminated Port properties to put properties back into productive business use.

Cost Range

Low = <$100K

Medium = $100k-500k

High = >$500k

Co-Benefits

- Air quality
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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Develop cleanup plans to close-out confirmed/or suspected contaminated sites on Port property as listed							
Action: Earley Business Center						High	
Obtain approval of Cleanup Plan from Ecology	■						
Develop remedial design and implement cleanup action plan		■	■	■	■		
Action: Parcel 99 (former Arkema properties)						High	
Complete interim cleanup action and redevelop a portion of the property for business use	■	■					
Obtain approval of cleanup plan from Ecology	■						
Develop remedial design and implement cleanup action plan		■	■	■	■		
Action: Parcel 2 (former Alexander Ave petroleum tank farm)						High	
Obtain approval of cleanup plan from Ecology	■						
Develop remedial design and implement cleanup action plan		■	■	■	■		
Action: Parcel 91 (former Sound Mattress site)						High	
Obtain approval of cleanup plan from Ecology	■	■	■				
Develop remedial design and implement cleanup action plan		■	■	■	■		
Action: Taylor Way Alexander Avenue Fill Area (TWAAFA)						High	
Agreed order / enforcement order - data gap work plan (25% participation)	■						
Complete remedial investigation, feasibility study and cleanup action plan on Port owned property in the TWAAFA		■	■	■			

Cleanup & Remediation *CONTINUED*

Remediate and clean up historically contaminated Port properties to put properties back into productive business use.

Cost Range

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Medium = $100k-500k

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Co-Benefits

- Air quality
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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Remedial Design and Construction							
Action: Parcel 15 (former Portac site)						High	
Implement and complete cleanup							
Action: Progress Rail						Low	
Awaiting response from Washington State Department of Ecology							
Action: Lower Wapato Creek						Medium	
Awaiting no further action determination from Washington State Department of Ecology							
Strategy: Long-term monitoring and maintenance of previously remediated Port properties							
Action: Continue to monitor and maintain 14 Port-owned properties						Low	
Strategy: Program management							
Action: Oversee tenant/former property owner-led cleanup actions on Port properties as listed						Low	
Action: Proactively seek grant funding for remediation and cleanup projects						Low	
Action: Track remaining confirmed and suspected sites on Port property						Low	
Action: Supporting property transactions and leases of contaminated sites						Low	
Action: Support tenant capital improvements						Low	

Habitat Restoration

Create wetland opportunities and improve fish habitat independent of regulatory obligation.

Cost Range

Low = <$100K

Medium = $100k-500k

High = >$500k

Co-Benefits

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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Manage Port's mitigation credit portfolio							
Action: Expand the Upper Clear Creek Mitigation Bank						Medium	
Action: Review mitigation credit portfolio balance and needs annually						Low	
Strategy: Develop future habitat mitigation sites							
Action: Expand mitigation/restoration sites in the Clear Creek watershed						High	
Use existing and new Port properties							
Explore partnerships with Pierce County							
Action: Complete construction and planting of Wapato Creek Habitat site						High	
Wapato Creek outfalls alternative analysis							
Design/build Wapato Creek outfall							
Action: Construct Saltchuk Beach area as a fish conservation credit bank						High	
Design and construct federal partnership portion of the project							
Design and construct Port-only portion of the project							
Evaluate Port-Saltchuk DNR lease area as restoration project							
Action: Complete concept or basis of design for Gog-le-hi-te III						Medium	
Form working group with Puyallup Tribe of Indians							
Action: Implement habitat improvements to add to a fish conservation credit bank						High	
Assess feasibility of removal of derelict structures and secure credit							

Habitat Restoration *CONTINUED*

Create wetland opportunities and improve fish habitat independent of regulatory obligation.

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Co-Benefits

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	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Engage in habitat enhancement projects with community partners							
Action: Partner with Pierce County on improvements to the Lower Clear Creek Mitigation site	■					Low	
Action: Partner with Puyallup Tribe on fish passage barrier (Upper Clear Creek)	■	■				Medium	
Action: Explore community partnership opportunities focused on fisheries enhancement	■	■	■	■	■	Low	
Action: Partner with Puyallup Tribe and Department of Natural Resources on Saltchuk restoration area construction, maintenance					■	Medium	
Action: Partner with Pierce County on flood control/habitat improvements (Upper Clear Creek site)		■	■	■	■	High	
Strategy: Maintain and enhance the Port's habitat stewardship program							
Action: Complete cost benefit analysis of full-time community nonprofits to perform habitat site stewardship activities	■					Low	
Action: Identify and remove invasive species	■	■	■	■	■	Medium	
Action: Develop an "adopt-a-habitat site" program for local nonprofits/organizations	■					Low	
Action: Implement community engagement plan around Port's habitat sites	■	■	■	■	■	Low	

Resiliency

Protect the health and safety of our employees, labor partners, customers, community, and operations while protecting our assets against natural and climate-related threats, including sea-level rise, in partnership with The Northwest Seaport Alliance.

Cost Range

Low = <$100K

Medium = $100k-500k

High = >$500k

Co-Benefits

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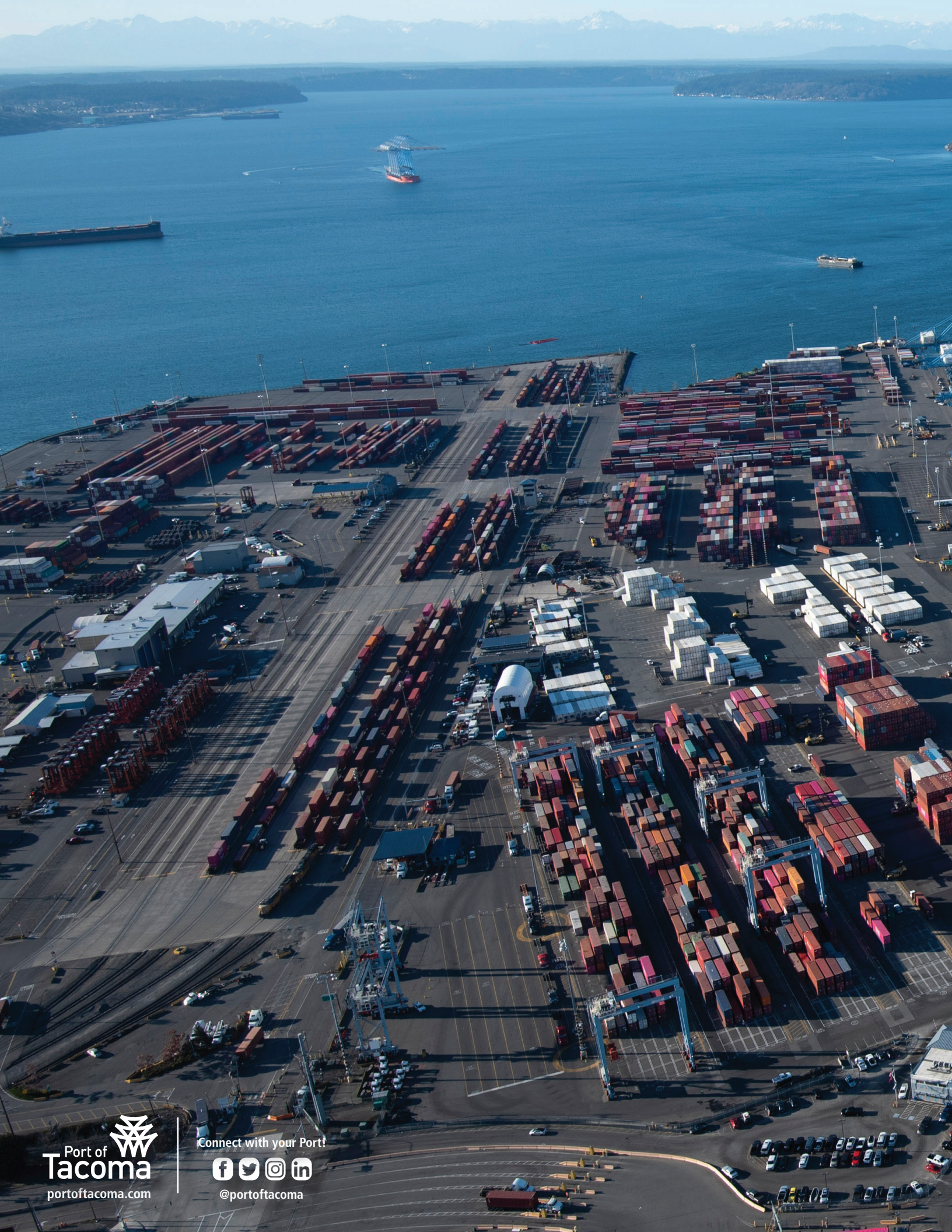
	2023	2024	2025	2026	2027 +	Cost Range	Co-Benefits
Strategy: Build and develop plans to identify and mitigate risk to natural and climate-related threats							
Action: Complete Vulnerability Assessment and Response Framework						Medium	
Integrate with Capital Improvement Plan projects where needed							
Incorporate best available science for hazards including sea level rise and extreme weather							
Establish resiliency program							
Action: Update the Port's All-Hazard Mitigation Plan						Low	
Review for necessary changes and coordinate with Pierce County							
Coordinate with partner agencies on their All-Hazard Mitigation plans (City, County)							
Incorporate best available science for hazards including climate change							
Action: Collaborate with partner agencies on resiliency efforts						Low	
Ensure representation of maritime interests in partner agency plans							
Participate in resilience and emergency response coordination, plans, and drills							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