

# Climate Resilience Planning & Financing in Westport, Washington

## BACKGROUND

The City of Westport is a small community situated on a peninsula in southern Washington at the mouth of Grays Harbor and the Pacific Ocean. In the summer, Westport's population swells to almost twice its year-round size, drawing tourists to its beaches, surfing, and state parks. Commercial fishing, seafood processing, and a marina are other key economic drivers for the community.

Surrounded by water on three sides, Westport has already begun to feel the effects of climate change. Storm surge events have triggered coastal flooding in the City's Marina business district, while oceanfront dunes and beach are eroding in front of private residences and state park land. These issues are compounded by sea level rise. Westport has a small municipal staff, and hazard mitigation planning to date has primarily focused on preparing for a possible Cascadia earthquake and resulting tsunamis. Climate-related hazards have historically received less attention from municipal officials and the public. Westport looked to the New England EFC for help assessing and building resilience to climate impacts and for insight into funding sources that would support future projects.

*Coastal dune erosion on the Westport Light Trail along the Pacific Coast*

*Photo: DM Edmondson*



## HIGHLIGHTS

### ENVIRONMENTAL FINANCE CENTER

New England Environmental Finance Center

### PARTNER

City of Westport, Washington

### SCALE/SIZE

Year-round population of 2,100; summer (tourist) population of up to 5,000

### KEYWORDS

Coastal Resilience, Climate Adaptation, Vulnerability & Risk Assessment, Sea Level Rise

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# APPROACH

Over the course of a year, the New England EFC led Westport through the Climate Resilience Prioritization Toolkit. Based on the [U.S. Climate Resilience Toolkit](#), this multi-step process identified climate-related hazards and community assets, assessed the vulnerability and risk of Westport’s assets to climate threats, and identified adaption options the City could pursue to build resilience for top priorities. Completion of the toolkit was informed by relevant

research and planning documents, City staff, Planning Commission, and City Council members, and scientific and technical experts from Washington’s Department of Ecology, Sea Grant, and the University of Washington.

# KEY FINDINGS

The Toolkit generated a series of potential adaption options (see excerpt below) that Westport could pursue to make top priority community assets more resilient to climate hazards. Options ranged

from soft shoreline stabilization using nature-based solutions, to education and awareness raising among the local business community, to accounting for sea level rise projections in shoreline management and permitting. Timelines and potential funding sources, as well as opportunities to integrate climate action into existing plans, projects, and proposals, were identified for each priority area. Findings were presented to the City Council and Planning Commission to determine how Westport will proceed with these recommendations.

## Excerpt from Adaptation Options to Build Climate Resilience in Westport, WA

Priority Area <i>(from top priority asset-hazard pairs in Step 5)</i>	Adaption Option <i>(including relevant tools, resources, and case studies)</i>	Timeline <i>Short-term (0-3yrs) Med-term (3-5yrs) Long-term (5yrs+)</i>	Funding Source(s)
<b>Pacific Ocean Shoreline, including Adjacent Residential &amp; State Park Land (Coastal Erosion, Storm Surge &amp; Sea Level Rise)</b> Westport’s Pacific Coast is characterized by sandy beaches and dunes, with roughly half of the shoreline bordering WA State Park land (Westhaven & Westport Light State Parks including Westport Light Trail) and the remainder adjacent to residential property including Condominiums and Single-Family Residences. The dunes are vulnerable to erosion resulting from storm surge and king tide events, with higher water levels due to sea level rise compounding the problem. Dune erosion in turn increases the vulnerability of shoreline structures to storm surge and rising tides. Over time, sea level rise will also result in beach loss. For more detail on SLR projections/likelihoods, see Toolkit Step 1.  Residential private property owners observed ongoing dune erosion, which over time resulted in changes in shoreline jurisdiction. The Westport by the Sea homeowners’ associations (HOAs) implemented an artificial dune and sand fence in 2016 with limited success. In 2021-2022, the HOAs funded and implemented soft shoreline armoring via a dynamic revetment or cobble rock berm.	Continue to coordinate with the HOAs and WA DOE to monitor the implications of the cobble berm to inform future approaches.	Short-term (0-3 yrs)	N/A
	Convene stakeholders (e.g. HOAs, State Parks, Army Corps) to discuss shared challenges specific to the Pacific shoreline and consider potential joint and/or individual responses.	Short-term (0-3 yrs)	Consider seeking a technical assistance provider to lead/facilitate this process.
	Review existing zoning and development standards and building codes to ensure regulations are conducive to climate adaptation strategies and needs. [See <b>Crosscutting-F</b> for additional detail].	Medium-term (3-5 yrs)	Reach out to <a href="#">Grays Harbor Council of Governments</a> and/or <a href="#">Grays Harbor County</a> to see if this is part of their planning services
	Evaluate opportunities for soft shoreline stabilization/living shorelines to attenuate wave action, mitigate erosion, and accommodate SLR. Note high wave energy conditions and large tidal ranges can impact the viability and resilience of living shoreline designs. Review lessons learned to maximize performance, including from the 2016 artificial dune project in front of Westport by the Sea, as well as regional/national attempts (see <a href="#">perspectives from New England</a> ). Consider the scale and breadth of solutions necessary to mitigate impacts and associated costs. [See also <a href="#">Half Moon Bay Shoreline</a> ].	Medium-term (3-5 yrs)	<b>National Fish &amp; Wildlife Foundation’s (NFWF) National Coastal Resilience Fund</b> funds <a href="#">planning, design, and implementation of coastal resilience and restoration projects using natural and nature-based solutions</a> to protect coastal communities from storms, floods, and other hazards.  <b>WA Recreation and Conservation Office’s Aquatic Lands Enhancement Account</b> provides grants for acquiring, <a href="#">restoring, or improving aquatic lands</a> (tidelands, shore lands, harbor areas, and the beds of navigable waters) for public purposes.

Step 1- Identify Hazards

Step 2- List Assets

Step 3- Classify Vulnerability

Step 4- Characterize Risk

Step 5- Prioritize Assets

Step 6- Adaptation Options

## ADDITIONAL RESOURCES

[Navigating the Federal Funding Landscape: A Guide for Communities](#) (New England EFC)

[Projected Sea Level Rise for Washington State](#) (University of Washington Climate Impact Group)

[Soft Shoreline Stabilization Implementation Guidance](#) (WA Department of Ecology)

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