

Executive Summary

The City of Seattle (City), through the Seattle Department of Transportation (SDOT), is replacing the Elliott Bay Seawall along the shoreline of downtown Seattle. The seawall protects transportation infrastructure (i.e., sidewalks, streets, a pedestrian and bicycle trail, the Colman Dock ferry terminal, and a rail line) and adjacent upland areas, including critical utilities, residences, businesses, and parks. The harbor area in Elliott Bay is used for commerce and transportation by ferries, cruise ships, and commercial vessels, and for recreation by residents and visitors. The downtown Seattle waterfront is an important center of commerce and a recreational area for the entire region.

The existing seawall consists of three types of walls built between 1911 and 1936. Over time, these structures have deteriorated as a result of natural and physical processes. The seawall's degraded condition puts it at risk for significant damage from a major storm or seismic event. The new seawall will protect the shoreline and upland areas from erosion and damage due to coastal storms and seismic events, thus helping to preserve economic competitiveness and quality of life in Seattle and the region. It will also provide a solid foundation for the downtown Seattle waterfront, including projects being developed separately to create new transportation infrastructure and public spaces along the waterfront as part of the City's Waterfront Seattle Program.



Elliott Bay Seawall Project Area

Availability of the Draft Supplemental Environmental Impact Statement

The Draft SEIS is available online at http://waterfrontseattle.org/seawall_project/environmental.aspx. A CD with the complete document, including all appendices, is included in the "In Focus" document inside the front cover of the printed SEIS.

Additional CDs of the Draft SEIS and appendices, as well as printed copies of the Draft SEIS, can be obtained by calling (206) 618-8584 or by sending an e-mail to seawallSEIS@seattle.gov.

Printed copies of the Draft SEIS are available for \$25.

Individuals requiring reasonable accommodation of any type, including language translation services, may call (206) 618-8584. Individuals who have a hearing impairment may call the Washington State Telecommunications Relay Service (TTY) at 711.

The project area extends along the downtown Seattle waterfront from S. Main Street to Broad Street. Elliott Avenue and Western Avenue delineate the eastern boundary; the western boundary extends into Elliott Bay and varies depending on the impacts being studied.

What is the project purpose?

The purpose of the Elliott Bay Seawall Project is to reduce the risks of coastal storm and seismic damage and to protect public safety, critical infrastructure, and associated economic activities along the downtown Seattle waterfront. The project will also improve the degraded ecosystem functions and processes of the Elliott Bay nearshore in the vicinity of the seawall.

The seawall holds the waterfront in place and supports Alaskan Way, including the sidewalk and the pedestrian and bicycle trail. It also protects utilities located east (landward) of its face. Due to deterioration over the past century, the seawall is at the end of its useful life and at risk of failure. Furthermore, it was not designed to withstand earthquakes, which are a continuing risk in the Puget Sound region.



Elliott Bay is an important link for juvenile salmon migrating from the Duwamish River to the Pacific Ocean. Within the project area, vital shallow-water habitat is limited, and migration along the shoreline can be difficult. Improving the degraded nearshore ecosystem will increase plant and animal diversity, enhancing habitat for salmon and other species.

What is the current status of the project?

Environmental review for the Elliott Bay Seawall Project was completed in spring 2013. Final design of the Central Seawall (shown as Phase 1 on the above map) was completed in summer 2013, and the remaining project permits were secured shortly thereafter. Central Seawall construction began in November 2013 and is currently expected to be substantially complete in mid-2016.

Construction of the North Seawall (shown as Phase 2 on the map) will begin once funding is secured, but no earlier than fall 2016.

What is a Supplemental EIS and why was it prepared?

The State Environmental Policy Act (SEPA) requires the City, as the lead agency and project sponsor, to inform the public of the potential effects of the Elliott Bay Seawall Project on the built and natural environment. A SEPA Environmental Impact Statement (EIS) for the project was completed in March 2013.

Since completion of the EIS, the City has determined that a Supplemental EIS (SEIS) should be prepared. An SEIS is a document that adds information and analysis to an existing SEPA EIS. An SEIS may be prepared for a variety of reasons, including:

- The project has changed and may cause new or increased significant adverse environmental impacts that were not evaluated in the original EIS.
- New information indicates that new or increased significant environmental impacts are likely.

Since publication of the EIS, refinements have been proposed to the project. These changes are the result of design refinements, adjustments to construction sequencing and approach, and agreements made through the permitting process, including the Section 106 Memorandum of Agreement and tribal coordination. The City has prepared this Draft SEIS to evaluate whether the proposed changes would cause new or increased significant adverse environmental impacts. The proposed changes are briefly described below and further detailed in Chapter 2 of this Draft SEIS. Chapter 3 discusses how the proposed changes would affect the natural and built environment in the project area.

Upon completion, this supplemental analysis will enable City decision-makers, with input from the public, regulatory agencies, and local tribes, to consider the environmental impacts of the project changes in conjunction with factors such as cost, schedule, and feasibility.

Would the Preferred Alternative described in the EIS change?

As noted above, the City has identified many proposed changes to the design and construction of the Preferred Alternative. These changes are not substantial enough to constitute a new project alternative for review, but rather are an update to the Preferred Alternative identified in the Final EIS. The “Updated Preferred Alternative” would still provide protection against coastal storms and seismic events by means of a new seawall using soil improvement. It remains the most cost-effective and least disruptive construction method. The three major project components described in the EIS, including a new seawall, improvements to aquatic habitat, and enhanced upland areas, are still integral to the project.

What changes are proposed as part of the Updated Preferred Alternative?

The proposed changes related to the Central Seawall project are summarized below. The North Seawall’s design and construction have not changed since the EIS, although some habitat features have been modified.



Rendering of the new sidewalk with light-penetrating surface to transmit light to the habitat below

Seawall

The Updated Preferred Alternative would construct the seawall up to 15 feet landward of the existing alignment, which is similar to the Preferred Alternative but with a slightly reduced setback in some areas. The project limits would also be extended slightly south to accommodate additional roadway and utility work. The new seawall will protect the shoreline from storm and wave erosion and impacts from floating objects, as well as provide resistance against seismic forces and potential liquefaction caused by an earthquake.

Habitat Improvements

The habitat improvements included in the Updated Preferred Alternative would, as described in the EIS, create a functional intertidal migration corridor along the seawall for juvenile salmonids and would also improve ecosystem productivity to enhance the marine nearshore food web. However, in response to potential conflicts with adjacent uses, some of the expanded habitat benches would be modified or eliminated.

Upland Improvements

The Updated Preferred Alternative would not change the project's upland improvements.

Construction Schedule

Construction of the Central Seawall began in November 2013. Due to the seawall's importance as critical infrastructure and as a foundation for other independent waterfront improvement projects, the City is committed to completing Central Seawall replacement in 2016.

Because project construction is a complex and dynamic process, it is susceptible to schedule changes due to changed field conditions, availability of materials, extreme weather events, and many other factors. To ensure that the project is completed on time, construction is now likely to continue through the summers of 2014 and 2015, with the potential for some work to extend past mid-2016. The most critical construction activities would continue during the summer months to recover any time lost to unanticipated schedule delays; additional efficiencies would also be gained by eliminating the need for demobilization and remobilization.

Summer activities could range from minor utility and roadway work to jet grouting and seawall reconstruction. The City would strive to minimize impacts by limiting summer activities to the greatest extent feasible and by implementing access and wayfinding measures as described in the EIS.

In addition to the potential elimination of summer shutdowns, most businesses on Piers 54, 55, 56, and 57 would close for a period of approximately 9 months, currently planned to extend from October 2014 through June 2015. Closure of the businesses during this period would allow construction to proceed more efficiently because of the reduced need for access. The Great Wheel and Argosy Cruises would remain open during this period, along with some office spaces.

With these modifications to the schedule, Central Seawall construction is anticipated to be substantially complete in mid-2016, the target completion date identified in the EIS. However, if unanticipated delays were to occur, it is possible that final construction activities could continue after that date until the project is completed.

Construction Methods

The Updated Preferred Alternative would be built using the same construction techniques that were described in the EIS; however, some modifications are proposed to final design and construction. These changes, which are described in Chapter 2, are primarily related to the following topics:

- Beginning as soon as summer 2014, ferry queuing would switch to south of Colman Dock, between Yesler Way and S. Jackson Street.
- A temporary sheet pile containment wall would be used where feasible to isolate construction activities from Elliott Bay; other types of containment (e.g., a turbidity curtain) would be used when a sheet pile wall is not feasible. In sections of Zones 3 and 4, portions of the temporary containment wall would be



retained after construction to provide additional stability for the habitat features.

- Additional geotechnical reinforcements would be included beneath the Zone 1 habitat beach for added stability.
- A larger area within the construction work zone would be dewatered to create drier conditions during construction. The water would be treated onsite (either on land or on a barge) before discharge.
- Soil improvement would occur from both the roadway surface and within the excavated construction work zone in most areas.

What are the new or increased effects of the Updated Preferred Alternative?

Overall, the types of effects resulting from the Updated Preferred Alternative would be similar to those described for the Preferred Alternative in the EIS. This section summarizes the ways in which they are expected to differ. The discussion is presented by element of the environment, in the same order in which these topics appear in the SEIS.

As discussed above, an SEIS *adds* information and analysis to an existing EIS; therefore, this document does not include an analysis of impacts that were already covered in the Final EIS, and elements of the environment that remain unchanged are not described.

Transportation

Traffic operations are not expected to change due to the lack of a summer shutdown period because summer traffic volumes were used in the EIS analysis. The primary change to the transportation analysis would occur from the revised ferry-queuing plan, planned to begin as soon as summer 2014. Moving the queue to the area south of Colman Dock could provide additional storage capacity and increase available parking in the project area. This change would also improve traffic on the Alaskan Way temporary roadway north of Yesler Way, although it is projected to increase congestion slightly at the intersections of Yesler Way with 1st Avenue South and S. Jackson Street with Alaskan Way.

Operational impacts to the transportation network are not expected to change as a result of the Updated Preferred Alternative.

Economics

If construction activities continue through the summer, the impacts to local businesses may increase incrementally above the level of effect described in the Final EIS due to reduced access and disruption. To reduce the potential impacts from summer work, the City would phase



construction activities to the greatest extent feasible to ensure that access to businesses and parking was provided during the summer.

The proposed closure of restaurant and retail businesses on Piers 54 through 57 could result in lost revenues of approximately \$11.1 to \$18.6 million. The City would compensate property owners for the period of lost access. Additionally, up to 245 employees could be temporarily laid off during the business closure.

Operational impacts to the local and regional economy are not expected to change as a result of the Updated Preferred Alternative.

Noise and Vibration

Pumps used to support the water treatment processes could generate sound levels of up to 90 A-weighted decibels (dBA) or more at 30 feet, which would be perceptible at all times during construction. Mitigation would be used to reduce sound levels to within the project's noise variance limits.

Without the summer shutdown period, construction noise would continue during the summer months and could affect nearby businesses, residences, and visitors.

Operational impacts from noise and vibration are not expected to change as a result of the Updated Preferred Alternative.

Cultural, Historic, and Archaeological Resources

As described in the EIS, two historic properties – the existing seawall and the Washington Street Boat Landing – would be affected by the project. The impacts of the Updated Preferred Alternative would be the same as or slightly less than those disclosed in the EIS. Since the EIS was published, the City, in consultation with U.S. Army Corps of Engineers (USACE), Washington State Department of Archaeology and Historic Preservation (DAHP), and the Advisory Council on Historic Preservation, has signed a Memorandum of Agreement (MOA) that identifies means for avoiding, minimizing, and mitigating adverse effects to the affected properties.



Land Use, Shorelines, and Parks and Recreation

Eliminating the summer shutdown period would affect land use, shorelines, and parks along Alaskan Way through additional temporary disruptions to access and increases in noise, vibration, and dust. Although these impacts would be of the same type as those described for the Preferred Alternative, more people would be affected because of the greater use of the area during the summer season.

Shoreline public access points would be restricted during the business closure; however, the public would retain the ability to access and enjoy the shoreline at other locations along the waterfront. To mitigate the impact on Argosy Cruises when public access in Zone 3 is limited, tours would leave from different locations.

Public Services and Utilities

During summer construction, emergency response times could be slightly slower than estimated for the Preferred Alternative because of the additional people and traffic in the area.

Operational impacts on public services and utilities are not expected to change as a result of the Updated Preferred Alternative.

Social Resources and Environmental Justice

Construction-related impacts on residents living near the work zone and on local community and social service resources would continue during the summer. Employees laid off as a result of the business closure may experience temporary hardship after the layoff, although they are generally expected to be able to find other work.

Changes proposed as part of the Updated Preferred Alternative are not expected to result in disproportionately high and adverse effects on environmental justice populations, and operational impacts are also not expected to change.

Visual Quality

Without the summer shutdown, more viewers would experience visual impacts from construction equipment and an active work zone due to the higher level of activity along the waterfront in the peak season.

Operational impacts on visual quality would change slightly as a result of modifying the expanded habitat benches and incorporating aesthetic design elements into the Zone 1 habitat beach.



Fish, Wildlife, and Vegetation

Some of the proposed changes to construction techniques would result in changed potential impacts to fish, wildlife, and vegetation within the project area. Minor and temporary effects to proposed critical habitat for Puget Sound rockfish would occur when riprap is removed from along the seawall. Noise from the pumps associated with water treatment processes could affect seals and other pinnipeds, although these effects are not expected to be substantial. Proposed changes to the containment system would reduce effects from noise and vibration on marine mammals, fish, and birds in some areas.

The Updated Preferred Alternative would result in minor changes during operation by slightly reducing the extent of expanded habitat benches and from use of sheet pile as structural support for the habitat benches in some locations.

Water Resources

Construction water quality would not change significantly with the Updated Preferred Alternative. The water treatment system will meet

Washington State Department of Ecology (Ecology) standards to ensure that water quality in Elliott Bay is not affected by construction-related discharges.

Operational impacts on water resources are not expected to change as a result of the Updated Preferred Alternative.

Would the cumulative effects of the project change as a result of the Updated Preferred Alternative?

Cumulative effects are project-related environmental effects in combination with the environmental effects of other past, present, and reasonably foreseeable future actions (RFFAs) in the vicinity. The RFFAs in the Central Seawall area include the Alaskan Way Viaduct Replacement Project, Waterfront Seattle projects, and the Seattle Multimodal Terminal at Colman Dock Project, among others. This analysis helps decision-makers evaluate how sustainable a proposed project is likely to be and how it might interact with other projects that have not yet been built.

During construction, the Updated Preferred Alternative is not expected to result in significant incremental adverse cumulative effects beyond those described in the Final EIS, although the effects may be slightly different due to the proposed changes in project design and construction. During project operation, the effects of the Elliott Bay Seawall Project, combined with those of other RFFAs, would result in long-term improvements in the aquatic environment and in economic and transportation conditions along the downtown Seattle waterfront.

How were members of the public, regulatory agencies, and Native American tribes involved in the process?

Ongoing discussions and collaboration with the public, project stakeholders, Native American tribes, and federal, state, and local regulatory agencies have continued since the EIS was issued, as final design was completed, and as construction began. Coordination has occurred through meetings, information exchange, and collaboration in the development of design refinements. Continued coordination will ensure that these parties stay apprised of proposed project changes and overall progress.

What is the relationship between the Elliott Bay Seawall Project and other projects in the area, and what coordination is underway?

The Elliott Bay Seawall Project is an independent project that will support the existing transportation infrastructure, protect the downtown Seattle waterfront from coastal storm and seismic damage, and provide a foundation for the future projects included in the



The Seawall team conducted outreach at 33 fair and festival days in 2013

Waterfront Seattle Program. The City is coordinating with the Washington State Department of Transportation (WSDOT), the Port of Seattle, the waterfront business community, and other City departments to minimize adverse effects due to construction and operation of the Elliott Bay Seawall Project, both alone and in combination with other projects in the area. Close coordination will help to ensure adverse effects from these projects are minimized and that the undertakings are completed in a timely manner.

What opportunities are available to comment on the Draft SEIS?

Comments on the Draft SEIS can be submitted in several ways. Comment letters may be sent to:

Elliott Bay Seawall Project
Draft SEIS Comments
c/o Mark Mazzola
Seattle Department of Transportation
P.O. Box 34996
Seattle, WA 98124-4996

Comments may also be e-mailed to SeawallSEIS@seattle.gov. In addition, comments may be provided orally to a court reporter at the Draft SEIS public open house on Thursday, January 9, 2014, from 4:00 to 6:00 p.m., at the Bertha Knight Landes Room at Seattle City Hall (600 4th Avenue). Computer terminals will be available at the open house for direct entry of comments.

All comments must be postmarked no later than Wednesday, January 22, 2014.

How will the comments be addressed?

All comments on the Draft SEIS received during the public comment period will be addressed in the Final SEIS, scheduled for issuance in April 2014. The Final SEIS will include the comment letters, e-mails, comment forms, and oral comments, along with responses to specific concerns and questions. All commenters will be notified of the availability of the Final SEIS.

