Elliott Bay Seawall Project
Art Programming Plan

HADDAD|DRUGAN, ARTISTS

PREPARED FOR THE SEATTLE DEPARTMENT OF TRANSPORTATION
IN ASSOCIATION WITH THE ELLIOTT BAY SEAWALL DESIGN TEAM

JANUARY 2013 DRAFT
Elliott Bay Seawall Project
Art Programming Plan

Prepared for:
City of Seattle Department of Transportation
700 5th Avenue, Suite 3900
Seattle, WA 98124

Submitted by:
Parsons Corporation
600 University Street, Suite 1130
Seattle, WA 98101

Haddad|Drugan LLC, Artists
1941 1st Avenue S., Studio 3i
Seattle, WA 98144

In Association With:
Anchor QEA, LLC
Axis Environmental, LLC
Ben C. Gerwick, Inc.
Envirosues
Exeltech Consulting, Inc.
Geo-Solutions, Inc.
Harrison Design
Hart Crowser, Inc.
James Corner Field Operations
Magnusson Klemencic Associates
Moffatt & Nichol
Parsons Corporation
Perteet
SG3 Strategies
Shannon & Wilson, Inc.
Stepherson & Associates
SvR Design Company
Tetratech
True North Land Surveying, Inc.
“The structure builds, then, as the observer proceeds from one experience to another, and finally a new aspect of perception is outlined. Scientific and artistic insight fuse, creating by their interplay a basic type of experience — neither science nor art, but a comprehension that has both the character of information and quality of poetic vision.”

- Gyorgy Kepes, The New Landscape
Introduction
- Project Overview 3
- Advancing Waterfront Seattle’s Vision for Art 4

Analysis
- Reconstructing the Elliott Bay Seawall 7
- Restoring the Marine Habitat 8
- Marine Habitat: Historic, Present, and Future Conditions 9
- Future Vision of Waterfront Seattle 10
- Spatial Conditions of the Restored Public Realm 11
- Future Transportation 12
- Reuse of Salvaged Materials in Art 13
- Views from the Shore 14
- Views from the Bay 15
- Viewpoints 16
- Environmental Phenomena 17
- Qualitative Character 18
- Historic Conditions 20
- Historic, Present, and Future Conditions 21

Seawall Stories 22

Vision for Art
- Philosophical Framework 24
- Conceptual Framework 26

Principal Art Opportunities
- Approach 29
- Seawall Reveal 30
- Sculpted Habitat 34
- Penetrating Light 38
- Aquatic Utility 42
- Puget Soundings 46
- Summary of Principal Art Opportunities 48
- Potential Locations of Principal Art Opportunities 49

Temporary Art Opportunities
- Approach and Opportunities for Incorporating Temporary Art during the Seawall Project Construction Period are in Development

Implementing the Art Plan
- Approach for Implementing the Art Plan is in Development

Bibliography & Resources 50
Introduction

articulate the structured face of the waterfront with art
PROJECT OVERVIEW

Art on the Central Waterfront
Art is a field of inquiry and profound cultural force that stimulates thinking, reveals meaning, and creates connections that can uniquely resonate with one’s consciousness of place. Seattle’s Central Waterfront is about to undergo a dramatic reinvention, and public art will play a major role in how this transformation is perceived, experienced, and remembered. In many ways art will be a catalyst for the cultural essence of the reimagined waterfront. It can speak about Seattle’s environmental ethos, history and culture of innovation and invention, connectivity to the world, and spectacular natural setting.

The Elliott Bay Seawall is the structural spine of the Central Waterfront and threshold where land meets sea. Replacement of the deteriorated seawall, portions of which are nearly a century old, is a foundational step for a program that will remake the waterfront, called Waterfront Seattle. Guided by Waterfront Seattle’s art plan, entitled A Working Plan for Art on the Central Seattle Waterfront, the Elliott Bay Seawall Project Art Programming Plan is a framework for the development of artworks both permanent and temporary that will articulate the seawall site, illuminating its workings in unexpected ways.

Art on the waterfront will be as dynamic and diverse as the multi-faceted attributes that inspire it, tapping into conditions of the past, present, and future to conjure Seattle’s Waterfront.

Elliott Bay Seawall Project
The Elliott Bay Seawall Project is a major and essential reconstruction that will replace the existing seawall with a new structure that meets current ecological, safety, and design standards. The City of Seattle plans to replace the Central Seawall beginning in late 2013, with a second phase of work for the North Seawall following as funding is available. The Central Seawall extends between South Washington Street (just south of the Washington Street Boat Landing) and Virginia Street (at the northern edge of Pier 62/63). It is approximately 3,700 feet long. The North Seawall will extend north from Virginia Street to Broad Street another 3,500 feet. The Central Seawall is the focus of this art plan.

The City of Seattle’s goals for the Elliott Bay Seawall Project are:
• address critical structural public safety needs at the shoreline;
• respect cultural, archaeological, and historic resources;
• consider long-term vision for the Central Waterfront;
• provide enhanced habitat and environmental quality;
• provide enhanced public gathering and recreational opportunities;
• support the economic vitality of the waterfront;
• minimize cumulative construction impacts;
• support fiscal responsibility.

Schedule
The Elliott Bay Seawall Project is currently in a design phase that will be complete in 2013. Construction is anticipated to occur over a period of three seasons, starting in 2013 and reaching completion in early 2016. Construction will be phased in order to minimize impacts on businesses and transportation and will be discontinued during summer months when peak visitation and tourism occur. Phases of construction will be refined after a General Contractor/Construction Manager is selected at the end of 2012.

Transformation of the Central Waterfront
Transformation of the waterfront will occur in the next decade through many current and future projects. One of the most significant is Washington State Department of Transportation’s replacement of the aged and vulnerable Alaskan Way Viaduct (Highway 99), a double-stacked elevated highway completed in 1953 that bisects downtown and the waterfront. The massive structure is being replaced with an underground tunnel. Upon completion of the bored tunnel and replacement of the seawall in 2016, the Viaduct along the Central Waterfront will be demolished and a new surface street constructed in its place. The new roadway will include improvements to sidewalks, crosswalks, bike lanes, and transit connections that will reconnect downtown Seattle to the waterfront.

According to historian Paul Dorpat, long-time waterfront entrepreneur Ivar Haglund spoke before his death in 1985 about how when the Viaduct does eventually come down, “the waterfront will awaken like Sleeping Beauty to the kiss of its prince, the city.” Much anticipation for this awakening is occurring and the City and State are working collaboratively across projects to take advantage of this once-in-a-lifetime opportunity to reshape Seattle’s waterfront. Toward that end, the City has initiated the Waterfront Seattle program.

Waterfront Seattle Vision
Waterfront Seattle, a program through which the waterfront will be transformed over time, describes a cohesive framework of public spaces, programs, and art that will enliven the waterfront. Essential to the vision are interconnections between the Central Waterfront and Elliott Bay to the west, downtown Seattle to the east, public parks and spaces to the north, and historic Pioneer Square and the stadium district to the south.

The Waterfront Seattle and Seawall Project teams have collaborated on seawall placement to maximize flexibility for the future implementation of waterfront open space. Waterfront Seattle’s design is being led by James Corner field operations, who is working with the Elliott Bay Seawall design team to conceive public realm elements of the Seawall Project that will become the initial segment of Waterfront Seattle’s public spaces.
ADVANCING WATERFRONT SEATTLE’S VISION FOR ART

Waterfront Seattle Art Plan
A Working Plan for Art on the Central Seattle Waterfront was completed as part of the Waterfront Seattle Concept Plan. It seeks to actively engage the public and artists of all backgrounds to be directly involved in a cultural reconnection with the evolving waterfront. While Waterfront Seattle’s concept design plan drafts strategies for reconnecting downtown Seattle to Elliott Bay physically, its art plan develops a program that will reconnect Seattle to Elliott Bay culturally.

The plan calls for a variety of art to create continuing engagement and cultural production on the waterfront. Art projects include core commissions for prominent sites, ephemeral and temporary projects, artist residencies, performances, lectures, and education programs.

A Working Plan for Art identifies the seawall as a core site for art, and in particular calls for art that reveals tidal processes and creates a more bio-positive environment. Given that Elliott Bay is one of the world’s only biodiversity hot spots within an urban center, one goal identified for the seawall is to restore severed connections between habitat zones (aquatic, intertidal, riparian, upland) on the new waterfront.

Elliott Bay Seawall Project Art Plan
The Seawall Project design team includes artists charged with ensuring that Waterfront Seattle’s vision for art is carried forth as part of the Project. The Elliott Bay Seawall Project Art Programming Plan interprets, develops, and applies the concepts and goals of A Working Plan for Art on the Central Seattle Waterfront into a program uniquely tailored to conditions and opportunities of the Seawall Project.

The concepts, research, and analysis completed by the Seawall Project design team are to be used in combination with the work of Waterfront Seattle as reference during the development of individual art projects for the seawall.

“A thoughtful redevelopment unavoidably destroys and preserves, making new things appear amidst the old. Art can work in parallel with these processes. It should not merely preserve, or represent (the past, or the future), but interact amid the systems, peoples, geographies, economies, and ecologies of its site. On a site as complex as the Seattle Waterfront, art must do more than symbolize or represent these processes. It must sincerely engage them over time.”

- A Working Plan for Art on the Central Seattle Waterfront

Pier 62/63 with yellow chairs set out as part of Waterfront Seattle’s initial phase of programming

Elliott Bay Seawall Project Design Team Artists
Artists Laura Haddad and Tom Drugan have produced the Elliott Bay Seawall Project Art Programming Plan collaborating as integral members of the Seawall Project Design Team. Their work includes:

- understanding and advancing the vision of Waterfront Seattle’s Working Plan for Art;
- researching and analyzing the Seawall Project’s site, design, goals, and methods;
- developing a conceptual framework for art based on Waterfront Seattle’s vision;
- identifying and analyzing the feasibility and artistic potential of Seawall Project sites and elements for inclusion of artwork;
- defining future art commissions to be administered by Seattle’s Office of Arts and Cultural Affairs (OACA) in partnership with SDOT;
- coordinating with SDOT, OACA, the Seawall Project design team, other artists, and other agencies and stakeholders to develop and implement art projects identified in this art plan.
Primary Art Concepts of Waterfront Seattle
The following section describes the main concepts of Waterfront Seattle's A Working Plan for Art and how the Seawall Art Programming Plan interprets and manifests them.

Art Intelligence: Art and Design Working Together
A Working Plan for Art calls for “design and art to work together to reveal and develop the unique character and identity of this site,” resulting in “art intelligence” integrated into each aspect of the design.” SDOT has adopted this imperative by embedding artists into the Seawall Project design team, allowing them to work closely with its engineers and scientists to ensure that art is considered in regard to every component of the project. As a result, the primary art opportunities that have been identified propose to integrate art into key systems of the Seawall Project, including habitat, light penetration, utilities, wayfinding, and the seawall itself. Art intelligence is lodged into the overall framework and objectives of the Project so that art and design can work together in ways that are sometimes seamless, sometimes independent, but always complementary in achieving mutual goals.

Continuous Elements: Art Addressing a Large Scale
A Working Plan for Art stipulates that “art should address the large scale of the waterfront’s continuous elements and contribute to the understanding of narrative along the waterfront.” The seawall is perhaps the largest-scaled piece of infrastructure that the City will produce. Asking artists to weave their ideas into its very workings has two benefits: the infrastructure becomes a more nuanced and fascinating artifact, and the art concepts are extended to the scale of the waterfront.

Cultural Identity: Respond to Place, Produce Place
A Working Plan for Art describes how “public projects will negotiate connections between new and old on the site” and engage the public in “developing a new cultural identity on the waterfront through artistic expression.” The process of producing the Seawall Art Programming Plan has entailed a thorough investigation and documentation of past, present, and future conditions on the waterfront with the intent that artists might respond to stories from all time periods and create compelling work that engenders a strong sense of place.

A Culturally Working Waterfront: Conceptual Values
A Working Plan for Art is formed around a set of core values to which the Seawall Art Programming Plan adheres.

“Ecology, Economy, Community” stipulates that art and culture on the waterfront engage these three broad forces whose interaction has continually shaped the waterfront. It is stated that ecological aspects of the waterfront that were suppressed by the existing seawall will re-emerge on the new waterfront, community will re-engage with the waterfront when the Viaduct is removed, and economy, which has always driven Seattle’s waterfront development, will continue to contribute to its shaping. Art should foster ongoing encounters between these systems. While the Seawall Project Art Programming Plan responds to all three of these subjects, it has a strong focus on creating art opportunities associated with restoring the waterfront’s ecology.

“A Working Waterfront” acknowledges the many types of labor and production that have been and will continue to be a part of Seattle’s working waterfront, including artmaking. The legacy of a “working waterfront” inspires a cultural program in which artists will work alongside workers from other fields on the waterfront. The Seawall Art Programming Plan calls for artists to work closely with Project designers, engineers, and contractors to create work that is uniquely tied to the physical and cultural identity of the waterfront. It also describes a wide array of temporary art commissions that will involve artists working on site during construction to engage the public directly in cultural production.

“A Waterfront as Cultural Think Tank” envisions the waterfront as a laboratory for incubating and testing new ideas, partnerships, and cultural productions that will influence the design, use, and experience of the waterfront. Environmental work related to the new seawall includes ongoing experimentation to increase the effectiveness of habitat restoration techniques. The Seawall Art Programming Plan specifies experimental art in which artists will collaborate with scientists and engineers to develop new methods of addressing ecological issues.

“The Site as Source” suggests that art consider place through lenses of history, geography, ecology, and economy. It provides a survey of significant places, both specific/historical and general/philosophical from which art might take inspiration. Some of the key sites identified in the plan that are significant to the seawall include Skid Road, Ballast Island, Tidelines, Salish Sea, Moon the Transformer, Underground, High and Low, and the Littoral Zone. Artists working on Seawall Project commissions may find inspiration in the places listed in A Working Plan for Art, the Seawall Art Programming Plan, or a “site” they may unearth in their own research. The waterfront’s past, present, and future as well as its culture, environment, and economy create a richly interwoven resource for artists that will foster unique site-specific artworks.

“360 Degree City” describes a method of comprehending the physicality of the waterfront in geographic terms, including understanding an individual artwork in the context of other artworks on the waterfront. As the first major project of the larger Waterfront Seattle vision, art created through the Seawall Project will frame a geographic “place” that creates a cohesive narrative about the seawall in the context of the whole waterfront. Falling under A Working Plan for Art’s ideas on geography is a vision to create “A Constellation of Sites” that connect artworks, audiences, and neighborhoods. Through this vision, artworks can be conceived to aid in “Navigation and Wayfinding” for routes created in, around, and connecting to the waterfront. The Seawall Art Programming Plan sets out to manifest these considerations by mapping system-based artworks that act as navigational devices for both human and marine life. Art created through the Seawall Project will be the first step in implementing this cohesive geographical constellation.”
Analysis

a dense overlay of structure, nature, and culture at the water’s edge

Elliott Bay Seawall, concrete slab being set against a structure of old growth timbers, 1934
(Seattle Municipal Archives, 8846)
RECONSTRUCTING THE ELLIOTT BAY SEAWALL

Existing Seawall
Currently the waterfront has three types of seawall structures which were constructed between 1911 and 1936, with the oldest section south of Madison Street. The seawall ranges between 15 and 60 feet in width. The widest section is located in front of the historic waterfront piers and spans the entire width of Alaskan Way to the western edge of the Alaskan Way Viaduct.

The seawall has deteriorated and needs to be replaced for the following reasons:
• it was built with untreated old growth timbers and has been damaged by waves and tidal forces as well as marine borers called gribbles;
• it was not built to withstand earthquakes and is unable to resist loads associated with potential liquefaction of the loose soils on which Seattle’s waterfront is constructed;
• waves and tidal forces have eroded fill from behind the seawall, creating voids that have caused structural damage and instability of the wall.

Seawall Replacement
The Elliott Bay Seawall is being designed to withstand a 1,000-year seismic event and will have a service life of 75-100 years. Methods being considered for the replacement of the Central Seawall take into consideration the Project’s objectives, structural aspects of the existing seawall, and other concurrent and future projects occurring on the waterfront. The new seawall will be constructed approximately 10-15 feet landward of the existing seawall, and other concurrent and future projects occurring on the waterfront. The new seawall will be constructed approximately 10-15 feet landward of the existing seawall, which will be removed after the new structure is in place. A sidewalk will extend west, over the water, to connect the piers to land.

Structural System of the New Seawall
The structural system for the new seawall will be built with soil improvements, using jet grouting and deep soil mixing.

Jet grouting consists of mixing in-situ soils with grout to form a mass of stabilized soil. Circular columns of improved soil are formed by inserting a hollow drill pipe into the existing soil, and spraying grout under high pressure through nozzles in the drill pipe into the surrounding soil. This process generates spoils that will be either reused or disposed.

The jet grout columns will be constructed in a grid pattern to create a block of improved soil extending down to firm glacial soils. The cellular arrangement of the columns will form enclosures around otherwise liquefiable soil. The finished configuration of the grouted columns will create the spine of the new seawall. Concrete face panels will be placed on its waterward side to protect the structure from wave and tidal action and other environmental forces.

Restoration of Alaskan Way
At completion of the Seawall Project, Alaskan Way will be in a “restored” state. It will include four lanes of traffic. A multi-use path will run on its east side and the cantilevered sidewalk on its west side. Following demolition of the Alaskan Way Viaduct in 2016, the roadway will be moved further east to its final location, after which the western section of the restored roadway will be replaced with the eastern portion of Waterfront Seattle’s Tideline Promenade, which is described in more detail on the following pages.

Utility Relocations
The project area contains extensive utilities including water, sanitary sewer, combined sewer, stormwater, electrical, steam, gas, fire alarm, and telecommunication systems. Some are directly beneath Alaskan Way while others extend through the seawall to the piers. Most of the connections to the piers will be temporarily relocated and reinstalled in their final locations as seawall construction progresses; others will be protected in place. Utilities that penetrated the new seawall include stormwater.

Amenities in the Restored Public Realm
The Seawall Project’s restored public realm will include the restored roadway, multi-use path, and cantilevered sidewalk pedestrian zone. Features of the pedestrian walkway include continuous light penetrating surfaces to improve marine habitat, temporary planters and seating where space allows (to be relocated or repurposed when the final configuration of the Tideline Promenade is built), a view platform at the Spring Street pier slip, a view of the new seawall at the Seattle Aquarium, railings at pier slips and the Aquarium, and lighting.

The Project also includes amenities at Washington Street: restoration of the historic Washington Street Boat Landing, which will be reinstalled at its current location following off-site restoration, and a new pocket beach similar to the existing beach at Olympic Sculpture Park. Other habitat restoration features are included along the length of the new seawall.

This art programming plan describes ways in which art can be incorporated into the Seawall Project’s public realm amenities and marine habitat improvements.

Opportunities for Art in the Seawall Project
While different locations, types, and themes for art offer different opportunities, the following generally can be applied to the art projects identified in this plan:
• art will be in a highly visible location;
• sites for art are layered with phenomena;
• art can tie to large-scale systems of infrastructure;
• art can function scientifically;
• art can contribute to Project goals and methods, including enhancing marine habitat;
• artists will have access to a collaborative team of engineers and scientists.

Constraints for Art in the Seawall Project
The following constraints generally can be applied to the art projects identified in this plan:
• art cannot impede ecological function;
• art will be subject to permitting requirements;
• space for large-scale sculpture is somewhat limited;
• visibility of art may be challenging in some locations;
• artists must take into consideration future phases of implementing Waterfront Seattle elements, which could cause certain site conditions to change.
Salmon Migration Conditions
As part of the Seawall Project, the City of Seattle is improving the nearshore ecosystem of Elliott Bay, with a focus on restoring the juvenile salmon migration corridor. Every year tens of thousands of salmon migrate along the Elliott Bay Seawall and then up the Green/Duwamish River and its tributaries to spawn. After beginning their lives in freshwater rivers, juvenile salmon swim down the Green/Duwamish River to enter Elliott Bay in the spring and summer, traveling along the Elliott Bay Seawall and Seattle’s urbanized downtown waterfront. Diets of salmon migrating through Elliott Bay include small crustaceans and riparian insects.

For juvenile salmon traveling to the ocean, the Seattle Waterfront presents a bewildering maze of open water and piers, shallow and deep water, light and darkness. Juvenile salmon eyes are sensitive to high contrast light conditions: it takes them 20-40 minutes to transition between dark and light areas. For that reason they typically swim around piers, where light levels are consistent, rather than beneath them. This is disadvantageous because as they move out to the ends of the piers the water becomes deeper, food is scarce, and predators are more abundant.

Enhancing habitat conditions for juvenile salmon along the Seattle Waterfront is pivotal to the success of regional salmon recovery. The Seawall Project will create approximately two acres of new aquatic habitat and a salmon migratory corridor.

The Project will also enhance habitat for other residential or migratory organisms that inhabit Puget Sound, as the ecosystem is connected and what supports salmonids also supports other forms of life. These resources include plankton, invertebrates, fish, birds, mammals, and aquatic vegetation.

Habitat Restoration Strategies
Replacement of the seawall provides a unique opportunity to incorporate elements along the new wall that will encourage juvenile salmon to hug the shoreline as they swim to the ocean.

The Seawall Project is employing the following strategies for improving marine habitat:

- create shallow water and intertidal habitat;
- improve substrates to support plant and invertebrate life;
- introduce riparian vegetation in upland areas;
- increase and balance light levels.

Design Elements for Habitat Improvement
General strategies for improving habitat are being met with a series of specific design elements, some of which can be augmented and revealed by art integration.

Create Shallow/Intertidal Water
Shallow water (6’ or less) along the shoreline increases plant growth to supply juvenile salmon with food while also creating a refuge from predators who live in deeper waters. The following design elements will accomplish this:

- a shallow sloping beach at Washington Street to provide a substantial intertidal area for respite;
- intertidal habitat benches between piers, constructed from stacked marine mattresses (rock filled mesh cubes), to create pockets of shallow water.

Improve Substrates to Support Plants and Invertebrates
Vertical seawalls typically lack sloping surfaces that modify patterns of wave energy and provide other physical characteristics that influence the growth and distribution of sessile invertebrates. The vertical edge they create reduces the intertidal surface area available for plant and invertebrate life, increasing competition and stress among organisms (Maureen Goff, p. 1). Additionally, seawalls often do not include the varied textures and crevices that can promote plant and invertebrate growth and provide refuge. The Seawall Project includes the following design elements to enhance ecological processes:

- textured seawall face panels to promote growth of intertidal vegetation and marine invertebrates;
- marine habitat “shelves” placed intermittently along the seawall to provide variations in slope and refuge for invertebrates;
- substrates that support life, including gravel and shell hash, placed on the marine floor at habitat benches (some will be loose and some confined in marine mattresses);
- marine mattresses to protect aquatic habitat from wave exposure.

A collaborative effort between City of Seattle engineers and planners, consultants, and University of Washington researchers led to the design, installation, and evaluation of “habitat enhancement test panels” that integrate physical features such as slope and surface texture to mimic natural intertidal microhabitats. Results of those test panels, still installed on the existing seawall north of the Seattle Aquarium, have informed the design of the Elliott Bay Seawall.

Introduce Riparian Vegetation in Upland Areas
Riparian plantings enhance the structure of the aquatic habitat and provide food and refuge for migrating salmon. While space for in-ground plantings is limited in the Seawall Project public realm, the following measures are being taken to maximize the potential that does exist for riparian vegetation:

- areas of the Washington Street Beach above the tidal zone to be planted with riparian vegetation;
- trees to be incorporated into the upland area of the Washington Street Beach, and eventually the promenade adjacent to it to create a critical mass of shoreline vegetation;
- temporary planters to be inserted wherever there is space and filled with plants that support the local shoreline ecology.

Increase and Balance Sunlight Levels
Greater levels of sunlight penetrating the water make it easier for juvenile salmon to see food and predators. Sunshine also promotes the growth of vegetation which provides food. The following design elements will be used to manage light in a way that benefits the marine environment:

- a continuous band of light penetrating surfaces (glass block and grating) to be incorporated into the cantilevered sidewalk hovering over the shallow water along the seawall, permitting sunlight to penetrate to the marine environment below and minimizing dark pockets between lit areas;
- artificial illumination designed to minimize the amount of night light entering through these surfaces, so as not to disturb natural rhythms.

Improve Substrates to Support Plants and Invertebrates
Horizontal seawalls often do not include the varied textures and crevices that can promote plant and invertebrate growth and provide refuge. The Seawall Project includes the following design elements to enhance ecological processes:

- textured seawall face panels to promote growth of intertidal vegetation and marine invertebrates;
- marine habitat “shelves” placed intermittently along the seawall to provide variations in slope and refuge for invertebrates;
- substrates that support life, including gravel and shell hash, placed on the marine floor at habitat benches (some will be loose and some confined in marine mattresses);
- marine mattresses to protect aquatic habitat from wave exposure.

A collaborative effort between City of Seattle engineers and planners, consultants, and University of Washington researchers led to the design, installation, and evaluation of “habitat enhancement test panels” that integrate physical features such as slope and surface texture to mimic natural intertidal microhabitats. Results of those test panels, still installed on the existing seawall north of the Seattle Aquarium, have informed the design of the Elliott Bay Seawall.

Introduce Riparian Vegetation in Upland Areas
Riparian plantings enhance the structure of the aquatic habitat and provide food and refuge for migrating salmon. While space for in-ground plantings is limited in the Seawall Project public realm, the following measures are being taken to maximize the potential that does exist for riparian vegetation:

- areas of the Washington Street Beach above the tidal zone to be planted with riparian vegetation;
- trees to be incorporated into the upland area of the Washington Street Beach, and eventually the promenade adjacent to it to create a critical mass of shoreline vegetation;
- temporary planters to be inserted wherever there is space and filled with plants that support the local shoreline ecology.

Increase and Balance Sunlight Levels
Greater levels of sunlight penetrating the water make it easier for juvenile salmon to see food and predators. Sunshine also promotes the growth of vegetation which provides food. The following design elements will be used to manage light in a way that benefits the marine environment:

- a continuous band of light penetrating surfaces (glass block and grating) to be incorporated into the cantilevered sidewalk hovering over the shallow water along the seawall, permitting sunlight to penetrate to the marine environment below and minimizing dark pockets between lit areas;
- artificial illumination designed to minimize the amount of night light entering through these surfaces, so as not to disturb natural rhythms.
Elliott Bay: Historic—Present—Future
The Central Waterfront was originally characterized by tree-covered bluffs fronted with mixed gravel beaches in the north end. In the south end tidal mud flats fostered eel grass, shellfish, and other life that supported the migration of salmon along the varied coastline. Today, despite the lack of shallow sloping intertidal beaches, Elliott Bay still serves as an important migratory corridor for salmon, though the convoluted path juveniles make around piers poses a threat, diminishing the salmon population. Future improvements made by the Seawall Project strive to streamline the migratory path, holding it close to shore where conditions are more habitable.

Cycles of Salmon Migration
Juvenile salmon migrate to the ocean in the spring and summer and adults return in the fall and winter to the Green/Duwamish watershed. The Salish people who inhabit the region have a symbiosis with the salmon who live in the Puget Sound area and organize activities around the migration calendar. Historically they have understood the following lifestyle characteristics of the various species:

- sockeye spend their early years in lakes;
- chum spawn in streams near the ocean in the fall;
- coho spawn in fast-flowing small streams in the fall;
- chinook spawn in large rivers far from the sea in spring and fall (Matthew Klingle, pp. 21-22).
**A Waterfront for All**
The Elliott Bay Seawall Project is the foundational step in the long-term implementation of Waterfront Seattle, a cohesive framework for public space, parks, connections, and programs that will enliven the waterfront. Waterfront Seattle will be built in phases over the next decade with a combination of public and private funds.

The Seawall Project Art Programming Plan aims to tie to Waterfront Seattle’s guiding principles:

- create a waterfront for all;
- put the shoreline and innovative, sustainable design at the forefront;
- reconnect the city to its waterfront;
- embrace and celebrate Seattle’s past, present and future;
- improve access and mobility;
- create a bold vision that is adaptable over time;
- develop consistent leadership.

**Tideline Promenade**
Waterfront Seattle’s framework plan includes public spaces that will be strung along a wide pedestrian spine called the Tideline Promenade, which will include plants, seating, kiosks, a bike path, and other amenities. The Seawall Project’s restored condition will include the westernmost portion of the future Tideline Promenade, including where it meets the property line of contiguous piers. The seawall will be located 15’ east of this property line. As a result, the 15’-wide section of promenade between the piers and seawall will be cantilevered above water, while the section east of the seawall will sit on solid ground. The cantilevered portion is where light penetrating surfaces will be located.

Permanent public amenities as identified in the Waterfront Seattle framework plan that will result from the Seawall Project include:

- the western edge of the Tideline Promenade;
- the Washington Street Beach.

**FUTURE VISION OF WATERFRONT SEATTLE**

---

*above:* Waterfront Seattle Tideline Promenade in its final configuration at Pier 54 (image courtesy of James Corner Field Operations)

*beneath:* Waterfront Seattle vision for public spaces overlaid onto public space that will result from Seawall Project
Spatial Opportunities
Unique spatial opportunities of the Seawall Project will inspire the creation of memorable art experiences.

- The promenade is layered and expansive vertically in the way its cantilever encompasses the water and marine environment below and open sky above.
- Just beyond the western edge of the promenade is an extensive view of Puget Sound, the Olympic Mountains, and sunset skies. Art can “borrow” these vistas in the manner of the Picturesque landscape tradition, expanding its spatial breadth enormously.
- The densest overlay of the kind of natural and cultural phenomena artists might be drawn to occurs at the water’s edge. Even after the final configuration of the Tideline Promenade is constructed, the western edge that is being built with the Seawall Project will be the magnet to which people gravitate.
- The promenade is narrow in the east-west orientation but long in the north-south orientation, presenting possibilities for sequential or narrative art that can be experienced over a three-quarter mile walk.

Spatial Constraints
The promenade that will be created with the Seawall Project will be narrower than the final condition. Certain conditions should be considered when conceiving artwork integration.

- The entire width from street curb to waterside edge varies between 18-29’. At least 18’ of this must remain clear space for pedestrian passage, additionally 3’ of clear space must be provided between the curb and any obstruction in the sidewalk area. Remaining space must accommodate utility boxes, street light standards, raised planters, seating, and other streetscape furnishings. As such, there are only a few promenade locations, in the wider north end of the site and at a widened cantilever in a slip between Piers 54 and 55, suitable for sculpture.
- The promenade will cantilever over the water, supported by a system of concrete beams that limit the placement of structurally intensive artwork.
- The surface of the promenade will include light penetrating surfaces that should not be permanently shaded by artwork or other streetscape elements.

The Washington Street Beach provides a fantastic opportunity for a spatially expansive artwork that can draw on the dense phenomena of the site.

Temporary planters in the north end of the site offer an opportunity to test new types of productive plantings that could range from tree nurseries to agricultural crops to natives that attract birds and other wildlife.

The Washington Street Beach provides a fantastic opportunity for a spatially expansive artwork that can draw on the dense phenomena of the site.

Temporary planters in the north end of the site offer an opportunity to test new types of productive plantings that could range from tree nurseries to agricultural crops to natives that attract birds and other wildlife.

The densest overlay of the kind of natural and cultural phenomena artists might be drawn to occurs at the water’s edge. Even after the final configuration of the Tideline Promenade is constructed, the western edge that is being built with the Seawall Project will be the magnet to which people gravitate.

The promenade is narrow in the east-west orientation but long in the north-south orientation, presenting possibilities for sequential or narrative art that can be experienced over a three-quarter mile walk.

Spatial Conditions of the Restored Public Realm

(left) Seawall Project restored promenade with temporary tree nursery planters in its widest section, adjacent to Waterfront Park (image courtesy of James Corner Field Operations)

(below) approximate dimensions of Seawall Project restored promenade width
**Seawall as a Transportation Project**
The new seawall will support the Alaskan Way Viaduct, existing and future surface streets, and contingent ferry and rail lines, all of which transport local, regional and international commuters, visitors and freight. Once the Viaduct is demolished, a new four-lane surface street will be built in its footprint. It will function as both an urban arterial and a regional connector for transporting freight.

Reconstruction of the Seawall is a foundational step in building this important new piece of transportation infrastructure.

**Waterfront as a Crossroads**
The waterfront is, in the words of Waterfront Seattle, a crossroads. Waterfront Seattle has an access strategy that seeks to connect the Central Waterfront with people and places throughout the city and region using a wide range of transportation and wayfinding options, including bicycles, ferries, public transit, walking, and a constellation of art.

**Migration as Mobility**
Central to the Seawall Project is a goal to restore a juvenile salmon migration corridor. Just as critical as facilitating the mobility of freight and people is facilitating the migration of salmon and other marine species.
REUSE OF SALVAGED MATERIALS IN ART

Salvaged Materials and Sustainability
Replacement of the seawall will include a demolition and salvage operation that runs concurrent with construction. Because the new seawall will push inward from the existing seawall, large and small structures as well as fill will be extracted and removed from the site. While much of this matter will be rubble, there also exist elements that may be desirable for reuse in art.

Salvaged materials offer the following qualities:
• durability and suitability for exterior use;
• low cost or free;
• patina of history, marine life, authenticity;
• conduit between the past and present;
• tie to city goals for sustainability.

Menu of Salvaged Materials
The Seawall Project has catalogued materials that will be salvaged and may be available for use in artworks. Of particular interest may be the following elements:
• drainage scuppers and outfalls in the seawall;
• plaques and emblems on railings and in the sidewalk (alternatively, these may be reinstalled or donated to the Museum of History and Industry);
• metal expansion plate over existing seawall;
• eki (wood) lagging on existing seawall;
• wood pilings from relieving platform;
• rails from old streetcar.

Application of Salvaged Materials in Art
While artists commissioned for any of the art projects identified in this plan may make use of the salvaged materials, certain opportunities should be highlighted:

Construction Curator. During construction an artist may be commissioned to select, catalog, and display curious salvaged artifacts in on-site interpretive cabinets.

Aquatic Utility. An artwork integrated with utilities may make interesting use of artifacts of previous utilities.

Sculpted Habitat and Habitat Incubators. Projects geared toward the production of marine habitat may consider using materials that already have a patina of marine life.
VIEWS FROM THE SHORE

clockwise from upper left:
pedestrians on existing sidewalk at University Street pier slip
looking out from University Street pier slip
Waterfront Park and Seattle Aquarium
looking north up Alaskan Way from the Marion Street pedestrian overpass
queue for ferry at Colman Dock
outdoor seating at Ivar’s on Pier 54
view of Aquarium from base of Pike Street Hillclimb
VIEWS FROM THE BAY

clockwise from upper left:
Washington State Ferry leaving Colman Dock, with Port of Seattle cranes in the background
view of waterfront with downtown skyline in the background, as seen from a boat
looking north toward Washington State Ferry at Colman Dock, with Seattle skyline landmarks in the background
looking north at back of Pier 54, toward the Great Wheel on Pier 57
Washington Street Public Boat Landing, with stormwater outfall showing in the seawall below
site of future Washington Street Beach, with Smith Tower in the background
looking toward Pier 55 and Argosy Cruises, with downtown buildings in the background
western edge of piles and deck of Piers 62/63, contrasted with downtown buildings in the background
Viewpoints

Seattle is renowned for its spectacular layered views that condense the urban skyline with Puget Sound and surrounding mountain ranges. Looking west from the Central Waterfront, the Olympic Mountains appear to be part of the city. This borrowed scenery can be used to advantage in artworks.

Views east to the waterfront from ferries and other boats are also fantastic, especially in their juxtaposition of historic wood piers, industrial-scale shipping containers and cranes, and the modern skyline.

Once the Alaskan Way Viaduct is removed slot views of the waterfront from downtown will re-open, providing a visual reconnection to the Bay.
Aquatic Environment
Puget Sound is a deep glacial fjord. Its natural shorelines are primarily glacial sediment beaches and mudflats. Seattle was settled where it is mainly because of Elliott Bay’s unusual depth, which afforded extensive deep water frontages for portage. There is approximately 12’ of tidal change on the shoreline, which registers against the seawall. Extreme low tides lift the curtain on Puget Sound’s hidden aquatic wonderlands.

Weather Phenomena
Environment, weather, and light are essential to experiences of the waterfront. The sense of place shifts dramatically as these natural conditions change. Sun, wind, clouds, rain, seasonal changes of light and weather, as well as diurnal changes from daylight to darkness are all phenomena to which art can respond, either heightening our perception of the environment or contradicting it.

Sun. Low western evening sunlight can be fantastic in its breadth, coloration of the sky, and casting of shadows. Of note is the wide seasonal difference in daylight hours (16 at summer solstice versus 8 at winter solstice).

Wind. Winds align along Puget Sound. Light winds (0-20 knots) come from the north in the summer and stronger winds (0-40 knots) from the south in the winter.
The qualitative character of the Seawall Project’s waterfront site changes from north to south. Dichotomous relationships including private versus public, large versus small, fantastic versus authentic, and artificial versus natural inform the qualities of place. Three character zones—experiential, fantastic, and authentic—have been identified, the boundaries of which are loosely defined by these dichotomies and other conditions. While the edges between the three zones are blurry and overlaps occur, they point to a way of understanding the site that might not be apparent through more analytic and quantitative diagrams.

Experiential
- Event Waterfront
- Spectacle
- Locals & Tourists

Fantastic
- Carnival Waterfront
- Whimsical
- Predominately Tourists

Authentic
- Working Waterfront
- Historical
- Locals & Tourists

Art projects developed in conjunction with the Seawall Project may play into or off of the qualities described for each.
Experiential
The north end of the site is city-owned property and includes quintessential places where Seattleites and tourists alike gather for communal experiences of large-scale spectacles both natural and cultural. The Seattle Aquarium offers hands-on experience with marvels of the marine environment. Pier 62/63 was the city’s premier outdoor summer concert venue in the 1990s and early 2000s. Collective memories of those events color people’s visits to the waterfront today. Waterfront Seattle’s concept plan includes features that will once again activate Pier 62/63 with spectacle: a skating rink, barge pool, stage, and grandstand. Not far south, Union Street plaza is also conceived as an event landscape with plans for a dramatic “cloud” water sculpture. The north end of the site features spectacular sweeping views of the Olympic Mountains and Puget Sound against a backdrop of atmospheric skies. Experiences here are of wonders that are large and real but otherworldly—ranging from sunset skies to epic concerts to the Puget Sound’s most curious creature, the giant Pacific octopus.

Fantastic
The piers in the central part of the site are privately owned and teeming with a carnivalesque commercial atmosphere geared toward tourists. This area offers a theatrical version of the Seattle waterfront: sunset views are supplanted by colorful electric lights while delusory displays at Ye Olde Curiosity Shop substitute for the scientific exhibits at the Seattle Aquarium. The mood here is one of whimsy and fun, with attractions such as the Great Wheel, the Bay Pavilion’s carousel and arcade, Ivar’s Acres of Clams’ culinary fantasy of “world famous clams,” Argosy Cruises’ thematic tours of Puget Sound, and a continuous stream of buskers parading their entertainments along the promenade. The fantastic blend of fact and fiction might best be exemplified by one of the waterfront’s oldest businesses, Ye Olde Curiosity Shop located at Pier 54. For over a century it has exhibited and sold a combination of genuine and replica curios including Indian baskets, giant whale bones, and more unusual specimens of sealife, including a bona fide mermaid.

Authentic
The south end of the site is a historically significant part of Seattle: the city’s original working waterfront. Like the north end, the land here is owned by public agencies. The Washington Street Boat Landing, built for the Seattle Harbor Department in 1920, stands as a historic remnant. Colman Dock/Pier 52 has provided ferry transportation through many incarnations starting with nineteenth-century steamships and continuing to today’s state-run ferry service. The monumental cranes and containers of the Port of Seattle’s shipping operations just south of the site are highly visible and lend an aura of authenticity to the waterfront. Yesler’s sawmill, historically located at the base of present-day Yesler Way, was the first major commercial venture of Seattle’s early settlers. Prior to that this area was a tidal flat at the mouth of the Duwamish River and a locus of work by Salish fishermen. The heart of this section of the future waterfront will be a new beach designed to foster the restoration of Seattle’s most authentic natural and cultural symbol, the wild Pacific salmon.
HISTORIC CONDITIONS

Geologic History
Seattle lies within the central portion of the Puget Sound Basin, a north-south topographic trough located between the Cascade Range and Olympic Mountains. The area has been impacted by glaciation over the past 2.4 million years, with the most recent glacial episode occurring about 13,500 years ago. The present Central Waterfront sits atop glacial and non-glacial deposits overlying bedrock. This geology is the result of repeated cycles of glacial scouring and deposition, tectonic activity, as well as landslides, shoreline erosion, and alluvial deposition. However, large-scale earth-moving projects by humans starting in the late 1800s account for the greatest modifications to the shoreline. The western edge of the waterfront was filled with soil removed from hilltops in and around downtown. The south end of the Central Waterfront, in the area of the former Yesler sawmill, includes large deposits of wood debris consisting of timbers, piles, mill ends, and sawdust.

Seismic History
The Central Waterfront is situated in an area where numerous small to moderate and occasional large earthquakes have occurred as a result of ongoing movement and collision between tectonic plates. The Seattle fault zone runs east-west across the south part of the city. Certain non-glacial deposits, such as fill, are prone to liquefaction from earthquakes of sufficient size and duration.

Transitional Shoreline
Two centuries ago Seattle’s waterfront was a natural coastline with tree-covered bluffs, gravel beaches, marshlands, mud flats, and an estuary at the mouth of the Duwamish River. Coast Salish people occupied villages in the area for many centuries. A primary village was at a peninsula on Elliott Bay, close to present-day King Street Station. The founding of Seattle is usually dated from the arrival of the Denny Party in 1851. Starting with Henry Yesler’s sawmill at the base of what
Past, Present and Future Meet and Merge
The waterfront has and will always be a place in transition. Indeed, Murray Morgan in his quintessential historic account of Seattle, *Skid Road*, says, "...here on the waterfront Seattle's history and Seattle's future meet and merge" (Morgan, p. 3). Mapping Seattle’s past, present, and future conditions together reveals curious overlaps ranging from land over water, industry over landform, and recreation over work. Also revealed are places where history has stood fairly still: boats have long been used as a main form of transportation on Elliott Bay, and the central piers and Washington Street Boat Landing have been in place since the early 20th century.

Art along the seawall can layer the past onto the present and future. However, art should avoid being didactic or interpretive, and instead look to historic events as inspiration for present-day experiences.
Coast Salish
Puget Sound is an ancestral home of the Coast Salish peoples. When settlers arrived in the 1850s more than 50 tribes called it home. The Duwamish is the Salish tribe most associated with Seattle’s Central Waterfront, having had encampments and a village at the mouth of the Duwamish River. Coast Salish tribes shared a common language called Lushootseed and many cultural traditions. Living in cool houses of grass mats in the summer and communal longhouses of split cedar in the rainy winter, they lived near rivers, lakes, or Puget Sound. Their primary means of transportation was by water, usually in dugout cedar canoes. They gathered shellfish, berries, camas, and other plants for food and medicine; hunted deer and other game; and fished by net, trap, weir, club, and hook and line for fish of all types. But by far the most important was salmon.

siʔaːƛ
Chief ˈsiʔaːƛ (Si’ahl or Sealth), Seattle’s namesake, was the dxʷdəwʔabʃ (Dkhw’Duw’Absh or Duwamish) chief when Anglo settlers arrived at Elliott Bay. He is perhaps best known for a speech he made in 1854 as his people were considering a proposal from the governor to move to a reservation. He spoke in the Lushootseed language, which was translated to English by way of Chinook jargon.

There was a time when our people covered the land as the waves of a wind-ruffled sea cover its shell-paved floor. Our people are ebbing away like a rapidly receding tide that will never return. Even the rocks thrill with memories of stirring events connected with the lives of my people. And when the memory of my tribe shall have become a myth among the White Men, these shores will swarm with the invisible dead of my tribe. The dead are not powerless. Dead, did I say? There is no death, only a change of worlds.

Doc Maynard’s Seattle Exchange
No one person was more influential in the founding of Seattle than Doc Maynard. From giving prime land to early settlers who he knew would add to the community, to doctoring immigrants and Native Americans often without pay, to supporting his friend Chief Sealth and other Salish during times of conflict, his generosity and vision for the future shaped Seattle. Maynard learned to speak Salish and advocated for tribes, becoming the “Special Indian Agent” when tensions grew between tribes and settlers. After they moved across the Sound for safety, he supplied the Salish with lumber and food. Maynard started the first store, the Seattle Exchange, located at Front and Washington Street. It became a de facto community center where Seattelites and tribes could get not only groceries and supplies, but also be doctored and post mail. In many ways the Seattle Exchange represents the exchange of cultures and generosity that permeates the vision for art on the waterfront.

Salmon People
For the First Peoples of Puget Sound, salmon were one of many kinds of deeply powerful protean beings called Animal People. They had superhuman abilities and eternal lives. A being called Moon the Transformer turned the Animal People into physical beings. In one story, the Salmon People kidnapped Moon and brought him to earth and raised him. As Moon grew up and realized his powers he changed the Salmon People into food for humans. There was confusion with this transformation. Moon at first told the Salmon People to go downstream to the ocean, but then changed his mind and had them come back upstream. Since then, salmon have traveled back and forth between the ocean and streams. The Animal People were transformed but did not disappear. Salmon have retained their power, sustaining people through their bodies and spirits.

Yesler Mill
Henry Yesler came to Seattle looking for a waterfront site for a sawmill and found the best land to be a “sag” where there was level ground and deep water. The land was at the seam between land claims of Seattle founders Carson Boren and Doc Maynard. Knowing the mill would bring growth through jobs, workers, and ships, and that this would cause land values to rise, Boren and Maynard donated a strip of land to Yesler. In addition to this strip of land heading uphill from the waterfront, Yesler acquired large areas upland that were then covered with trees. Those timbers were cut and then skidded downhill to the sawmill where they were milled to size and loaded onto ships at Yesler’s wharf, to be transported to San Francisco and other areas. Yesler Mill became the economic engine of early Seattle, and employed immigrants and Native Americans alike. Other buildings on the property became community gathering places, including a courthouse and a hall for traveling shows of minstrels, ventriloquists, and actors. Yesler’s Mill and Wharf burned in different fires.
Land Claims & City Plats
When platting Seattle’s township in 1853, the four original claimants could not agree on a street orientation. Doc Maynard surveyed his land, in the south end of town, parallel to the water. Since the coastline ran fairly north-south, he ran his streets true to the compass. Denny and Boren also platted their land parallel to the bay, but since the bay curved, their plats were not oriented with the cardinal points. Maynard and Boren’s plats met in a tangle of mismatched roads at Mill Street (now Yesler Way) where there was a curve in the bay. A similar mismatch occurs where Denny and Boren’s plats met at what is now Stewart Street. The skewed grid of streets with angled intersections and remnant triangular spaces remains a feature of downtown Seattle’s street grid, extending to the waterfront.

Alaskan Way Viaduct
The massive Alaskan Way Viaduct, part of Washington State Route 99, is a double-decked concrete structure running parallel with the shoreline. It was built in the 1950s to alleviate traffic congestion, which had become an impediment to moving cargo on the waterfront after the seawall was constructed, tidal lands filled in, and the four-lane Alaskan Way built on top of it. Alaskan Way was being used as a bypass around downtown, which slowed the movement of trucks. Though early planning options included a tunnel, the Viaduct was instead built. While it sped traffic flows through (or over) Seattle, it also severed the relationship between downtown and the Central Waterfront. The space under the Viaduct is unappealing and creates a huge physical barrier. After being damaged by the Nisqually Earthquake in 2001, the Viaduct is being removed and its transportation function will be taken up by a two-mile tunnel and improved surface streets. Seattle has a love/hate relationship with the Viaduct, which while blocking views between downtown and the waterfront also provides magnificent views of Elliott Bay and the Olympic Mountains.

Tidelines
On Elliott Bay, cyclical time is registered through tidelines. Moons wax and wane, hillsides are sluiced into the bay, seas rise, land subsides. Tidelines continue to mark their presence against this ever-changing shoreline. They are the elusive tipping point between the land and the sea. Tidelines are a conceptual and organizational framing device for Waterfront Seattle’s concept plan. Physical, tectonic, and material properties of the design evoke horizontal depositions and vertical registrations inspired by the shifting tidal waters of Elliott Bay. Tidelines, which have always existed on the Central Waterfront, will continue into the future, linking the present with the past and future.

Ye Olde Curiosity Shop
A landmark souvenir shop, art gallery, and museum of Northwest Native American culture, Ye Olde Curiosity Shop has been located on Seattle’s Central Waterfront and owned by four generations of the same family since its founding in 1899. Joseph Standley started the shop at Madison and Front Street with his personal collection of natural wonders and Indian artifacts, which he supplemented by trading with local Indians and sea captains. Seattle was undergoing the boom of the Klondike Gold Rush at the time, and the shop prospered. By the time Standley exhibited at the 1909 Alaska-Yukon-Pacific Exposition, the Curiosity Shop had become famous for its collection, which supplied artifacts to many museums. Following its move from Madison Street, the shop was located on Colman Dock for over 50 years. After some years on Pier 51 it moved with its collection of over a million objects to its current location on Pier 54. Ye Olde Curiosity Shop houses a mix of curiosities and significant art objects ranging from tribal artworks to bizarre items like shrunken heads and mummies to dime store souvenirs.

Century 21
Century 21, the 1962 Seattle World’s Fair, provided Seattle with its landmark Space Needle and Seattle Center campus. Often forgotten is how the Fair ushered in a new wave of waterfront attractions that highlighted the region’s marine life through a lens of entertainment. Ivar Haglund had laid the foundation with his Pier 54 Aquarium from 1938 to 1956. Century 21 brought to Pier 56 the Seattle Marine Aquarium, predecessor to the current Seattle Aquarium. It featured a 20,000-gallon tank, 600-pound dolphin, and later an orca whale named Namu. The Seattle Sea Circus, which included daily performances of sea lions, porpoises, and banjo-playing seals, was located between Piers 50 and 51. At the end of Pier 51 a popular exotic Polynesian restaurant was built, lasting until ferry terminal expansion in 1981. Several “boateels” were docked at the waterfront and provided accommodations for Fair visitors. Century 21 coincided with Port of Seattle innovations in container shipping to the south. In many ways, the World’s Fair marked the transition of the Central Waterfront from a place for marine industrial use to a place for tourism, nostalgia, leisure, views, play, and fantastical entertainment.
vision for art

ecology, economy, and community in exchange

Indian camp with canoes, Ballast Island at the foot of Washington Street, ca. 1891, in the midst of a transition and exchange between Coast Salish tribes and Anglo-American settlers (University of Washington Libraries, Special Collections, NA 680)
PHILOSOPHICAL FRAMEWORK

Amplify the Edge Condition
The Elliott Bay Seawall defines Seattle’s primary edge, where land meets sea. The wall is a dynamic seam where a myriad of elements, forces, and life forms interact in unique and complex ways. This edge represents a concentration of abundance for both human and non-human life. For wildlife it is rich in natural resources and conditions that promote ecological processes such as salmon migration. For humans, the waterfront’s value resides in its economic engines of shipping and commerce, as well as its dazzling views and connections to nature that provide psychological, cultural, aesthetic, ecological, and recreational assets. Art incorporated into the Seawall Project will articulate this edge as the physical, conceptual, and psychological spine of Seattle’s Central Waterfront.

Renew Sustainable Interconnections
The Coast Salish tribes once formed seasonal encampments concentrated along Puget Sound’s bountiful shorelines, where waterways served as primary conduits of food and transportation. For hundreds of years the ecological system that supported their culture fostered an ethic of moderation and respect for the natural environment. With the nineteenth-century advent of Anglo-American development of the region, the wealth of civilization expanded at the expense of nature’s abundance. Through recognition of this imbalance it has become apparent that nature is no longer a force separate from human activity. Humanity and nature are entwined. The Elliott Bay Seawall Project is striving to renew dynamic and ecologically sustainable interconnections between the marine realm and human realm for future generations.

Create a Fluidity of Space and Time
The consciousness of Puget Sound’s indigenous peoples was characterized by a fluidity of space and time where land was thought of not as privately owned property but instead as a cultivated shared resource. Life was organized around natural patterns like tides and seasons, and time was conceived as a cyclical continuum in which the past and future were alive in the present. Markedly different is the Anglo-American concept of linear time, systems of personal land ownership, and the fervor for commerce that has shaped Seattle’s waterfront. The replacement of the seawall allows Seattle to reshape its edge as, in the words of Waterfront Seattle, a “waterfront for all.” Access for all species will expand and shared places will be reestablished, reconnecting people with nature and the understanding that activities in the present work within a continuum of time.

Conceive of Art as Exchange
In his incisive exploration of Seattle’s environmental history, Emerald City, Matthew Klingle asserts that as salmon return to the city, “they seem to swim out of nature and into culture.” Conversely, it might be said that as humans move away from the center city and toward the water they shift out of culture and into nature. As Seattle’s waterfront edge, the reconstructed Elliott Bay Seawall is a place where interactions between the cultural and natural, or human and marine, worlds will occur. If conceived to foster moments of meaningful exchange in these interactions, the seawall and its art can stimulate the city to reestablish its environmental ethic and reinvent its future.

Underpinning the art vision for the Seawall Project is a philosophy of exchange that strives to illuminate and originate simultaneous and shared experiences of space and time, art and science, and human and marine that articulate the edge of the Central Waterfront.
CONCEPTUAL FRAMEWORK

Prompt an expanded Exchange between natural and cultural worlds by heightening interactions amongst elements and life forms present in the Seawall’s human and marine realms.

SPATIAL EXCHANGE

Explore the vertical layering of the seawall—an edge where human and marine habitats coexist.

The pedestrian promenade that will result from the Seawall Project occupies a spatial envelope along the waterfront’s edge that is horizontally narrow but vertically expansive. In the majority of locations the sidewalk cantilevers out from the seawall, hovering over the water. This creates a unique edge in which “human habitat” is layered over “marine habitat.” In a sense, fish will swim under the human realm and into culture while people walk over the marine realm and into nature. The seawall face will be punctuated with “habitat shelves” to enhance marine life along the shoreline. The cantilevered promenade can be thought of as a habitat shelf for humans. Tides will move up and down the seawall beneath this human habitat shelf, further merging natural and cultural flows. This vertical column of common space is a place where resources that affect both the human and marine realms—light, water, habitat, sound, and others—must be nurtured for shared mutual benefit. Art can work within this stratified envelope to foster and express a spatial exchange, or permeability, between the two realms.

TEMPORAL EXCHANGE

Create an exchange between the past, present, and future of the Seattle waterfront.

Art can express the temporal exchange of nature and culture through stories. Storytellers weave narratives designed to interest, amuse, remember, or instruct. While the most enthralling stories are often rooted in real events, a merging of the fictitious with fact, illusion with memory, can produce a captivating artistic lens through which to communicate the human condition. Site-specific artists are often storytellers who relay conditions of place. Just as narrated stories can jump between historic, contemporary, and futuristic periods, stories told through art along the seawall can thread together different time frames. Art can unearth tales of Seattle’s growth embodied in the waterfront’s constructed land while envisioning and stimulating its future development. These stories of the seawall should reflect both the shifting edge where land meets water and the fluctuating relationship between human and marine life that has occurred there. Artists relating these ebbs and flows of life on the waterfront can act as minstrels (interpreting stories of the past), magicians (improvising stories of the present), and fortune tellers (predicting stories of the future). An exchange of knowledge and philosophy occurring across this temporal layering will be revelatory. Artist-inventors of these chimerical tales of the seawall can either set the stage for an improvisational theater of the urban environment or be on location as primary players within the performance.
Implement the concept of Exchange through art that performs the following actions:

**ATTRACTING**

Conceive of art as a “magnet” that attracts both human and marine life and forms a field of exchange between the two realms.

Art that works at the seam of the human and marine realms of the waterfront can generate a conceptual “magnetic field” that draws nature and culture into closer contact. Magnetic fields form unique properties that can reassemble an environment. Forces of attraction go to work on things that enter these fields, inciting unexpected relationships that might not exist outside the field. Art can create a similar aura around it that triggers new attractions and relationships between parts of the environment that might not otherwise interact. It can also act as an attraction that draws people from afar to the waterfront.

**EXPERIMENTING**

Invent art that operates as a test site, manipulating and synthesizing environmental phenomena to act as both a catalyst and barometer of ecological function.

Like science, art is about experimenting. Site-specific artists seek to investigate place-based systems, stories, processes and materials that support and broaden the concepts of their research and exploration. They look to engage in collaborative work with engineers, ecologists and designers to test innovative ideas. The Elliott Bay Seawall Project is conducting experimental installations to test wall textures and light penetrating surfaces to determine the best methods for improving the shoreline ecosystem of Elliott Bay and restore the juvenile salmon migration corridor. Similarly, artists should treat the site as a laboratory for creating work that fuses scientific and artistic insight with a goal of deepening an exchange between human and marine realms and revealing project science as wonder. Artworks can be conceived as incubators that test and direct possibilities for future developments on the waterfront.

**REVEALING**

Use art to articulate and reveal hidden systems of nature, culture, history and infrastructure at work on the site.

Seattle’s waterfront is deeply layered with invisible mechanisms, events, geologies, ecologies, stories and phenomena that have significantly influenced and will continue to inform its physical, functional, natural, commercial, and social character. Sometimes these latent conditions are literally buried or underwater, sometimes they are ephemera long since gone but which have altered what remains, sometimes they are still visible in the landscape but have lost their meanings, and sometimes they are aspirations for the future. These hidden systems and stories of the past, present, and future are part of the workings of the waterfront; affecting its ecology, economy and community. Artists should look to the site as a source of inspiration, revealing both generalities and peculiarities of place that resonate with the concepts and themes they are exploring. This articulation can bring deeper significance and revelation to the public’s experience of the waterfront edge.

**WAYFINDING**

Design and locate art in such a way that it aids in the navigation of both human and marine species through the site.

Essential to the way in which a place is experienced and comprehended is the manner by which it is navigated. In the case of the Seawall Project this holds true for both human and marine species. The Tideline Promenade will make the waterfront clear for humans to navigate and Seawall Project artworks will be a foundational step in the “constellation of sites” described in A Working Plan for Art on the Central Waterfront as a wayfinding device. Using art to assist people with finding the waterfront from the east is also important, as are schemes for art that provides wayfinding during construction. For juvenile salmon migrating to the ocean, the Seattle Waterfront presents a bewildering maze of open water and piers, shallow and deep water, light and darkness. The Seawall Project aims to aid marine species in their navigation through the site by implementing a continuous band of light penetrating paving surfaces and other habitat enhancements along the shoreline. Art can expand on these strategies while also creating an alternate wayfinding system for people that might offer a new understanding of the waterfront’s marine realm.
principal art opportunities

integrated artworks as conduits of exchange
**APPRAOCH**

**Integrated Experimental Art**

The principal commissions for the Seawall Project are envisioned as experimental, site-specific conceptual artworks integrated and engaged with their context to form a continuously transforming medium of exchange between site systems and art interventions.

**Integrated Art.** For permanent art in particular integrated art can be interpreted as work that is conceptually and spatially fused with the Seawall Project’s physical surfaces, structures, systems, and utilities. It can also be interpreted as a fusion with project goals of rebuilding infrastructure and fostering environmental sustainability.

**Experimental Art.** While the approach of creating integrated art implies art aligned with its site, the art must avoid being a decorative application of pattern and color and instead layer an explorative conceptual meaning or alternate method of inquiry onto the site. The art should be considered experimental in the sense that it is working with and testing ideas, concepts, methods, materials and phenomena related to the broader concept of stimulating exchange between human and marine realms.

The art is envisioned as being responsive to site phenomena, reflecting the Pacific Northwest environment, and creating memorable experiences for both frequent and infrequent visitors to the waterfront.

**Thematic Commissions**

Artists commissioned for the principal art opportunities will create work informed by the visions for art described in both the **Elliott Bay Seawall Project Art Programming Plan** and **A Working Plan for Art on the Central Seattle Waterfront.** Each artist will explore a unique theme or medium for their work, tying it to specific conditions of the site. The thematic media identified in this plan—habitat, light, utility, and sound—have been selected because of their correlations with the overarching concept of stimulating exchange between the human and marine realms: they are each potential conduits for such exchange. The themes are intended as inspirational starting points. Artists will explore the site at large; seeing, hearing, feeling, learning, intuiting. It is possible that an artist might find inspiration from a quality of the site and project that has not yet been identified, or explore several overlapping media in their work.

The principal commissions could result in one major work or a choreographed series of linked works. While it is anticipated that the art will be permanent and integrated into Seawall Project components, ephemeral or event-based work or some combination of permanent and temporary media is also possible. Artists commissioned for principal commissions may design a permanent artwork as well as a temporary installation that foretells the permanent piece.

In addition to the four thematic commissions herein called Sculpted Habitat, Penetrating Light, Aquatic Utility, and Puget Soundings, opportunities for the Seawall Project design team artists to apply aesthetic treatments to certain functional components of the project have been identified and are described under the heading, Seawall Reveal.

**Site Selection**

As part of their concept exploration, artists working on principal commissions will engage with representatives of the City of Seattle, Seawall Project design team, Waterfront Seattle, and other stakeholders to select the most appropriate locations for the art projects they envision.

Specific sites suggested in this plan are within the limits of the Elliott Bay Seawall Project’s restored public realm. They have been identified because of their relation to particular themes, positioning at intersections of human and marine realms, and factors such as visibility, interesting phenomena, and technical requirements. It may be possible to site art on waterfront property not within the Seawall Project limits, though review by proper agencies and landowners outside of the project would be required.

It is essential that the process of site selections be undertaken holistically, considering the relationships of the sites and artworks within the context of each other and the Waterfront Seattle design and art vision in its entirety. Synergies, dialogues and exchanges between the sites selected by different artists will emerge. Those relationships will be explored and tied to the waterfront narrative as a whole, forming the first grouping of projects within an emerging “constellation of sites” envisioned as a structure for art and wayfinding in **A Working Plan for Art on the Central Seattle Waterfront.** The process of creating these connections and exchanges will elicit a meaningful exchange between artworks and other waterfront elements.

**The interplay of the conceptual framework of articulating an exchange between the human and marine realms with the spatial conditions of the seawall site suggests a typology of art that is integrated with the forms and functions of the project.**
The Seawall Reveal artworks suggest aesthetic treatment of several functional elements that are occurring as part of the base project. The treatments suggested will imbue these elements with conceptual meaning that ties to the project’s goals of attracting habitat, experimenting with environmental phenomena, revealing history, and exploring the Tidelines concept through art. These pieces are also an opportunity to create recurring work that appears intermittently across the public realm, unifying, punctuating, and bookending it.

The face of the seawall articulates the edge where water meets land. It is the spine of Seattle’s waterfront. While in many ways the seawall will be an engineered structure, it is also a dynamic seam where a myriad of elements, forces, and life forms interact in complex ways. The Seawall Project includes a critical goal to improve ecosystem functions and processes along this edge. While substrate improvements to the marine floor west of the seawall are part of that agenda, a primary piece is roughening the wall face with texture and shelves. That surface is a fantastic canvas for a sculptural relief that can merge conceptual meaning with functional requirements. A similar merging of metaphor with functional requirements to improve marine habitat might occur in discrete locations along the light penetrating paving surfaces.
Aquarium Bridge Grate: A service entry bridging the promenade to the Aquarium is proposed to be a metal grate, similar to that at the entry to the fish channel at Yesler Way. Creating an artist-designed metal grating is an opportunity to illustrate site history. Also similar to the condition at Yesler Way is the shift in street grids that occurs here. Stewart Street, just east of the Aquarium, indicates where the plats of two of the city’s founders, Denny and Bell, come together in an irregular way. The shifted grid could be reflected in the grating design. Another possibility is to expand on art concepts explored in the seawall face panels at the Aquarium site. This piece could be designed in conjunction with the Yesler Way Grate to bookend the project site, particularly if the two pieces work together to tell an idiosyncratic story of city founders.

Yesler Way Paving Grate: The light penetrating pedestrian paving surface at the foot of Yesler Way, crossing over the channel through which fish enter the new migration corridor, is proposed to be metal grating. Creating an artist-designed metal grating is an opportunity to illustrate site history while also tying the promenade to the real-time ecological function of a light penetrating surface. Yesler Way is historically significant as the seam where the plats of two of the city’s founders, Maynard and Boren, come together in an irregular way. This historic moment registers along Yesler Way just east of the waterfront, where different street grids still meet. The shifted grid could be reflected in the grating design. Other historically significant aspects of this location—such as Yesler Mill, Ballast Island, an early incarnation of Ye Olde Curiosity Shop, and even a sea animal circus during Seattle’s 1962 Century 21 celebration—could be reflected in the artwork in such a way that they tie to the fish channel below. This piece could be designed in conjunction with the Aquarium Bridge Grate to bookend the project site.

Seawall Texture: The seawall face panels will be textured to enhance habitat function along the entire length of the waterfront. Areas where those panels will be visible—such as at the Aquarium where the promenade will be cut back to allow sunlight penetration to the water below, and potentially at pier slips—present an opportunity to design the wall texture as an artwork. The art treatment could both reveal and augment the function of using the seawall as a device for habitat enhancement. Because the seawall face is the waterfront element against which tides register most visibly, art can also be used here to reveal this tidal phenomenon.
**SEAWALL REVEAL: “HABITAT STRATA” CONCEPT FOR VISIBLE WALL PANELS**

**Habitat Strata Science**
- Intertidal species occupy the shoreline in horizontal strata, or microhabitats, that are formed based on:
  - physical factors (salinity, wave action, light, temperature, et cetera);
  - biological factors (predation, competition, herbivory, et cetera).
- Intertidal species exhibit secondary growth patterns, in which one species colonizes on top of another.

**Habitat Strata Art**
- Texture of wall panels and shelves mimics the variety of the marine life it is trying to attract.
- Horizontal strata of panel textures are based on habitat strata of the intertidal zone in Elliott Bay.
- Habitat strata are inherently tied to tidal zones, so Seawall Reveal “Habitat Strata” concept ties to Waterfront Seattle “Tidelines” design concept.

---

*Possible habitat strata that could inform design of the seawall face panels and shelves*
existing seawall near Aquarium, exhibiting stratified tidal coloration and textured marine habitat test panel

Visual Mock-up of Habitat Strata Concept for Seawall Face Panels

- left: layers of intertidal species inspiring wall textures
- center: translation of species to concrete
- right: layers of intertidal species colonizing concrete panels, creating new offset strata patterns

Texture Options
Concrete texture can depict the marine life it is mimicking realistically (shown to left) or geometrically/abstractly (shown above).
Puget Sound is an astounding natural wonder fronting Seattle. Improving marine habitat along the city’s waterfront edge is a primary focus of the Seawall Project. There are opportunities for an artist to create work that reveals, responds to, and supports ecological and tidal conditions of the seawall, promenade, and Elliott Bay. Working closely with project engineers, biologists, ecologists, and designers, the artist will develop artwork that relates to the complex ecology of the site, both interpreting and expanding ways in which the seawall and its new public spaces perform concurrently as infrastructure and habitat. This is a unique opportunity to create art that transcends illustrating science to become a poetic mechanism of ecological restoration. The art should be inventive and engaging; manipulating, synthesizing, and drawing attention to the many environmental phenomena at work along the waterfront. The vision for this commission is that the resulting artworks act as both catalysts for and barometers of ecological function along the restored waterfront. The art should be experimental, combining unique forms, materials, and methods with the dynamics of the waterfront’s natural systems to result in work transformed by its exchange with nature.
Habitat Benches: Several “habitat benches” (shallow water areas with substrates that support the growth of marine life, such as shells and gravel, cobble and kelp) are incorporated along the seawall to improve habitat. These locations could incorporate art that is carefully placed so as not to inhibit habitat.

Washington Street Habitat Beach: The primary site for this commission is currently imagined as a new habitat beach near the historic Washington Street Boat Landing. In this location the “face” of the seawall will be softened with a beach that is being designed to provide an important respite for juvenile salmon in their migratory route. This location has great historical significance for Seattle as part of the pre-development tidal flats at the mouth of the Duwamish River, a Native American encampment, and the location of the city’s first economic engine, Yesler Sawmill (at the base of the historic “skid road”). Art here is envisioned to support the ecological objectives of the beach and/or relate to Waterfront Seattle’s Tidelines concept. The artist might also collaborate with the design team to incorporate art concepts into functional design elements of the site such as rock arms to protect habitat, pedestrian access above the mean high water line, and viewing platforms.
**SCULPTED HABITAT: POTENTIAL SITES AT WASHINGTON STREET BEACH**

- **ISLAND**
- **JETTIES**
- **TIDAL ZONE**
- **TIDE POOLS**

**Parameters for Creating Art in Tidal Areas:**

- Avoid overwater cover that causes shade in the water, which inhibits marine life.
- Avoid barriers that could inhibit fish passage.
- The Seawall Project has established limits to the amount of fill that may be placed in tidal areas. Art must be designed to work within these limits and should be coordinated with other project fill elements. This condition may pose challenges for certain types of artwork, such as islands.
- Intertidal work may require permitting.
- Art and sculptural landforms above the 12’ elevation mark, such as on the tops of jetties and at the top of the beach, are feasible.
- Artistic design of the surfaces of project elements in the tidal area, such as sides of jetties, is feasible if suitable materials are used.
- Materials that are naturally occurring in Elliott Bay can be used in tidal areas.
Puget Sound area men fishing from wooden platform, 1890-1895
(University of Washington Libraries, Special Collections, NA 4183)

Log booms floating in water at Yesler Mill, 1878
(University of Washington Libraries, Special Collections, A. Curtis 59756)

Indian dugout canoes in the harbor, foot of Washington Street, ca. 1891
(University of Washington Libraries, Special Collections, NA 897)

Washington Street Boat Landing, 2012
Penetrating Light

Light is a defining quality of Seattle. Puget Sound’s northern latitude creates a wide fluctuation in sunlight hours throughout the year. During winter, sun rarely penetrates a dense cloud cover, while in summer’s dry months sunlight is bountiful. The Central Waterfront, with its fantastic sunsets and colorful night illumination, is a place where light can be celebrated. This commission is an opportunity to work with and contribute to the natural and artificial light at play on the waterfront.

Light plays a critical role in creating a healthy environment for both human and marine life: both species are drawn to light. Current waterfront conditions are such that juvenile salmon do not swim under dark piers, opting instead to swim around them in lighter but deeper water that has limited food supply and increased numbers of predators. The Seawall Project includes design elements that will expand and balance light levels in the marine environment adjacent to the seawall, encouraging migrating salmon to hug a re-created light-filled shoreline where water is shallower and food more plentiful. Light penetrating surfaces (LPS) in the cantilevered ground plane will allow sunlight to illuminate the water below. The design team is conceiving the LPS and other promenade paving elements as a unified surface that will thoughtfully evoke the migration of salmon below.

This commission presents an opportunity to create art that manipulates light in the human and/or marine realm. The work could be an atmospheric piece that attracts people to the water’s edge, or it could contribute to the ecological functionality of the marine environment. The art might provide a poetic interpretation of light penetrating into the marine environment, revealing and celebrating its nurturing of the life that occurs there. The merging of nature and culture that occurs in the ancient ritual of salmon migration is a radiant wonder.
**Overlook at Pier Slip:** The public realm includes a triangular deck suspended over the water at a slip between Piers 54 & 55 that presents a site for art. This location provides pedestrians with a place to step off the main path and get close to the water’s edge. It also functions to “square off” the space between the piers, putting its edge perpendicular to the adjacent piers. Because it is important for the ecological function of the water and habitat bench beneath it that the overlook not create excessive shade, its floor will be designed as a light penetrating surface. The overlook is an opportunity for art interventions and artist-designed variations on certain design elements. This artwork must work with the project engineering that supports the standard design elements.

**Penetrating Light**

**Tideline Promenade:** The nearly three-quarter mile long promenade that cantilevers over the water will incorporate light penetrating surfaces (LPS) of glass and metal grating to stream sunlight to a salmon migration corridor hugging the seawall. This is a key piece of the Tideline Promenade and is being designed by James Corner Field Operations in conjunction with the rest of the promenade public realm elements to create a cohesive waterfront edge. The design concept is to evoke a sense of the aquatic life moving under the feet. An artist collaboration with JCFO and the design team could result in an overlay of art that compliments the design vision. It is recommended that the artist commissioned for this opportunity study phenomena of light along the site and region as a whole and then identify possible opportunities and methods of incorporating art into the project to bring poetic resonance to the waterfront and ecological and urban design goals of the project around the theme and medium of light. Concepts proposed by the artist will be gauged partially in terms of their applicability to the overall vision for the Tideline Promenade.

**Estimated Budget**
- $250,000 - $400,000

**Potential Art Elements**
- light penetrating materials (glass, perforated metal, solar tubes, etc.)
- light-bending materials (prisms, etc.)
- light-reflecting materials (mirror finishes, etc.)
- light-emitting materials (phosphorescent and fluorescent materials)
- LEDs and other lights
- photovoltaics

**Artist Qualifications**
- established artist
- experience using natural and/or artificial light as a primary artistic medium in past work

**Sites & Opportunities**

**Overlook at Pier Slip:** The public realm includes a triangular deck suspended over the water at a slip between Piers 54 & 55 that presents a site for art. This location provides pedestrians with a place to step off the main path and get close to the water’s edge. It also functions to “square off” the space between the piers, putting its edge perpendicular to the adjacent piers. Because it is important for the ecological function of the water and habitat bench beneath it that the overlook not create excessive shade, its floor will be designed as a light penetrating surface. The overlook is an opportunity for art interventions and artist-designed variations on certain design elements. This artwork must work with the project engineering that supports the standard design elements.

**Penetrating Light**

**Tideline Promenade:** The nearly three-quarter mile long promenade that cantilevers over the water will incorporate light penetrating surfaces (LPS) of glass and metal grating to stream sunlight to a salmon migration corridor hugging the seawall. This is a key piece of the Tideline Promenade and is being designed by James Corner Field Operations in conjunction with the rest of the promenade public realm elements to create a cohesive waterfront edge. The design concept is to evoke a sense of the aquatic life moving under the feet. An artist collaboration with JCFO and the design team could result in an overlay of art that compliments the design vision. It is recommended that the artist commissioned for this opportunity study phenomena of light along the site and region as a whole and then identify possible opportunities and methods of incorporating art into the project to bring poetic resonance to the waterfront and ecological and urban design goals of the project around the theme and medium of light. Concepts proposed by the artist will be gauged partially in terms of their applicability to the overall vision for the Tideline Promenade.
**LIGHT PENETRATING SURFACE TREATMENT**
*(paving treatments must work with project engineering)*

**EDGE TREATMENT**
*(functional railings must be engineered for vehicular impact)*

**PRISMS OR VIEW PORTALS**

---

**BACKLIGHT UNDER LPS**
*(excess light cannot spill into the aquatic environment)*

**SOLAR POWERED PAVING LIGHTS**

---

**Light Penetration into Water**
*left: sunlight penetrates LPS and connects human and marine realms*
*right: some wavelengths (colors) of light penetrate water deeper than others*
The Great Wheel and Bay Pavilion lights, 2012

Puget Sound bioluminescent jellyfish (Aequorea victoria)

Puget Sound bioluminescent plankton (Noctiluca scintillans)

Lights on Navy ships in Elliott Bay, 1937
(Museum of History & Industry, PI26472)
Utilities are both the functional machinery and lifeblood of the working waterfront. A major component of the Seawall Project is to support and when necessary relocate major utilities that run along Alaskan Way. As such, the Seawall Project provides the best opportunity for art on the Central Waterfront to draw attention to these conduits, as recommended in A Working Plan for Art. This commission is an opportunity to bring revelation to these circulation systems and when possible imbue them with meaning that ties to the concept of allying the seawall’s human realm with its marine realm.

Being a waterfront site, water-based utilities could be the focus of the artwork. Urban water — stormwater, wastewater, drinking water, and even steam — is often conceived as an engineered system. The circulation of water through underground pipes, revealing it only as it emerges sanitized from faucets, has tended to diminish people’s connection to water as a poetic medium and essential liquid of life. In addition to its management through technical, mechanical and industrial means, water is a vital creative energy that rises and recedes, flows and sits still, nourishing life. This art project is an opportunity to evoke the dual essence of water as both a chemical substance and an elixir of dreams, while also looking at how it fits within a cohesive network of utilities and other urban infrastructure.

“UNDERGROUND: The waterfront will be reopened and reconnected to the rest of the city after the removal of the Alaskan Way Viaduct. Some of the traffic which used the viaduct will be diverted to a new tunnel running under downtown, with an entrance to the south of the central waterfront. The waterfront itself is loaded with underground services: steam tunnels, major power lines, a railroad tunnel, water mains and pipes taking storm water and treated sewage out to the bay. These various conduits for cars, power, water, freight, and heat can be unearthed, revealed, traced, or documented through art.” - A Working Plan for Art on the Central Waterfront
Steam Vents: Seattle Steam Company is one of the last working remnants of downtown Seattle’s early industrial fabric, still supplying steam heat to numerous buildings, including the Aquarium and Colman Dock. Steam pipes, along with many other utilities, are being relocated with the seawall construction. Steam requires regular venting. There may be an opportunity to coordinate with this private utility to create a steam-based art feature, possibly encompassing a vent(s) with an artwork to give the exiting steam metaphoric meaning. The vent could be at pedestrian level, or possibly penetrate the seawall. Locations in the public realm near the Aquarium or Colman Dock are feasible.

Outfalls: Some existing stormwater outfalls and combined storm water/sanitary sewer outfalls (CSOs) will be reconstructed to pierce through the seawall. Outfall locations at the base of Pine Street and University Avenue will have “habitat benches” (shallow water with substrates that support marine life) built around them. While it is anticipated that the new outfall pipes will enter Elliott Bay beneath the low tide line and the outflow of water will not be visible, there may be an opportunity to mark their presence with art mounted to the seawall surface or outfall pipe housing. The art could be revealed and concealed with the change in tides and there is potential for tidal water to be captured at high tide, stored, and slowly released at low tide. The art will be visible from adjacent piers, but somewhat “secret” from the promenade. The work should include an element on the promenade, possibly marking the location of the outfall pipe, that triggers people to look for the art.

Systems: Water-based utilities and utilities that puncture the seawall have been specifically identified as opportunities for art integration. In addition, it is recommended that the selected artist look at the waterfront and its traceries of utilities as a whole and use a system-based approach to understand the site and propose artwork. Through this process new opportunities for art may emerge.

Potential Art Elements
- sculptural pieces in stone, concrete, metal, glass, or other durable materials both at the pedestrian level and seawall/marine level
- light
- gargoyles
- vents, catch basins, vaults, manhole covers and other utility devices visible on the surface
- materials salvaged from existing seawall, such as stormwater scuppers

Concepts & Considerations
- Create art that reveals, dramatizes, supports, and poeticsizes both the presence and function of utilities along the seawall, with an emphasis on water-based utilities.
- Explore utilities as systems and avoid applied decorative treatments.
- Explore changes in utilities during different weather conditions, tidal conditions, seasons, and times of day.
- Draw attention to how cleanliness of water entering stormdrains can affect marine life as it is discharged into Bay.
- Explore how clean freshwater mingling into saltwater can enhance marine habitat.
- Collaborate with engineers to create inventive systems that support habitat restoration.
- Tie art to elements of Seattle’s historic waterfront such as steam ships, steam-powered trains, water wheels, fresh water flumes, wooden box sewer pipes, et cetera.
- Intertidal work may require permitting.
- Utility work must be coordinated with utility agencies and owners.

Estimated Budget
- $150,000 - $200,000

Artist Qualifications
- established artist with design team experience

Sites & Opportunities
- Locations with art opportunities include
  - Steam Vents
  - Systems
  - Outfalls

Aquatic Utility
- The vent could be at pedestrian level, or possibly penetrate the seawall. Locations in the public realm near the Aquarium or Colman Dock are feasible.
AQUATIC UTILITY: EXISTING CONDITIONS & POTENTIAL SITES

EXISTING UTILITY LOCATIONS

POTENTIAL ARTWORK SITE OVER UNIVERSITY STREET OUTFALL PIPE
historically elevated V-shaped log flumes carried water from springs on 3rd Avenue to downtown, shown here coming down James Street and in the foreground rounding the corner at Front Street past Henry Yesler’s home, 1870 (Museum of History & Industry, 2002.3.552)

stormwater scuppers in existing seawall; ports may be salvaged and reused in art

aerial view of pier slip at University Street with CSO outfall

doctor view of existing CSO outfall at University Street

eexisting Steam vents in downtown Seattle

existing stormwater outfall north of Pier 63

Olympian, a Puget Sound steam engine sidewheel ferry, 1892 (Seattle Municipal Archives, 65590)
The plasticity of sound offers an infinite palette for artists. Sounds can be collected, revealed, created, manipulated, mixed, and juxtaposed to create audio art that communicates particular aspects of a place in unique ways. Sounds of nature, industry, history, language, and music can be composed to effect emotion through contemplative, arresting, amusing, or other means. The Seattle waterfront is characterized by a wide array of sonic source material ranging from the natural acoustics of Puget Sound’s underwater world to its marine life to the cultural and industrial sounds of its people at recreation and work to vehicles on the Alaskan Way Viaduct. The commissioned artist will be encouraged to tap into conditions of the seawall site to create a site-specific artwork that resonates with or creates a sense of place. With time as an essential component, audio art, whether pre-recorded or created in real time, can layer a narrative structure onto an experience of place. This can work particularly well if applied to a promenade such as that being created along the seawall.
### Estimated Budget
- $125,000 - $200,000

### Potential Art Elements
- a sited artwork that creates sound at that location through its activation by people or the environment
- a sited device with which one interacts to listen to sound produced elsewhere
- sound retrieved with personal digital devices from a virtual place that is linked to the site through signage or sculpture (in this scenario an art experience for members of the public without digital devices should be considered)

### Concepts & Considerations
- Explore the use of a sound sequence tied to or inspired by the promenade sequence.
- Create art that reveals sounds along the seawall and in Puget Sound.
- Consider revealing to humans what the waterscape sounds like to marine life by channeling such sounds to the pedestrian area above; consider revealing to humans how they sound to marine life below.
- Consider projecting historic, current, and future sounds of the site into the present-day soundscape.
- Consider making sound recordings of the waterfront before the Viaduct is torn down.
- Consider incorporating tribal voices and Salish language into an artwork.
- Consider using as source material oral histories about the Seattle waterfront, seawall, and Salish culture that have been collected by the Seawall Project and other agencies; contribute to this collection.
- Urban noise can be disruptive to marine life, so projecting sound into the water is discouraged. Sound art must be coordinated with project scientists to ensure that it will not disturb marine life.

### A Brief Compendium of Seattle Waterfront Sounds (past, present, future):
- waves, tides, rain, wind, voices of marine life, voices of human life, echoes of the viaduct, cars, trucks, bikes, skates, trains, canoes, sailboats, swimmers, ferries, horns, sirens, phones, planes, birds, cranes, docks, saws, Salish language, foreign language, native tongues, foreign tongues, fire, music, opera, memories, silence

### Artist Qualifications
- established artist
- experience using site-specific sound as a primary artistic medium in past work

### Sites & Opportunities
- How an audio artwork is experienced is essential to its effect. The commissioned artist will determine the best location for the work depending on the concept of exploration.

---

**Puget Soundings**

---

**Elliot Bay Seawall Project Art Programming Plan—January 2013 Draft**
# SUMMARY OF PRINCIPAL ART OPPORTUNITIES

<table>
<thead>
<tr>
<th>Art Project</th>
<th>Budget Range</th>
<th>Artist Qualifications</th>
<th>Potential Sites</th>
<th>Potential Art Elements</th>
<th>Concepts &amp; Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sculpted Habitat</td>
<td>$300,000 - $400,000</td>
<td>• established artist with design team experience • commitment to scientific exploration and/or ecological processes as part of creative practice</td>
<td>• Washington Street Beach • habitat benches • seawall face and shelves • public piers • sites TBD by commissioned artist</td>
<td>• boulders, rock work, or earthwork (with fill limits) • ecologically-functioning sculptural elements • islands • tidepools • floating elements • plants • sculptural elements attached to seawall • materials salvaged from existing seawall (if environmentally safe)</td>
<td>• Illuminate, reveal, and contribute to ecological conditions of the seawall, Elliott Bay, and Puget Sound. • Use art to support biodiversity and the growth of marine life. • Consider creating art that acts as a habitat structure for marine life and a sculpture for people. • Explore art that is responsive to tidal shifts. • Consider art that changes over time due to environmental forces. • Collaborate with engineers to create an inventive system that supports habitat restoration. • Acknowledge site history. Acknowledged site history. • Consider permitting requirements.</td>
</tr>
<tr>
<td>Penetrating Light</td>
<td>$250,000 - $400,000</td>
<td>• established artist with design team experience • experience using natural and/or artificial light as a primary artistic medium in past work</td>
<td>• overlook at Spring Street Pier Slip • sites TBD by commissioned artist</td>
<td>• light penetrating materials (glass, perforated metal, solar tubes, et cetera) • light-bending materials (prisms, et cetera) • light-reflecting materials (mirror finishes, et cetera) • light-emitting materials (phosphorescent and fluorescent materials) • LEDs and other lights • photovoltaics</td>
<td>• Use natural and artificial illumination to attract people from the human realm and fish from the marine realm. • Create sculptural and light-based assemblages that amplify light in both human and marine habitats. • Consider combining sun-activated materials for daytime effects with electric light for nighttime effects. • Consider using solar energy to power artwork effects. • Consider changes in light that are responsive to environmental factors like tidal shifts, seasonality, salmon migration, or interactions with people. • Explore optical properties of light.</td>
</tr>
<tr>
<td>Aquatic Utility</td>
<td>$150,000 - $200,000</td>
<td>• established artist with design team experience</td>
<td>• stormwater and CSO outfalls • steam vent(s) • vents, catch basins, vaults, manhole covers and other utility devices visible on the surface • sites TBD by commissioned artist</td>
<td>• sculptural pieces in stone, concrete, metal, glass, or other durable materials • light • gargoyles • materials salvaged from existing seawall, such as stormwater scuppers</td>
<td>• Reveal, dramatize, support, and poeticize both the presence and function of utilities along the seawall, with an emphasis on water-based utilities. • Explore utilities as systems and avoid applied decorative treatments. • Explore changes in utilities during different weather conditions, tidal conditions, seasons, and times of day. • Draw attention to how cleanliness of water entering stormdrains can affect marine life as it is discharged into Elliott Bay. • Collaborate with engineers to create an inventive system that supports habitat restoration. • Tie art to elements of Seattle's historic waterfront such as steam ships, steam-powered trains, water wheels, fresh water flumes, and wooden box sewer pipes.</td>
</tr>
<tr>
<td>Puget Soundings</td>
<td>$125,000 - $200,000</td>
<td>• established artist • experience using site-specific sound as a primary artistic medium in past work</td>
<td>• sites TBD by commissioned artist</td>
<td>• a site artwork that creates sound at that location through its activation by people or the environment • a site device with which one interacts to listen to sound produced elsewhere • sound retrieved with personal digital devices from a virtual place that is linked to the site through signage or sculpture and also provides an experience for those without digital devices</td>
<td>• Create art that reveals sounds along the seawall and in Puget Sound. • Consider revealing to humans what the waterscape sounds like to marine life. • Consider projecting historic, current, and future sounds of the site into the present-day soundscape. • Explore the use of a sound sequence tied to or inspired by the promenade sequence. • Consider using as source material oral histories about the Seattle waterfront and seawall that have been collected by the Seawall Project; contribute to this collection. • Ensure that sounds will not disturb marine life.</td>
</tr>
</tbody>
</table>
POTENTIAL LOCATIONS OF PRINCIPAL ART OPPORTUNITIES

ART PROJECT LEGEND:
- SEAWALL REVEAL
- SCULPTED HABITAT
- PENETRATING LIGHT
- AQUATIC UTILITY
- PUGET SOUNDINGS

location TBD
bibliography & resources

Books and Articles


Websites

http://www.burkemuseum.org/waterlines/index.html
http://depts.washington.edu/coast/
http://glassian.org/Prism/Vault/index.html
http://www.historylink.org
http://puget.usgs.gov
http://www.pugetsoundnearshore.org
http://seattle.gov/transportation/seawall.htm
http://waterfrontseattle.org

Elliott Bay Seawall Project Documents

Biological Assessment. September 2012.


Waterfront Seattle Documents


