

**Seawall Stakeholder Subgroup  
Meeting #4 Summary  
October 19, 2010**

**Meeting Information**

Seawall Stakeholder Subgroup  
Meeting #4 – October 19, 2010  
5:00-7:00 p.m.  
Puget Sound Regional Council, Board Room  
1011 Western Avenue, Seattle, WA

**Attendance**

**Seawall Stakeholder Subgroup Members**

- Brett Allen, Triad Development
- George Blomberg, Port of Seattle
- Michel Brotman, Simply Seattle
- Bob Davidson, Seattle Aquarium Society
- Bob Donegan, Ivar's
- Gary Glant, Seattle Parks Foundation
- Duane Hartmann, Waterfront Landings Condominium Association
- John Odland, MacMillan-Piper
- Katherine Olson, Alliance for Pioneer Square
- Ted Panton, GGLO
- Lisa Parriott, Washington State Ferries
- Jon Scholes, Downtown Seattle Association
- Brian Steinburg, Allied Arts
- Heather Trim, People for Puget Sound

**City and Project Staff**

- Bob Powers, SDOT
- Bob Chandler, SDOT
- Stephanie Brown, SDOT
- Brian Holloway, SDOT
- Paul Elliott, SDOT
- Jennifer Wieland, SDOT
- Steve Pearce, SDOT
- Hannah McIntosh, SDOT
- David Goldberg, Seattle DPD
- Ridge Robinson, TetraTech
- Chuck Purnell, TetraTech
- Erin Taylor, EnviroIssues
- Jim Brennan, JA Brennan
- Greg Murphy, JA Brennan
- Tanja Wilcox, JA Brennan
- Bob Fernandes, Berger/ABAM
- Jerome Unterreiner, ZGF

**Welcome and Housekeeping**

Bob Powers welcomed attendees to the fourth Seawall Stakeholder Subgroup meeting and began a round of introductions. Erin Taylor announced that the summary of Subgroup Meeting #3 would be distributed at a later date.

Bob Fernandes provided an update on the project team's work since the last subgroup meeting. He explained that the consultant team has entered Phase 2 of the project, and there are a number of engineering deliverables underway, including roadway design work, preliminary analysis of sea level rise, construction sequencing, and relative cost evaluations.

Stephanie Brown reviewed the project's planning and conceptual design schedule, noting that the conceptual plans presented at this meeting will enable the team to move forward with analysis. She

explained that the subgroup's November meeting would provide a more detailed analysis of the conceptual plans and mark the beginning of an intense period of collaboration with the Central Waterfront team.

## Conceptual Plans

To introduce the conceptual plans, Stephanie explained the rationale for and approach to developing these end-to-end plans, focusing on three key points:

*1. Why are end-to-end concepts important?*

At the September subgroup meeting, zone area designs were presented, keeping distinct ideas separate from one another. Developing end-to-end concepts has provided a chance for the project team to explore relationships and transitions between zones. Designs in each zone and program elements need to be considered and evaluated relative to their value along the entire waterfront. For example, overwater coverage may be exchanged in different locations to generate zero net gain, and linear habitat features must be analyzed in terms of their square footage or other along the entire waterfront. Stringing the zone area designs together also helps to begin to understand concepts from a regulatory perspective and from an operations and maintenance perspective.

*2. How did the team develop the conceptual plans?*

Each of the conceptual plans meets the goals and objectives that the subgroup has previously discussed. The plans do begin to represent tradeoffs between goals at a very high level.

*3. How flexible are these designs?*

The designs are very flexible at this point, and will continue to be so until April 2011 when the locally preferred alternative is announced. This flexibility will ensure an active collaboration with the Central Waterfront team.

Reminding the group of the important features of the zone area designs, Stephanie noted that the team's focus in developing the concepts continued to revolve around where the seawall is located and what that means for public open space on the upland side of the wall, getting light to the water, and enhancing shallow water habitat. Each of conceptual plans takes a slightly different approach to these focus areas.

**Question:** How far along in the design effort will the Central Waterfront team be by April 2011? Is that team represented at this stakeholder meeting tonight?

**Response:** Central Waterfront team representatives are present at the meeting. The Central Waterfront team is still forming, but they will have six months of interaction with the seawall team, which will ensure a design that meets the needs of both projects.

**Comment:** The current wall location should be identified during the presentation of each concept.

**Response:** The current wall location is shown in each conceptual plan (dashed lines).

**Question:** Will concepts change after, or in coordination with, the Duwamish River cleanup, particularly related to fish migratory patterns?

**Response:** Much of the Duwamish River cleanup has encouraged fish to travel down the central waterfront corridor. Any change the seawall project makes at the waterfront should enhance that effort; there will continue to be opportunities for SDOT to partner with the Duwamish River cleanup team.

**Question:** What is the status of the environmental impact statement (EIS)? So far, there has been good input into habitat considerations and analysis of those, but there are many other categories included in an EIS that have not yet been addressed, such as transportation.

**Response:** The team is currently writing methodology reports to respond to each discipline to be presented in an EIS; those reports cannot be completed until alternatives are selected. Release of the draft environmental impact statement (DEIS) is expected in late 2011.

Jerome Unterreiner then oriented subgroup members to the conceptual plan illustration packets. He explained that the conceptual plans are based around five broad ideas that respond to the project's goals and objectives. The illustration of each concept includes a general description of the theme or idea behind the concept and a physical description of the entire concept, including specific features within each zone. The illustration shows the wall alignment in each concept, suggested habitat improvements, and potential locations for public space opportunities.

Ridge Robinson described the five conceptual approaches, focusing on the wall location in each. He noted that the science and engineering behind the concepts and designs is still unfolding, and pointed out that Pier 48 is left in place in all five plans. The five conceptual approaches are the following:

- A. In-Kind Replacement—seawall is put back in its existing location with habitat improvements
- B. Ecological Waterfront—wall is pulled back to create opportunities for natural beaches/habitat
- C. Urban Waterfront—wall is pushed out to create public space and gathering opportunities
- D. Context Connections—combination of wall in place and pulled back to connect to adjacent elements and characteristics, such as the Pioneer Square neighborhood and Pike Place Market
- E. Evolving Experiences—combination of wall pushed out and pulled back to create a set of varied experiences along the waterfront

Ridge explained that program elements for the seawall project include features such as rock structures, beaches, steps, art, boating and transportation touchpoints, and educational or interpretive opportunities. These types of elements have been applied to appropriate concepts and locations along the waterfront in order to show how and where they might be used. Not all program elements would be implemented by the seawall project, and the exact footprint of some elements remains to be determined. Additional work is underway to identify the elements that will be included in the environmental analysis.

Jim Brennan described each concept; additional information is available on the project website (<http://www.seattle.gov/transportation/seawall.htm>).

#### **Concept A: In-Kind Replacement**

*Replace the seawall in its current location. This is the fix-it alternative.*

Concept A replaces the wall in its current location, with habitat improvements and the addition of program elements that enhance human connections to the water. Light wells or light tubes could be used to provide light under existing piers in order to achieve more consistent light levels for migrating juvenile salmon. Additionally, habitat benches could be installed between piers, and Waterfront Park and Piers 62/63 could be opened up with light portals to improve the migration corridor. Substrate modifications and light wells could be added at Bell Harbor Marina. There could also be art elements, viewing decks or nodes, and opportunities for historical interpretation along the wall.

### **Concept B: Ecological Waterfront**

*A green urban waterfront immersed in rich Puget Sound ecology.*

Concept B emphasizes the ecology of Puget Sound and includes a maximum amount of beaches, riparian plantings, and other habitat features. This concept connects people to natural experiences and dynamic systems of ecology, economics, and culture. In the southern section of the project, the wall would be left in place. In front of the piers, the wall is pushed back and light-permeable decking and open water portals are introduced. Benches near the aquarium and beaches with riparian plantings could be added to maximize the ecological function of the area. Jim explained that earlier designs included a beach, but coastal engineers suggest benching as a better alternative due to wave climate and exposure in this area. Near Bell Harbor Conference Center, the wall would be set back with light-permeable decking and viewing nodes for activity. The concept also shows a vertical garden to increase the habitat value of the seawall and a bench connecting to Olympic Sculpture Park in the north. Cumulatively, this concept is very “green,” with intensive landscape, beach logs, snags, native plants, and overhanging vegetation.

### **Concept C: Urban Waterfront**

*An active civic waterfront influenced by historic and contemporary urban fabric.*

Concept C maximizes the harder, urban edge of downtown Seattle. People could enter the waterfront from Pioneer Square and explore the water with short-stay moorage. There are opportunities to create a central gathering space and to emphasize the importance of Pike Place Market. This urban scheme would include stairs to the water to create public touchpoints as well as light wells and habitat benches such as those shown in Concept A. Near the Aquarium, concrete steps or a deck structure could provide an amphitheatre with access to the water. An overwater connection could be included from Pier 57 to 59. Further north, intimate civic areas are possible, along with short-stay moorage near Bell Street Marina. There would be gathering spaces at the foot of the Pike Place hill climb.

### **Concept D: Context Connections**

*A waterfront connected to adjacent neighborhood character, function, and aesthetic.*

Concept D emphasizes the context of current and adjacent uses of the waterfront and the neighborhoods adjacent to the water. The concept embraces the unique character of each area and connects people to the water. A gathering space can be created in Pioneer Square by pushing the wall out, providing views and serving as a gateway to Puget Sound. There could be a pedestrian promenade with light wells, tidepools, a floating park, intertidal benches, and boat rentals up to Bell Street Marina. Moving north, the wall would remain in its current location with additional view decks and a new wall behind Bell Harbor Conference Center. The team envisions this concept having focal points created by reflections of the character of different areas along the waterfront.

### **Concept E: Evolving Experiences**

*An episodic composition of places that tell a story of the importance of Puget Sound to its inhabitants.*

Concept E considers the waterfront in terms of sequential experiences that tell a story along the way. The seawall would define spaces of varied size, with openings to the water, beaches, and over-water structures. This concept emphasizes movement along the waterfront, especially maintaining circulation in front of businesses. A lighted migration corridor of open water portals could be provided, and beaches and over-water structures could both be included. The Aquarium’s planned expansion would be accommodated, as would the potential for event space on Piers 62/63. Near the Edgewater Hotel, light-penetrating decking and vertical gardens are possible, and habitat benches could be constructed wherever the wall is set back.

## Concept Plan Discussion

Meeting attendees were invited to view the concept plans during a short break. Bob then announced that the discussion would be an open dialogue regarding the five concepts. Stephanie noted that the team would like to hear questions, strong likes and dislikes, and any elements that might be missing in the concept plans. She reminded the group that the team focused on three areas for these designs: wall location, inclusion of a light corridor, and shallow water habitat.

**Question:** Can you elaborate on the idea of a floating park (shown in Zone 4)?

**Response:** The floating park could be a long, linear, overwater experience. It could integrate habitat, kelp beds, and different marine environments. Alternately, the overwater park could be a large, central gathering space with events similar to past *Summer Nights at the Pier*. A floating swimming pool is included in Concept D to represent active recreation, but other designs have smaller, more intimate spots. The details and programming for these spaces would be determined by the Seattle Parks Department.

**Question:** Do any of these concepts address sea level rise more than others? What rate of sea level rise is the team predicting?

**Response:** The project team is planning for a one to two foot rise in the next 100 years, and there is a draft report the team is reviewing related to this topic.

**Question:** Are there order of magnitude costs available for the concepts?

**Response:** The team does not yet have five different cost estimates for these concepts, although a range of costs will be presented in November as part of the evaluation and preliminary analysis. Costs will be estimated after alternatives are selected.

**Comment:** Four of the five schemes have unique aspects. Concept D, however, does not seem like a true thematic concept, as generally one would expect all of the concepts to relate to their respective neighborhoods.

**Comment:** The available public space on the piers should be indicated with darker pink on the drawings.

**Comment:** Any new moorage should be strictly public moorage.

**Comment:** There should be more of an ecological push near the Aquarium, and this seems muted in Concept B. This is area has significant educational opportunities.

**Comment:** There has been no mention of stormwater or contaminated sediment thus far.

**Response:** Stormwater and contaminated sediment elements have been present on past drawings (showing existing conditions), and the team will bring them back for clarity as the designs move forward.

- ✓ **ACTION:** Stormwater outfalls and areas with contaminated sediments will be identified on future drawings.

**Comment:** The light wells appear scary the way they are currently depicted; they should be shown in a different way. Light wells also may not be adequate for substantive ecological benefit and should not be used for the length of the project as the only method for providing light.

**Response:** In future drawings, the light wells could be portrayed differently. At the next meeting, the project team will bring information about potential brands and ideas for light wells and portals.

- ✓ **ACTION:** Future designs will depict light wells in a different way.
- ✓ **ACTION:** Provide examples of different brands/types of light wells, light penetrating decking, and open water portals to illustrate these features.

**Comment:** The drawings for Concepts B and E depict a “wavy” seawall, which would be very costly.

**Response:** The seawall itself would not be wavy, but the physical experience would appear that way with the addition of program elements such as decking.

**Comment:** Demolition debris from the viaduct should be recycled and used to create the breakwaters or habitat benches. This could save construction and debris disposal costs. Failing to use this material would be a loss, especially considering the volume potentially required for the seawall.

**Response:** Depending on pH levels of the concrete and project timing between viaduct demolition and seawall construction, that may or may not be a possibility. The team will need to determine the pH of the viaduct structure and how that material would interact with Elliott Bay.

- ✓ **ACTION:** Determine the pH levels of viaduct concrete.

**Comment:** The open water portals are artificial, and garbage will collect in them through currents. Those areas should not be featured for our tourists.

**Comment:** Light-permeable sidewalks may not be the appropriate solution for some areas where they are indicated in the designs due to vehicle loads.

**Question:** There seems to be less emphasis on the northern section of the waterfront. Is enough attention being paid to the north?

**Response:** Space is limited in the north, which is why there has been less emphasis so far; additionally, this will be the second phase of the project. The Central Waterfront team will look at potential uses of public space afforded by the re-route of Alaskan Way after the viaduct’s demolition, and the seawall team will continue to explore opportunities for this area.

- ✓ **ACTION:** Explore additional ideas for the north end of the waterfront.

**Comment:** Concept B nicely addresses the large void from the Aquarium to the Bell Street Pier area. That is a very long stretch of sidewalk without interest. There could be a high/low walk implemented there as people approach the boat moorage.

**Comment:** Concept B addresses the “triangle” near the Aquarium in a new way; however the other concepts address it in the same, stagnant way. It would be a missed opportunity if that space is not maximized.

**Response:** The seawall team is particularly interested in working with the Central Waterfront Project team on opportunities for this area.

**Question:** Are all concepts open to the design team as a menu of potential options?

**Response:** Yes.

**Comment:** Concept B is favorable, but it could be the most expensive, which is a drawback.

**Question:** What kinds of activities are envisioned in areas depicted with as central gathering spaces? There could be a number of implications for these spaces, particularly related to who will gather and how those areas will be maintained. Will they be similar to Piers 62/63?

**Response:** The team has not yet addressed that question and has focused instead on understanding how the wall's location will affect the amount of available space on the upland side of the seawall. There could be any number of possibilities at these locations, which will be explored by the Central Waterfront team.

**Comment:** Maintenance costs, as opposed to capital costs, must be considered throughout this process.

**Comment:** The detailed zone drawings should be distributed.

✓ **ACTION:** The project team will provide packets of zone area designs for subgroup members.

**Comment:** It would be helpful to see the science behind the fish migration corridors; the subgroup will need high confidence that the structure we put in place will benefit the habitat.

**Response:** The Army Corps of Engineers will conduct a rigorous cost-benefit analysis, which will help to answer questions about the types of habitat improvements that will be most beneficial. Additionally, the project team is continuing to compile research on habitat improvements. There may be cases where some ideas do provide habitat functions, but do not improve conditions enough to justify the cost.

**Comment:** The floating docks and piers are interesting ideas. If there is a floating dock, however, people cannot get from the beach to the water. A bridge could be built, but bridges are expensive. It might be better to illustrate the floating dock parallel to the pier. Walkways connecting piers exclude pedestrians trying to get to the beach.

**Response:** There may be an opportunity for an elevated pedestrian walkway, under which boats can come and go.

**Comment:** The concepts that include long, continuous corridors reflect the ideas of the Portland waterfront. For example, Tanner Park in Portland has a main walkway with grass and concrete areas for seating. Seattle could use a similar design that drops down to the water and attracts people.

**Comment:** Light wells should require minimal maintenance and operation costs, since there is nothing mechanical involved. However, they may not be appropriate in Seattle considering the small amount of light received during the day (coming from the east over buildings to reach the waterfront). Glass blocks are a good alternative; although, they can become slippery for pedestrians, and they do not transmit light well if they are scratched.

**Comment:** The sustainable patterns discussed at the Sustainability Workshop several months ago were wonderful elements but could require long-term maintenance. Hopefully the group can achieve the same improvements but avoid those issues.

**Comment:** The designs should be bolder with regard to building out into the water. Aside from navigational access, building out into the water with a sub-tidal structure is beneficial in many ways.

**Comment:** If the new seawall delivers some benefit to stormwater that will be a sign of huge progress.

**Comment:** Increasing the amount of public gathering space on the waterfront would be a splendid outcome. With respect to the residential properties there, the gathering places must consider any negative implications, such as public safety or traffic, resulting from their presence.

**Question:** Has an option without over-water structures been explored? Are there any arrangements with lease holders?

**Response:** That is a question the project team will address in the coming months.

### Next Steps for Conceptual Plans

Jennifer Wieland announced that a final version of the project goals, objectives, and evaluation metrics was included in the stakeholders' packets. This document incorporates all feedback, emailed comments, and conversations regarding the goals and objectives since the last meeting.

Jennifer reviewed the major changes, and noted that the evaluation metrics will be used by the project team to evaluate the five concepts presented at this meeting. All five concepts will be scored relative to one another. For instance, metrics address the measurement of costs; how habitat benefits are evaluated; and how open space, public gathering opportunities, and long-term flexibility are incorporated. At the next meeting, the results of the evaluation will be shared with the group.

**Comment:** What will happen if metrics score the same for separate concepts?

**Response:** Some metrics will illustrate no difference between concepts, which is appropriate at this level of design and this stage of evaluation.

### Action Items and Closing

- ✓ Identify stormwater outfalls and areas with contaminated sediments on future drawings.
- ✓ Depict light wells differently in future designs.
- ✓ Provide examples of different brands of light wells and light-penetrating decking.
- ✓ Provide input to pH question relative to viaduct concrete.
- ✓ Review ideas for the northern end of the waterfront.
- ✓ Provide zone area designs for subgroup members.
- ✓ Provide an update on the EIS process to the subgroup.

#### Next Meeting:

Seawall Stakeholder Subgroup Meeting #5

Date: Tuesday, November 16, 2010

Location: Puget Sound Regional Council (1011 Western Ave, Suite 500)

Time: 5:00-7:00 p.m.