

CENTRAL WATERFRONT STAKEHOLDERS GROUP

MEETING SUMMARY

Meeting #4

May 12, 2011

MEETING INFORMATION

Meeting #4, May 12, 2011

5:15 – 7:15 p.m.

Seattle City Hall, Bertha Knight Landes Room

ATTENDANCE

Stakeholders

- Warren Aakervik
- Brett Allen
- Geoff Anderson
- Chuck Ayers
- Kevin Clark
- Bob Davidson
- Bob Donegan
- Jan Drago (for Leslie Smith)
- Craig Hanway
- Susan Jones
- Charles Knutson
- Nicole McIntosh
- John Odland
- Vince O'Halloran
- Katherine Olson
- Vlad Oustimovitch
- Geri Poor
- Theresa Schneider
- Brian Steinburg
- Tom Tanner
- Heather Trim

Staff

- Bob Chandler, Seattle Department of Transportation (SDOT)
- Steve Pearce, SDOT
- Jennifer Wieland, SDOT
- Hannah McIntosh, SDOT
- Mark Williams, TetraTech
- Erin Taylor, EnviroIssues
- Ridge Robinson, TetraTech
- Bob Fernandes, BergerABAM
- Drew Gangnes, MKA
- Merri Martz, Tetra Tech
- Ethan Bernau, SOJ

Approximately seven members of the public were in attendance.

WELCOME

Bob Chandler, Alaskan Way Viaduct and Seawall Replacement Program Director, welcomed the group to the fourth Central Waterfront Stakeholders Group meeting and began a round of introductions. He reviewed the meeting objectives:

- Review Waterfront Seattle public input and set the stage for next steps,
- Further define Elliott Bay Seawall Project alternatives, including cost estimates, and
- Explore science-based opportunities for seawall habitat restoration.

Advising on Waterfront Seattle and the Elliott Bay Seawall Project



HOUSEKEEPING

Erin Taylor noted that a summary of the third Central Waterfront Stakeholders Group meeting was included in the meeting materials and asked if anyone had questions or clarifications to the document. There were none.

Referring to a historic photo from the Seattle Municipal Archives, Erin noted that almost 78 years ago to the day, the first concrete slab of Type A seawall was lowered into place. Bob Chandler noted that the City of Seattle acted as its own general construction manager for the 1930s construction of the seawall since it was a complicated project that no company wanted to take on at the time.

WATERFRONT SEATTLE UPDATE

Hannah McIntosh, Assistant Project Manager for Waterfront Seattle, provided a summary of the input from Waterfront Seattle's first public meeting, held on February 17, 2011. A detailed summary was included in the meeting materials as well. Over 1,000 people attended the event, and the project team received over 2,000 unique responses regarding people's desired visions for and uses of the future waterfront. Responses were gathered in two ways: a survey (both online and hard copy) and at activity stations during the event.

Common responses to the survey question asking "What makes a good waterfront?" included: 1) opportunities for views, 2) better access to water, 3) activities, events, and destinations, and 4) the ability to stroll. Responses on the activity boards at the event also indicated that people looked forward to strolling, sitting, viewing, opportunities to dine, and changes to touch the water on the new waterfront. In addition, people indicated that they wanted to be as close to the water as possible on the new waterfront, including on the ends of piers and in the water. The feedback received at the February public meeting will be reflected in the emerging designs to be presented at the public meeting on May 19, 2011.

Steve Pearce, Project Manager for Waterfront Seattle, provided information about the upcoming public meeting at Bell Harbor Conference Center, noting that the design team would be presenting preliminary design ideas that will be refined over the next year. Steve added that food and music will be available at 5:00 p.m., followed by a presentation on the waterfront design concepts beginning at 6:30 p.m. A question and answer session will follow the presentation, and activity stations will be available for the public to provide feedback on the ideas presented by the design team.

Comment: Is the Waterfront Seattle project hosting and/or promoting engagement events outside of the central downtown area? The team may be missing input from a large sector of the public that does not live or work downtown.

Response: One goal of the Waterfront Seattle project is to bring people to the waterfront, and therefore we have decided to host our large events this summer near the project area. We'll be going out to talk with community groups throughout Seattle this year, and we appreciate that input for future outreach and advertising.

Comment: The Waterfront Seattle project should consider asking meeting attendees whether they work or live downtown.

Response: The Central Waterfront Outreach Subcommittee has also talked about tracking where participants live and work. We are planning to collect zip codes at future public events.

SEAWALL ALTERNATIVES UPDATE AND COSTS

Jennifer Wieland, Planning and Design Lead for the Elliott Bay Seawall Project, reported that the Elliott Bay Seawall Project team presented the local project alternatives to the Seattle City Council on April 25, 2011. The majority of the presentation focused on the two “bookend” alternatives for the first phase of the project, but the team also covered the project purpose and need, goals, coordination with Waterfront Seattle, and preliminary cost estimates.

Bob Fernandes described the preliminary 10 percent design cost estimates for Phase 1 of the seawall replacement. He noted that the estimates are in peer review at the city and have not yet been approved by the U.S. Army Corps of Engineers (Corps). Bob explained that these estimates are higher than previous planning-level cost estimates (developed in early 2010) for the following reasons: 1) the Phase 1 project area has been extended approximately 200 feet to Virginia Street (previously assumed to be Pike Street); 2) the drilled shaft structural solution is being used for costing, as it has a better historical price record; 3) habitat restoration is now included in the estimate; and 4) some utility costs have been reprogrammed from the Central Waterfront Project to the Elliott Bay Seawall Project.

The structural solution for the new seawall accounts for roughly 80 percent of the project cost; roadway costs are similar in both Alternative A and B. Bob Chandler emphasized the likelihood that a design somewhere in between the two “bookend” alternatives will ultimately be selected through the design process.

Following up on the previous stakeholders meeting, Drew Gangnes outlined seawall alternatives for Zones 5 and 6, which include the Bell Harbor Marina, Bell Harbor International Conference Center, Port of Seattle offices, and Pier 70 up to Broad Street. In these two zones, the existing seawall is the smaller Type A structure, with a nine foot pre-cast concrete face panel and a timber relieving platform. Therefore, for both Alternative A and B, the face of the new seawall structure will be placed approximately nine feet inland (east) of the existing seawall face.

Comment: The team should consider placing a value on those four upgrades that add expense to the project. This would make the project estimates more equitable. Is the value of those four upgrades \$100 or \$100,000?

Response: We believe the current costs are reasonable best estimates. The difference in costs from the planning-level estimates and the 10 percent design estimates can be directly attributed to the four factors discussed: a longer project, costing with drilled shafts, including habitat enhancements, and transferring utility costs to the seawall project. Down the road, it may be up to the community to decide if some upgrades are valuable. However, it’s important to recognize that a significant amount of the cost

comes directly from the structure itself; we are taking a conservative approach to using drilled shafts for the estimate and will continue to seek cost savings where possible.

Question: Why have the utilities been switched from the Central Waterfront Project to the Elliott Bay Seawall Project?

Response: In many cases, it makes more sense to do this utility work during the seawall project from a phasing and schedule perspective.

Question: Would the cost of utility infrastructure be included in a vote or levy?

Response: If utilities are moved for transportation purposes, the utility companies must pay the associated costs. The seawall is a transportation project, and therefore the utility companies must fund the relocation.

Comment: The stakeholders and the public will be interested in what the individual cost will be to residents and businesses.

Question: Will the new, final road be sitting on liquefiable soils?

Response: The roadway costs included in the seawall estimate are for the construction roadway and the restored roadway, which is the road that will exist at the completion of the Elliott Bay Seawall Project but before Waterfront Seattle construction begins. Waterfront Seattle will construct the final roadway, and it will be appropriately stabilized.

Comment: There is enormous public sensitivity to project costs, and this project will be a “hard sell.” The team should do everything possible to make the previous and current estimates comparable.

Response: The project team is only at 10 percent design, and we do not expect to choose either Alternative A or B. There is still a year’s worth of value engineering to complete, and with many opportunities for costs to decrease. We feel that this is a reasonable starting point, as the four assumptions we discussed previously adequately explain the difference between previous and current estimates.

Question: Is it possible that the cost savings will be as significant as with Olympic Sculpture Park? In that case the planning-level estimate and actual cost came down tens of millions of dollars.

Response: We do not expect to find quite as much savings as the Olympic Sculpture Park project.

Question: Has the estimate for the entire project changed, or just Phase 1?

Response: We did not develop a previous estimate for Phase 2.

Question: What is envisioned for the multi-use path in Zones 5 and 6?

Response: The current multi-use path on the east side of Alaskan Way will be restored following construction of the Elliott Bay Seawall Project and will remain until Waterfront Seattle completes the final roadway. The Waterfront Seattle Framework Plan will include approaches for improving the existing pathways.

Comment: The team could save money by not placing a restored roadway in Zones 5 and 6 and instead constructing the final roadway and pathways.

Response: Because this work is in Phase 2 of the seawall project, this may be possible. However, because the entire seawall project area (Washington to Broad Streets) is included in the project's Environmental Impact Statement, we must assume a similar condition and timeframe for all construction.

Question: If drilled shafts are the selected structural solution, can groundwater pass through the structure? Today that occurs naturally due to the porous nature of the deteriorating timber, steel, and concrete seawall structure. Will pumps be required for this functionality in the future?

Response: The team is considering this question. There may be simple solutions that allow water to pass through the wall, hopefully without a complex pumping system.

SEAWALL HABITAT UPDATE AND DISCUSSION

Jennifer Wieland outlined the history of habitat questions related to the seawall project and the topics to be covered in the presentation. She noted that a summary highlighting the habitat information to be covered was included in the stakeholders' packets. The seawall habitat work is being coordinated with the Waterfront Seattle team, but the Elliott Bay Seawall Project team brings extensive experience to the table, particularly related to in-water habitat restoration. Ecosystem restoration is part of the Elliott Bay Seawall Project's official purpose and need; as such, habitat enhancements can also be cost-shared with the Corps.

Drew Gangnes described the nearshore environment and salmon migration within the context of Seattle's natural, cultural, and industrial history. Referring to an historic map, Drew pointed out features of the early Seattle shoreline. He described how a natural shoreline provides a number of critical habitat characteristics, particularly for salmon: shallow water, light, marine ecosystems, and riparian plantings. When the seawall was constructed and the backshore filled, the shoreline lost much of its natural ecological function. Today, Seattle's central waterfront is approximately 60 percent covered with piers.

In 1999, when Chinook salmon were listed as an endangered species, a salmon recovery plan was developed and ratified by the municipalities in the Green and Duwamish waterways. The plan spelled out specific measures and allocated millions of dollars to salmon recovery. The Elliott Bay Seawall Project area is a bottleneck in the migratory route, and repairing the bottleneck is pivotal to the success of the recovery plan. The lack of light and virtual "ecological dead zone" in the under-pier environment leads juvenile salmon to traverse into deeper, more dangerous waters. If they are lucky to make it through those areas, they arrive on the other side confused, hungry, and even more vulnerable. Therefore, the team's plan is to create a shoreline environment with analogous function to the natural shoreline.

Merri Martz, a biologist on the seawall team, noted the interdisciplinary nature of the habitat team. The team shares the common goal of creating a functional migratory habitat for salmon and enhanced nearshore productivity. The team has partnered with

the Corps and has studied existing literature about the northwest nearshore environment. Additionally, the team has undertaken new studies to fill existing data gaps, especially regarding fish behavior in an area with a series of piers, the effectiveness of light penetrating structures, and the values associated with habitat restoration.

In late 2010, the team conducted an existing habitat analysis using a video inventory technique. Currently underway is a salmonid population and behavioral survey focusing on juvenile out-migration. During the inventory, the team mapped existing habitats and generally noticed less macroalgae and invertebrate productivity under piers (dark) compared to pier edges (more light) and between piers (lightest areas). Observations of fish populations have been conducted in two ways: via snorkel survey in the water and from piers looking down at the water. The latter can help the team extrapolate data on school sizes and behavior more effectively than in-water observations. Merri described how the observed salmon are generally located within three meters of the seawall, likely trying to stay in the shallowest waters.

Comment: Can you report on the gross numbers of each of the species documented?

Response: We can distribute the report with actual real numbers when it is complete.

- ✓ **Action:** Post habitat report that includes gross numbers of invertebrates and other observed species on the project website.

Question: Have the habitat studies been funded with a grant and conducted by students?

Response: The studies are paid for by the Elliott Bay Seawall Project's budget. Students in the University of Washington's Fisheries School are involved in the research.

Researchers have also been conducting night studies, and they have observed significant differences in fish numbers under and between piers due to the large amount of ambient light coming from upland sources. They discovered that the lowest contrast in fish numbers between and under piers was observed at dawn and dusk, when the light differences between the two conditions are less dramatic.

Merri reiterated Drew's point that the project team is striving to create a continuous migration corridor along the seawall, providing shallower water and better lighting for salmon under and between the piers. Where possible, riparian vegetation, textured walls, and substrate enhancement will be enhanced as well.

Ridge Robinson described how the project team is analyzing potential solutions, constraints, physical conditions, and other considerations (such as navigation) in order to understand the best value for habitat enhancements. He also described the methodology for evaluating expenditures. To do this evaluation, the team first identifies a range of features and establishes cost estimates for each. Those same features are then rated relative to one another for their effectiveness in restoring habitat over a 50-year period. Various combinations of those features are then identified, and the costs and effectiveness of those combinations are compared. Finally, to assist with decision-

making, an incremental cost effectiveness analysis is completed to help show how much habitat benefit might be gained by spending a given amount of money.

The costs that will be analyzed include construction costs, potential real estate easements, and life-cycle costs for up to 50 years of maintenance and operation. The analysis results in the ability to identify the features that will provide the greatest improvement at the least cost.

Question: What unit of measurement is used for comparison?

Response: The unit is simply a measurement of quantity and quality relative to the existing conditions.

Questions: For comparison, what would the rating of a pristine area be?

Response: Each project is different. The Elliott Bay Seawall Project is using a maximum score of 10 for each parameter, and there are 10 parameters, leading to a total score of 100. A pristine habitat might be anywhere from 90-100. The existing conditions of Elliott Bay fall in the range of 20-25. The Corps will look at this analysis and extrapolate it to a 50-year period (multiplying 100 times 50), for a maximum score of 5,000.

Question: Is there a rating for the habitat improvement's effect on tourism?

Response: No, this approach does not rate the value of structures, tourism, or business effects. This approach will not lead us to a final decision, but it is a reasonable way to begin thinking about the physical needs of the waterfront and comparing potential enhancements. There will be additional conversations with the stakeholders and others about the reasons to implement certain improvements in specific areas. In addition, a cost benefit analysis for structures and regional economic impacts is required as part of the project's feasibility study.

Question: Is a budget identified for the habitat portion of the project, or does this analysis help the team identify a budget?

Response: This exercise is helping the team identify a budget.

STAKEHOLDER ONCE AROUND

Bob Chandler invited the stakeholders to give their input and ask additional questions about the presentations

Jan Drago: Will the team make a recommendation for incremental implementation of these features if the budget does not support constructing them all at once?

Response: This certainly could be an approach, but we don't know yet.

Chuck Ayers: No additional comments.

Nicole McIntosh: The team should consider the weight limits related to vehicle loads for light penetrating surfaces such as glass blocks, particularly for the Ferry Terminal.

Bob Donegan: I have concerns about costs and feel that it will be hard to sell a project that is over budget. The environmental analysis ranks features against each other, but

not against other alternatives that have been set aside. I would also like to see the science behind light needs, such as requirements for depth penetration. I recommend that future maps zoom in on the waterfront and seawall area (not showing beyond 1st Avenue). I am also concerned that there is a significant amount of coal in the substrate around the four central piers, which is not going to respond to habitat improvements.

Response: The team has considered capping any contaminants with fill. We also are looking at options to ensure fill material stays in place.

Kevin Clark: Selling this project to the public will be a big challenge. We must measure dollars spent and output.

Craig Hanway: Thank you for the presentation and graphics; this was understandable.

Susan Jones: Thank you for the presentation and graphics. This was a lot of content, but it was easy to understand.

Brett Allen: I am very interested in the science and appreciated the presentation.

Theresa Schneider: The material was easily understandable for someone new to this topic.

Heather Trim: This project is great and is critical for the restoration of Puget Sound. Please consider the following suggestions: 1) Emphasize and message that the nearshore habitat acts as a nursery. 2) Place an emphasis on ways to make the habitat enhancements more approachable by humans, perhaps in the form of tide pools or beaches; I did not hear mention of beaches. 3) I would like to see the potential for using the viaduct debris as new substrate somewhere in this presentation. 4) Include more information about cultural benefits as a result of salmon restoration. 5) Distribute a map of contamination in the project area. 6) Consider the possibility of applying for different funding sources for habitat restoration elements of the project, such as National Resources Damage Assessment (NRDA) funding.

Response: With regard to using pieces of the viaduct, there may be challenges with the chemical compound of the concrete and its reaction to sea water. We will be able to answer that question as we move forward.

Susan Jones: Students at the UW Department of Architecture studied and categorized potential reuses for waste from projects such as the viaduct replacement. The project team should look through those studies.

Warren Aakervik: The project team should study the entire life cycle of salmon. You may find that the highest mortalities often occur in upper rivers and banks as a result of runoff pollution and other culprits. We should improve the habitat that exists in Elliott Bay, but the team should fully understand the numbers of salmon that will benefit from improvements in this area relative to improvements elsewhere.

Vince O'Halloran: I represent the Deep Sea Fishermen's Union, and we have a keen interest in the survival of salmon for our industry. I commend the project team on their

work. I do want to understand how construction activities may create silt runoff and how or if that will be addressed in the study.

John Odland: The cost analysis is very interesting to me. If the juvenile salmon migrate from the Duwamish River to Smith Cove, we need significant improvements in the specified areas. Looking at the results of monitoring studies of juvenile salmon near the Olympic Sculpture Park should give us an idea of the amount of improvement we can expect.

Tom Tanner: I am concerned about timing for this project, as the schedule shows that we will be in construction two years from now. There is a lot of science yet to be discovered, and there are many decisions still to be made. Timing is very important, and we cannot present the seawall project to the community at an inappropriate time. Please help us understand the tangible benefits of this project to the public. We are an advisory group to the City of Seattle, and we would like to be able to advise on these elements.

Response: The science is evolving, and the team will bring information back to the stakeholders as it becomes available. Completing this project on time is critical, and we feel confident that the time available over the next two years is enough to do this work.

Brian Steinburg: No additional comments.

Vlad Oustimovitch: I would like to know more about the seawall habitat examples in other cities that the project team has studied and their relative effectiveness.

Response: The project team has visited Vancouver and talked to the researchers monitoring the habitat improvements along their seawall. We also have a Peer Cities summary of six different cities, including information about habitat enhancements, available on the project website for your reference.

Jan Drago: My vision of the waterfront has been influenced by the early sketches that People for Puget Sound created. I am happy and feeling positive about the work that has been done. Thank you.

Geoff Anderson: Last meeting's discussion about construction techniques helped our conversation today as well. Has the team also considered using fiberoptic technologies in the concrete as a light source?

Charles Knutson: General comments from the Chamber's Transportation Committee, to which Stephanie Brown presented in April, included a lot of interest and support for the seawall replacement and requests for more information about construction, access, parking impacts, and general impacts to the Port of Seattle and Washington State Ferries. This presentation on habitat was easy to understand. Using a scale of 1 to 100, with 100 being a pristine environment, what is the rating could we expect after implementing the habitat improvements discussed today?

Response: Somewhere above 50.

Geri Poor: No additional comments.

NEXT STEPS AND ACTION ITEMS

Bob Chandler summarized the action items captured during the meeting:

- ✓ Outreach should extend outside of the downtown.
- ✓ Define roadway phases (e.g., interim, restored) in a way that is easier to understand.
- ✓ Distribute more details about the science behind the habitat analysis as it becomes available.
- ✓ Post the habitat report that includes gross numbers of invertebrates and other observed species on the project website.

The fifth Central Waterfront Stakeholders Group meeting is tentatively scheduled for Tuesday, July 26, 2011.