

Eastbank Esplanade Portland, Oregon

Erika Harris, Chen Hai



Client: Portland Parks and Recreation
Owner: City of Portland Parks and Recreation
Location: SE Water Ave & SE Hawthorne Blvd, Portland, OR

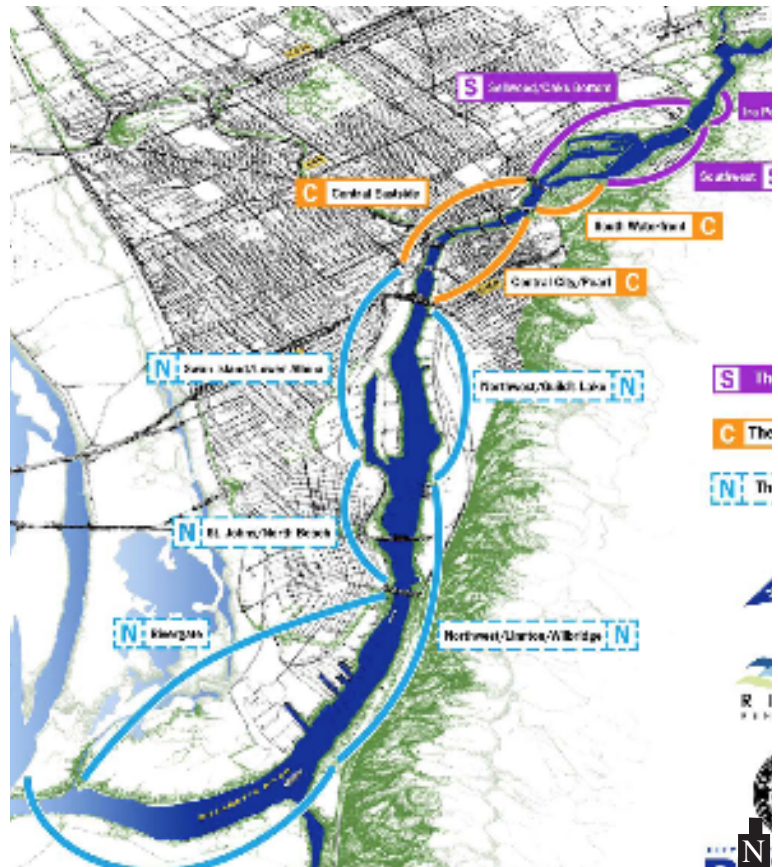
Acreage: 0.12
Length: 1.5 miles
Acquired in 1998
Cost: \$30 million

Construction Dates: March, 2001
Landscape Architecture: Carol Mayer-Reed

Amenities: boat dock, canoe launch, paths, biking trail, hiking, visitor attraction etc.

Vera Katz Eastbank Esplanade is a pedestrian and bicycle path along the east side of the Willamette River in Portland, named after the former mayor Vera Katz. It is known as an innovative urban-renewal project. This project is designed by Carol Mayer-Reed. It turns a gritty urban environment between the riverbank and the freeway into a popular public space. The scenic pathway is 1.5 miles long, from the Hawthorne Bridge to north Steel Bridge. It connects the eastside neighborhoods to Tom McCall Waterfront Park and the westside neighborhoods.

The City of Portland Bureau of Planning defined three areas in the river plan "River Concept". Eastbank Esplanade belongs to the central part. This is to be the region's gathering place. The "Vibrant Waterfront District" and "Front Yard" River Renaissance Vision themes are the most critical themes.





History

Much of the trail is under I-5, and the Central Eastside was the historically ill-considered side of town. The Eastside Esplanade was the area's first waterfront park. It was hoped that the Esplanade would serve as a catalyst for the neighborhood's redevelopment.

The project rebuilt the I-5 bicycle bypass washed out by the Willamette Valley Flood of 1996.

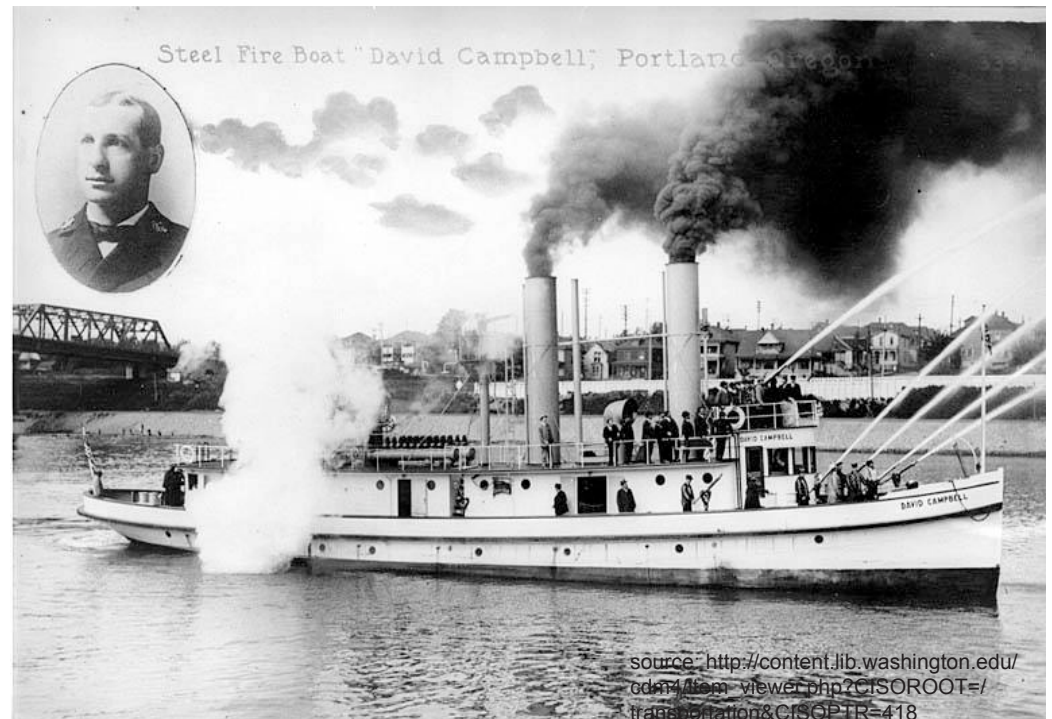
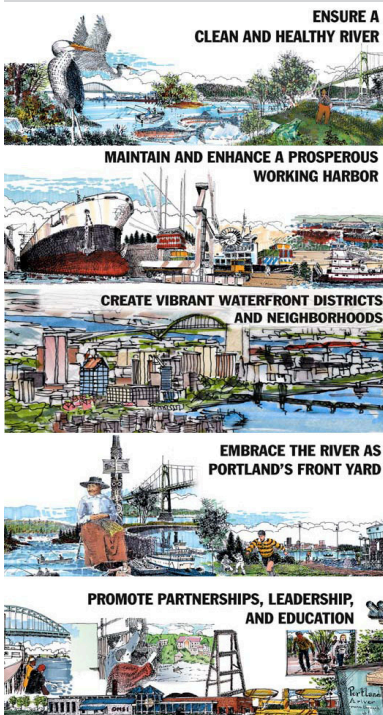
The Eastbank Esplanade has been an important part of the long-term vision for downtown Portland to allow walkers, cyclists and joggers to complete a riverside central city loop between the Steel and Hawthorne Bridges and provide an east-west connection (between Lloyd District and Old Town/Downtown) for residents and visitors. City planners included the park in the 1988 Central City Plan.

Portland was founded on the Willamette River for its transportation access. With the walkway and the new public boat dock, the project is seen as reclaiming the river as a transportation connection.

The five Goals of River Renaissance:

1. Make the river clean and healthy for fish, wild life, and people.
2. Maintain and enhance the working harbor and its infrastructure.
3. Embrace the river as Portland's front yard.
4. Encourage the orientation of new development toward the river with greenway set-backs and river access.
5. Promote partnerships, leadership, and education.

<http://chatterbox.typepad.com/portlandarchitecture/planning/>



source: <http://content.lib.washington.edu/odm4/atom-viewer.php?CISOROOT=/transportation&CISOPTR=418>



Eastbank Esplanade

Planning/Design Approach and Process

In 1993, the City began developing a master plan to guide the design and construction of the Eastbank Esplanade. The City formed a citizen Eastbank Riverfront Project Advisory Committee (PAC) to provide project oversight. The PAC included members of adjacent neighborhoods, the Central East-side Industrial Council, landowners, river and environmental enthusiasts, and long-time parks activists. The lead consultant was Hargreaves Associates, landscape architects based in San Francisco.

Completed in January 1994, the Eastbank Master Plan described an esplanade with docks, piers, overlooks, a plaza for festivals and gatherings, floating walkways, fountains, public art, and connections to the neighborhoods and Portland's bridges. The Master Plan called for a phased approach to building the Esplanade:

- Phase I – The Floating Walkway, Steel Bridge to Burnside Bridge (complete)
- Phase II – Burnside Bridge to Hawthorne Bridge (complete)
- Phase III – The “crescent” area between the Hawthorne Bridge and OMSI (future phase)

The Esplanade is a joint project of the Portland Development Commission and Portland Parks and Recreation.

The Steel Bridge walkway project is part of the Office of Transportation's River Access and Transportation Program, developed to encourage accessible and efficient transportation along the Willamette River. To use the Steel Bridge, Portland Transportation negotiated with Union Pacific Railroad Company, which owns and operates the bridge. The designers had to make sure that the new walkway on the lower deck did not affect the navigational clearance.



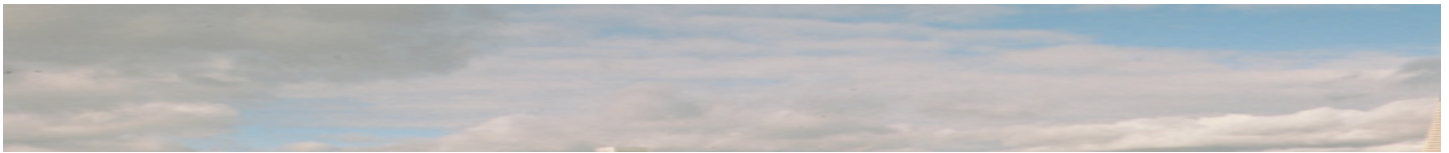
The project cost \$30 million with Eastbank Esplanade Phase I and II costing \$20 million and the Steel Bridge walkway and boat dock costing \$10 million. Funds for the Steel Bridge walkway, overlook, railroad bridge and public boat dock came from federal CMAQ funds (Congestion Mitigation Air Quality), tax increment funds from the Oregon Convention Center Urban Renewal Area, Oregon Department of Transportation, Oregon State Marine Board, Local Improvement District funds from area property owners, and the City's Office of Transportation.

Construction of the Esplanade began in October 1998 and was completed in May 2001.

Goals

Some goals for the project that emerged from public involvement included:

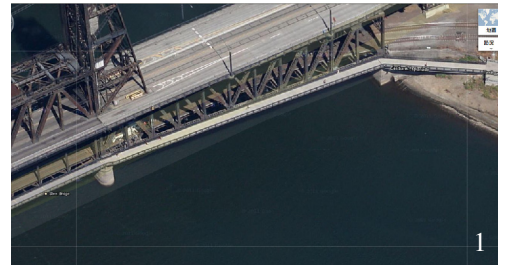
- Ensure a clean and healthy river
- Maintain and enhance a prosperous working harbor
- Create vibrant waterfront districts and neighborhoods
- Embrace the river as Portland's front yard
- Promote partnerships, leadership and education



Features

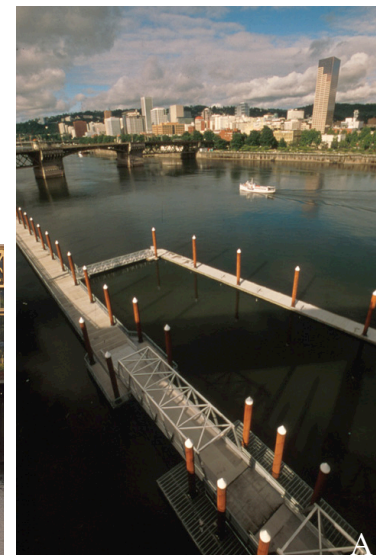
• Paths

1. Pedestrian/ bicycle connection on bridge
2. At-grade trail
3. The 1,200-foot floating walkway and bike pathway
4. Burside Bridge Connection
5. Cantilever Walk



• Docks

- A. Boat dock
- B. Tour Boat Dock

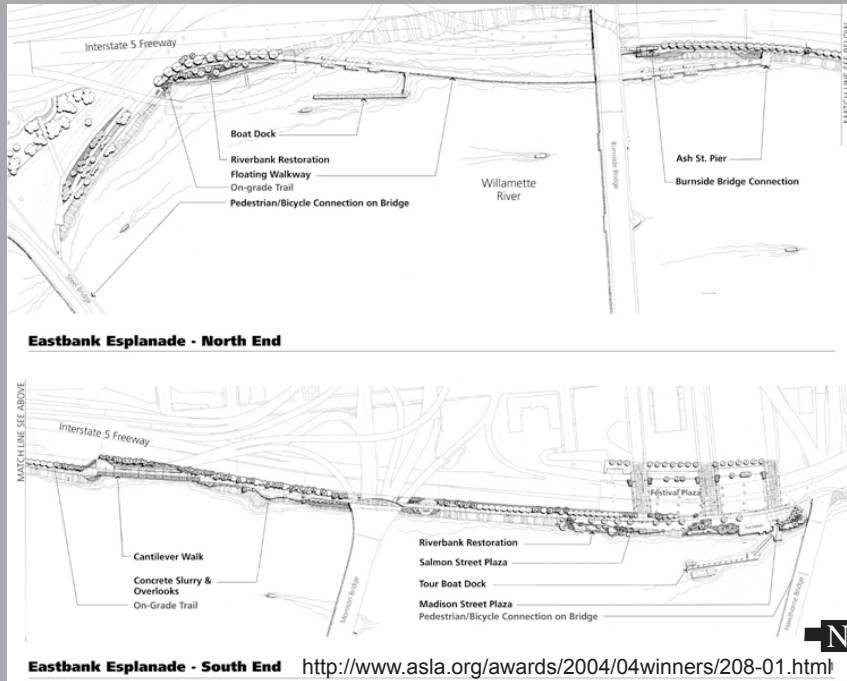




Eastbank Esplanade



Carol Mayer-Reed, FASLA, is leader of landscape architecture and urban design at Mayer/Reed. She usually works on projects such as waterfronts, light rail transit, parks, trails, sustainable urban mixed-use developments and campuses.



- Gathering space
- a. Ash St. Pier
- b. Concrete slurry & overlooks
- c. Salmon street plaza
- d. Madison street plaza





Comment by Gil Penalosa:

“ I find it amazing that there is so much conflict between bicyclists and pedestrians. We should be best friends. Even the pedestrian is not much, but if you combine bike and pedestrian, it will be a lot.”, “ I think it will be nicer if it built wider. If you know there will be high density of bicyclist and pedestrian, you should separate them. Because they are going different speeds, if you put them together, there will be a lot of accidents. Even if there are no accidents, people will feel unsafe. You can see some cyclists ride very fast, so you cannot see lots of children and elders. ”

Bike and pedestrian

The Esplanade is a crucial link in Portland's non-motorized transportation and recreation network. The Esplanade improves access to the Willamette River in this constrained area under I-5. It is also part of a 40-Mile Loop that links parks and green spaces. With 17% of Portland residents biking for transportation, the Esplanade and the bridges it connects have heavy use by cyclists. After it opened, bike use on Steel Bridge increase 220%. Now, there are 2,800 bike trips per day. It not only provides alternative commuting routes for bicyclists and pedestrians, but contributes to a healthier citizenry.



Floating Walkway

The 1,200 foot floating walkway along the river side rises and falls with seasonal fluctuations. It provides people a new path to ride bikes and walk and gives visitors the sensation of walking on water. It is also connected to a 120 ft long public dock and connects to the west side.

Due to worldwide climate change, the Willamette River has been at its highest water level since 1996. A 1,000 foot section of the walkway was closed for about one week due to a wet spring and heavy snow melt.





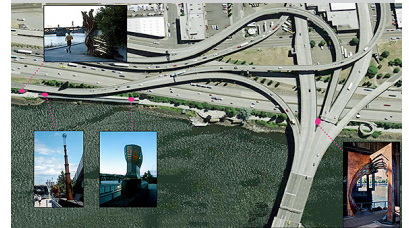
Eastbank Esplanade

Public space, art and wayfinding

The urban marker and public art installation projects are part of the Eastbank Esplanade. They show the connection between past and present.

There are four pieces of public art at Eastbank Esplanade: Echo Gate, Ghost Ship, Stackstalk and Alluvial Wall. They were all created by RIGGA, a group of local artists. They create a series of “sculptural knots and ghosts” which reflect the riverbank’s interwoven urban and natural history.

The urban markers symbolically connect the river to the adjacent industrial district and residential neighborhoods which were isolated by I-5 in the 1960s. Story themes provide an awareness of the linkages between past and present and the transportation and land use choices that create livable cities. The markers incorporate street signs, lighting, story panels, and wayfinding.



Echo Gate



<http://www.segd.org/design-awards/2002-design-awards/eastbank-esplanade-urban-markers.html?l=1>



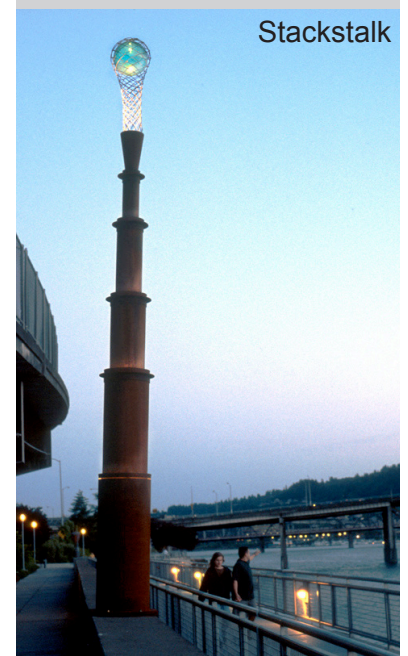
http://www.justseeds.org/blog/2009/09/interview_with_taylor_stevenson_1.html#more



Ghost Ship



Alluvial Wall



Stackstalk



Ecological considerations

Plants

The east bank of the Willamette has a steep bank held by rip-rap and it is severely compacted. Despite these limitations, it is home to cottonwood and willow. With the efforts of volunteers, they cleared invasive weeds from 1.25 acres of steep riverbank.

Bio-engineering techniques use native plants and minimize the riprap rock erosion. There are 280 trees and 43,695 shrubs were planted along the riverbank. Native plants including rose, willow, Douglas spiraea, red osier dogwood and snowberry anchor the bank and provide habitat for local wildlife.



http://blogs.oregonlive.com/commuting/2011/04/southeastern-ecological-restoration-of.html



resource: Eastbank Riparian Restoration
Families plant native plants.

Water+Plants

There are two examples of collecting runoff and pre-treating it. The first one is “vegetated swale”. It is located under the freeway along east side of the parking lot and has a total of 2,240 cubic feet. The runoff from the parking lot will permeate buried sand filters before going to the public drainage system. It can handle 0.83 inches in 24 hours.

The second one is “Cobble Vegetated Swale”. It is located along the path, between the floating walkway and Steel bridge. The facility has a total of 2,421square ft. The runoff from the path will be collected in scuppers then sent to swales for retreatment.



source: <http://www.portlandonline.com/bes/index.cfm?a=68699&c=36848>

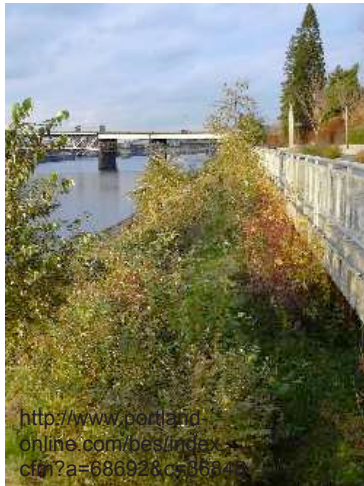


source: <http://www.portlandonline.com/bes/index.cfm?a=68702&c=36848>



Habitat

The Esplanade is a demonstration project for improving habitat for fish and wildlife and riverbank restoration. For example, the bank restoration at Madison Street Plaza provides fish habitat and stormwater treatment. At the top of the bank, a trough sand filter collects stormwater and filters it. And in other places, the riverbank has been reshaped with grading that creates shallow habitat for fish and other wildlife.

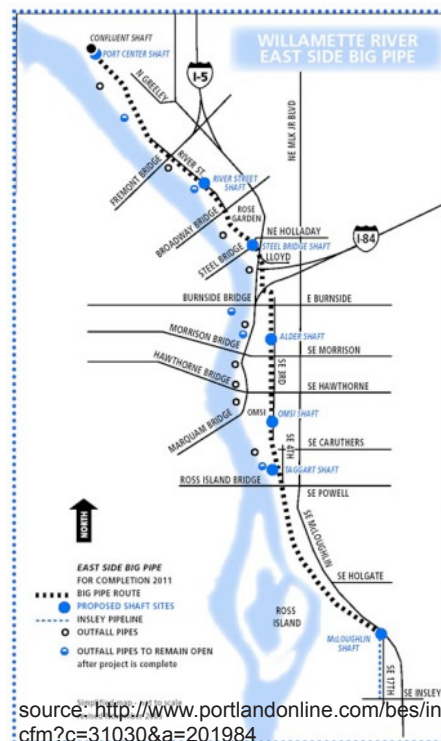


Construction period

The construction timeline coordinated with fish migration seasons.

East Side Big Pipe Project

Portland's Big Pipe Project began in 1991. The East Side is the latest and largest sewer construction project in Portland. This project controls combined sewer overflows (CSOs) to the Columbia Slough and Willamette River.



Eastbank Esplanade



River Bank

There are five basic river-bank types in the downtown reach.

Industrialized banks

Armored banks

Naturalistic banks

The concrete sea wall

Enhanced or modified banks

source: Portland Downtown Riverfront Habitat Opportunities

Enjoy the Willamette Riverbank





Unsolved problems:

- High water forces closure of the floating section of the Eastbank Esplanade
- The pathway is too narrow in places; consider all kinds of users

Relevance to Seattle

- Waterfront access as economic catalyst
- Non-motorized transportation connections along waterfront
- Popular despite elevated highway above
- Public art incorporated throughout the Esplanade
- Docks have multiple functions, such as moorage and water taxis
- Design used creative solutions for this constrained area, such as floating walkways
- Markers on the esplanade make a connection to the Eastside Portland street grid
- Waterfront habitat restoration techniques - innovative?
- Eco-tourism and nature paddling tours

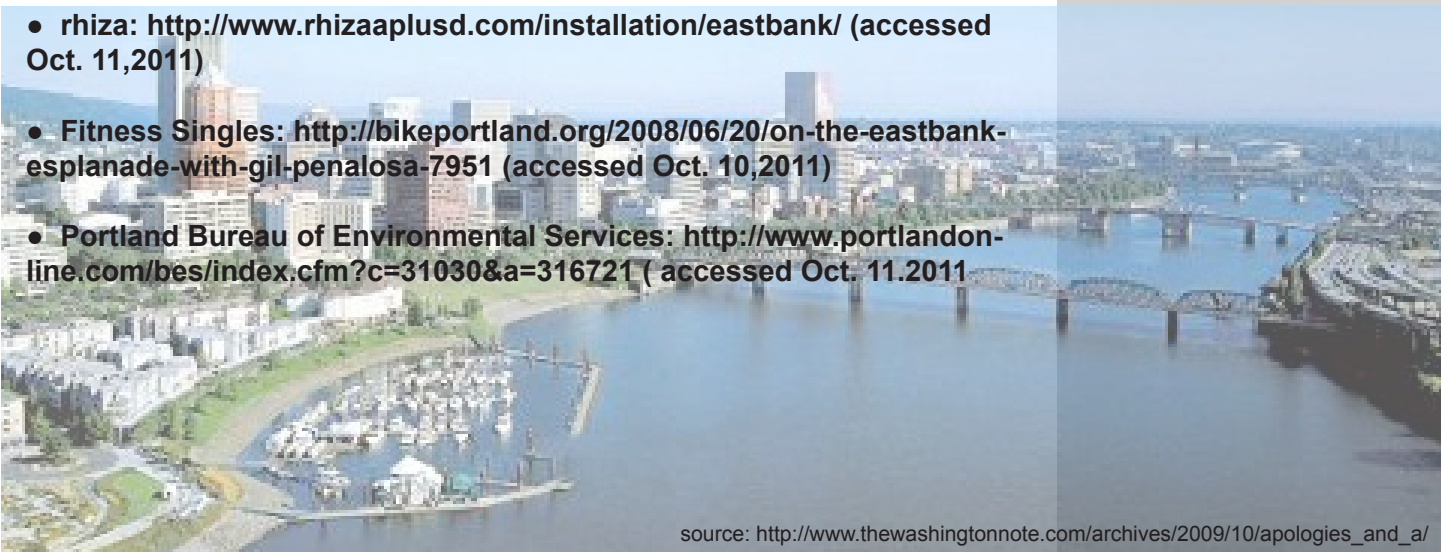




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Resources

- City of Portland Department of Parks and Recreation website: <http://www.portlandonline.com/parks/finder/index.cfm?action=ViewPark&PropertyID=105&searchtext=waterfront> (accessed Oct. 9, 2011)
- Portland Development Commission Fact Sheet: http://www.pdc.us/pdf/ura/central_eastside/factsheet.pdf (accessed Oct. 9, 2011)
- Portland Development Commission Press Release: http://www.pdc.us/pdf/ura/central_eastside/release.pdf (accessed Oct. 9, 2011)
- Portland Bureau of Environmental Services: <http://www.portlandonline.com/bes/index.cfm?c=29323> (accessed Oct. 1, 2011)
- ASLA: <http://www.asla.org/awards/2004/04winners/entry208.html> and http://www.asla.org/meetings/awards/awds02/eastbank_esplanade_urban_markers.html (accessed Oct. 12, 2011)
- ASLA: <http://www.asla.org/awards/2004/04winners/entry208.html> (accessed Oct. 10, 2011)
- SEGd: <http://www.segd.org/design-awards/2002-design-awards.html#/design-awards/2002-design-awards/eastbank-esplanade-urban-markers.html> (accessed Oct. 12, 2011)
- OregonLive: http://www.oregonlive.com/portland/index.ssf/2011/06/portlands_eastbank_esplanade_f.html (accessed Oct. 11, 2011)
- Bikes Belong: <http://www.bikesbelong.org/what-we-do/federal-policy-funding/why-invest-in-bicycling/eastbank-esplanade-or/> (accessed Oct. 10, 2011)
- rhiza: <http://www.rhizaaplusd.com/installation/eastbank/> (accessed Oct. 11, 2011)
- Fitness Singles: <http://bikeportland.org/2008/06/20/on-the-eastbank-esplanade-with-gil-penalosa-7951> (accessed Oct. 10, 2011)
- Portland Bureau of Environmental Services: <http://www.portlandonline.com/bes/index.cfm?c=31030&a=316721> (accessed Oct. 11, 2011)



source: http://www.thewashingtonnote.com/archives/2009/10/apologies_and_a/