

South Waterfront Park

“The South Waterfront Greenway Development Plan (GDP) has achieved an integrated and balanced design that fuses the goal of creating a new high-density urban community with the desire of the public to create habitat in the Willamette River.” (Portland Parks and Recreation Bureau 2004)

Key features: Riparian plantings and shallow water habitat.

Location: South Waterfront, Portland, Oregon

Lead entity: Portland Parks and Recreation Bureau

Status: Complete

Cost: Phase 1: \$10,798,100 (Kennedy-Wong 2014)



Figure 1, South Waterfront Greenway design overview.

1.1 SHALLOW WATER HABITAT

A major goal of the South Waterfront design was to restore shallow water habitat that had been destroyed by historic industrial uses along the Willamette River. The project removed 27,000 tons of concrete, debris, and contaminated soil, and installed gravels for fish habitat. A curved, tiered seawall containing riparian plantings was installed to protect the greenway from erosion while still providing shading, habitat, and high flow refuge for fish. Below the seawall, a 25,000 square foot sloping beach of gravel and rock was created to give fish refuge from high flows and predators. The beach was also contoured to encourage racking of woody debris to further enhance habitat. (TriMet 2013)



Figure 2, Seawall and shallow water habitat at the South Waterfront during low flow.

1.2 REVEGETATION

The riparian zone along the seawall was heavily revegetated with native species including willow, alder, big leaf maple, native rose, spiraea, and dogwood. This vegetation helps to slow and filter urban runoff. Plantings were also installed within and between the seawall tiers. (TriMet 2013)



Figure 3, Vegetation and shallow water habitat cross sections at South Waterfront Park.



Figure 4, South Waterfront Greenway with shallow habitat visible (bottom right).

References

Kennedy-Wong, Elizabeth. "South Waterfront Greenway." The City of Portland Oregon. February 5, 2014. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/45643>>.

Tri-County Metropolitan Transportation District of Oregon (TriMet). "Restoring Shallow Water Habitat." Portland-Milwaukie Light Rail Transit Project. 2013. Web. September 3, 2015. <<http://trimet.org/pm/abouttheproject/sustainability.htm>>.

Figure References

Figure 1: Kennedy-Wong, Elizabeth. *South Waterfront Greenway Central District*. Digital Image. The City of Portland Oregon. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/article/390800>>.

Figure 2: Kennedy-Wong, Elizabeth. *Slide image 4*. Digital Image. The City of Portland Oregon. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/article/390800>>.

Figure 3: Portland Parks and Recreation Bureau. *Cross sections 5 and 6*. Digital Image. South Waterfront Greenway Development Plan-Phase I Design Component. December 8, 2004. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/article/175890>>.

Figure 4: Forster, Bruce. *Now open for business*. Digital Image. Bike Portland. May 14, 2015. Web. September 3, 2015. <<http://bikeportland.org/2015/05/14/south-waterfront-greenway-open-go-check-143248>>.

Image References

Design Overview: Kennedy-Wong, Elizabeth. *South Waterfront Greenway Central District*. Digital Image. The City of Portland Oregon. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/article/390800>>.

Greenway vegetation walkway: Forster, Bruce. *Now open for business*. Digital Image. Bike Portland. May 14, 2015. Web. September 3, 2015. <<http://bikeportland.org/2015/05/14/south-waterfront-greenway-open-go-check-143248>>.

Planted shallow water: Kennedy-Wong, Elizabeth. *Slide image 4*. Digital Image. The City of Portland Oregon. Web. September 3, 2015. <<https://www.portlandoregon.gov/parks/article/390800>>.

Shallow water habitat cross section: Portland Parks and Recreation Bureau. *Cross sections 5 and 6*.
Digital Image. South Waterfront Greenway Development Plan-Phase I Design Component.
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