



Turning Basin 3 Habitat Restoration Project, Duwamish River, Tukwila, Washington

The Elliott Bay Trustees identified the Turning Basin 3 site as an opportunity to restore habitat at a former industrial property on the Duwamish River. The site was a former marina and repair yard at the upstream boundary of the maintained navigation channel on the Duwamish River. A Quonset hut occupied the upland portion of the site and a steep rip-rap embankment formed the transition to the river. A wooden dock and debris from grounded barges littered the mudflats next to the site.



Before (2004)

The Trustees approved a conceptual design for creating an intertidal marsh at the site that was intended to soften the transition from upland to aquatic areas and provide a source of food for out-migrating juvenile salmon. Ridolfi enhanced the conceptual design by increasing the area of the proposed marsh, removing the grounded barges and designing an anchoring system for large logs and stumps placed at the lower elevations of the marsh to prevent erosion and enhance habitat diversity.



After (2006)

In addition, Ridolfi sampled for lead-based paint and asbestos in the Quonset hut. Asbestos and lead-based paint were discovered and Ridolfi coordinated the permitting, construction, and disposal of regulated materials. Ridolfi also proposed a plan for removing of the grounded barges and designed an anchoring system for large logs and stumps placed at the lower elevations of the marsh as habitat features. These features were also designed to help prevent erosion at the edge of the proposed marsh. Because of limited site access, the dock structure and barge debris were removed using barge-mounted equipment.