
COMMENCEMENT BAY NRDA RESTORATION

Fact Sheet 2

VISION

Working Draft January 2, 1998

The current status of certain habitat components of the Commencement Bay ecosystem is limiting to fish and wildlife populations. For example, it is estimated that approximately 2,100 acres of intertidal mudflat and about 4,000 acres of intertidal emergent marsh were located in the Commencement Bay study area prior to 1877. Less than 2% of these special aquatic sites currently exist in Commencement Bay (U.S. Army Corps of Engineers et al. 1993).

The goals of the trustees are to: (1) Meet statutory objective of restoring, replacing, rehabilitating, or acquiring the equivalent of natural resources and/or their services injured or destroyed as a result of the release of hazardous substances or a discharge of oil; (2) Provide alternatives for those natural resources that will not recover without efforts above and beyond regulatory requirements for source control, sediment cleanup, and habitat restoration (e.g., certain fish and wildlife species, water quality); and (3) Provide a diversity of sustainable habitat types and species within the Commencement Bay ecosystem to enhance fish and wildlife resources.

The Trustees' vision focuses on restoring the various habitat components of the Commencement Bay ecosystem, such as vegetated shallows, mudflats/salt marshes, off-channel sloughs and lagoons, tidal creeks, freshwater marshes, adjacent well-stratified upland buffers, and naturalized creek and river channels and corridors. The vision places emphasis on baywide restoration through an ecosystem or landscape approach rather than creating isolated fragments of habitats. Each element is intended to function in concert with other elements.

Elements of Restoration

1. **Waterways**

Restoring habitat in the waterways will entail creating or enhancing habitats large enough to provide ecological benefits to fish and wildlife. Fringing salt marshes and low gradient mudflats were once extensive in the Bay and provided habitat for bottom dwelling organisms that are important to the food chain, especially for juvenile salmonids and shorebirds. Shorelines inside and peninsulas between several of the waterways offer opportunities for mudflat and salt marsh restoration and/or enhancement.

Creating off-channel sloughs, lagoons, and dendritic channels will also provide important refuge and acclimation areas for outmigrating salmon, and feeding, loafing, and isolated refuge areas for migratory and resident waterfowl and shorebirds. The scarcity of these habitat features is a limiting factor in maintaining or increasing fish and avian populations. Creating viable habitat corridors along the waterways will provide the necessary biological requirements for fish and wildlife utilizing the waterways, the Bay and Puget Sound. Design changes and upgrading existing artificial structures (e.g., pilings, piers, etc.) provides additional opportunities to enhance habitat values for fish and wildlife in the waterways.

2. **Creek and River Systems**

Historically, there were many off-river habitats, such as sloughs, small streams, and connected wetlands, in the Commencement Bay area. These habitats allowed for easier downstream migration of salmon by providing staging areas for acclimation, feeding, and refuge from large predators. They also provided feeding, loafing, and isolated refuge for birds, provided wildlife access to water, and provided overall habitat for a more diverse assemblage of species. Tidal creeks and rivers provided access routes for organisms using salt- and freshwater marshes as nursery and feeding areas. The upper watersheds, including the White and Carbon River, South Prairie Creek, Hylebos Creek, Wapato Creek, and other major tributaries, provided spawning sites, large organic debris input to the ecosystem, travel corridors, forage, nesting, and cover for a wide variety of fish and wildlife species.

Several opportunities exist for creek and river enhancement and connections to the shoreline approaches and waterways of Commencement Bay. In order to reestablish successful salmon runs in these systems and improve overwinter survival, removal of barriers to fish passage, and preservation and enhancement of the watershed are necessary. Upper watershed enhancement activities would include creating well-stratified riparian corridors and buffers, augmenting instream flows to benefit fish movement, creating off-river habitat, and providing spawning gravels. In addition, reconnecting old oxbows and creating other off-river sloughs designed with a variety of habitat features, such as those established at the Gog-le-hi-te wetland, will help provide some of the necessary habitat components currently limiting enhancement efforts for fish and wildlife species in the Commencement Bay watershed.

3. Shoreline Approaches

Shoreline approaches include primarily the shoreline between Dash Point and the Hylebos Waterway and between Point Defiance and the Thea Foss Waterway, and secondarily, Dash Point to Dumas Bay, the south facing shores of Maury and Vashon Island, and from Point Defiance to the railroad tunnel alongside the Tacoma Narrows. These shorelines are narrow intertidal and shallow subtidal margins around a relatively deep urban bay. The nearshore margins are important migratory routes for salmon, waterfowl, and shorebirds and should be protected and enhanced to provide connections between other habitat components. Although existing habitat in these areas is relatively intact, the potential exists for additional enhancement efforts, including creek cleanup activities, establishing nest boxes, reestablishing fringing marsh, planting eel grass, developing kelp beds, and providing deeper water artificial reefs (substrate enhancement) for intertidal spawning. Substrate enhancement for intertidal spawning and artificial reefs would be separate actions to achieve different objectives.

Restoration Implementation

A restoration case manager (RCM) will serve as the point of contact and manage the implementation of restoration projects on behalf of the Trustees. In coordination with the Trustees' technical staff, the RCM will oversee and monitor the implementation of the CB/NRDA Restoration Plan.

The CB/NRDA Trustees hold quarterly public meetings. If you have questions or would like to be on a mailing list to receive notice of opportunities to participate please contact:

Jennifer Young, Restoration Case Manager
NOAA Damage Assessment and Restoration Center NW
7600 Sand Point Way NE 98115
Seattle, WA 98115-0070
phone: (206) 526-4348
fax: (206) 526-6665
e-mail: jennifer.young@noaa.gov

Public notices, meetings, and other restoration planning information will also be announced at <http://www.darcnw.noaa.gov/cb.htm>.

SOURCES: CB/NRDA Final Restoration Plan, 10/97.

U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration. 1993. Commencement Bay Cumulative Impact Study. Volumes 1 (Assessment of Impacts) and 2 (Restoration Options).
