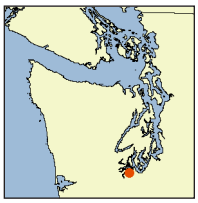

PUGET SOUND NEARSHORE ECOSYSTEM RESTORATION PROJECT (PSNERP)
POTENTIAL RESTORATION SITES

WDNR Budd Inlet Beach

PUGET SOUND NEARSHORE ECOSYSTEM RESTORATION PROJECT

The Washington Department of Natural Resources (WDNR) Marine Lab is located on the site of a former ship maintenance facility on the eastern shore of Budd Inlet. Use of the site is now very limited, with most of the lab activities relocated to other sites. WDNR has expressed interest in restoring more natural conditions to their property. In the 1950s, nearshore fill and armoring as well as a creosote-treated wood pier were added to the site. In the summer of 2012 the pier was removed, but the area of fill and armor remains, covering the upper beach and blocking the movement of sand and gravel along the shoreline. Development of adjacent private property resulted in an armored shoreline and filled a barrier embayment, disconnecting a small stream and the embayment from tidal inundation. The proposed project involves removal of the armoring and fill at both locations and restoration of the upper beach and barrier embayment. Excavation of a tidal channel will allow tidal connectivity to the lagoon. Recreation of the natural beach profile will allow for movement of beach and bluff sediment along the shore.

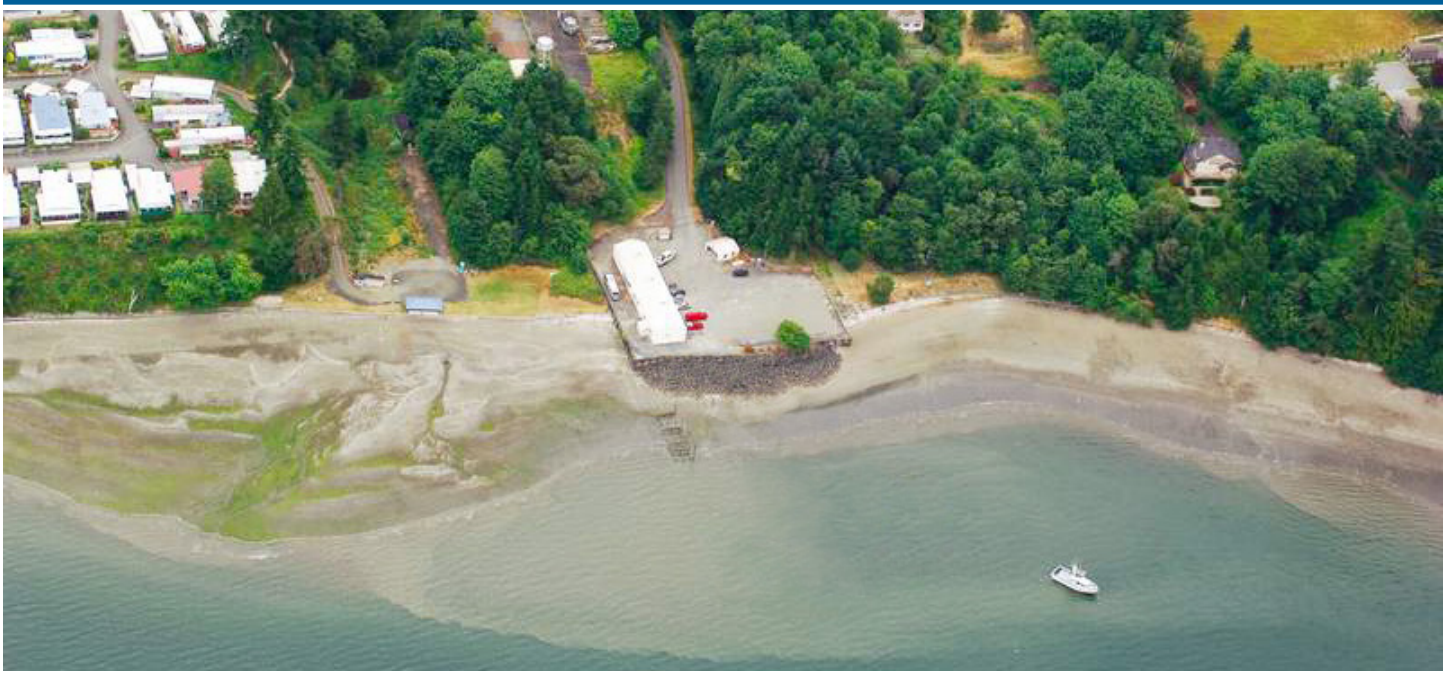

IMAGE: Washington State Department of Ecology (2006); ESA (Adobe Photoshop) (2012)

Processes Restored

- Movement of sand and gravel along shorelines.
- Movement of sand and gravel from bluffs to beaches.
- Natural erosion and accretion of beaches.
- Natural exposure to wind and wave action.
- Unrestricted movement and migration of fish and wildlife.

Conditions Improved

- Restored coastal embayment that provides valuable nursery habitat for threatened species of juvenile salmon such as Chinook, increasing their survival and supporting population recovery in Puget Sound.
- Restored sand and gravel beaches that serve as spawning grounds for forage fish (e.g., surf smelt and Pacific sand lance), which are a key element of the marine food chain.
- Improved connectivity between nearshore and adjacent uplands.
- Increased area, length, and complexity of shoreline.
- Improved resiliency of the shoreline to response to changes in the environment such as rising sea levels and increasing storm events.

Image above depicts major project features. See design report for additional details.

Key Design Elements

The restoration proposal would remove shoreline armoring, buildings, and fill material from the WDNR property. Some of the fill is expected to be contaminated by past land uses and would be properly removed and disposed offsite. The area north of the WDNR facility would be excavated to recreate the historical barrier embayment and stream channel and the shoreline armoring removed. Along both properties, a natural beach profile would be recreated and shoreline native vegetation installed.

Site Summary Statistics

- Area of Restored Process: 2 acres
- Total Project Cost: $9.7 million

For more detailed information regarding this conceptual design, please visit our website at ***www.pugetsoundnearshore.org/cdr.html****.*