



Snow Creek and Salmon Creek Estuary

Salmon and Snow Creeks flow into Discovery Bay, one of the largest and most important commercial shellfish harvesting areas in Washington State. The historic estuary of Salmon and Snow Creeks has been impacted by construction of Highway 101, State Route 20, and a railroad across the estuary. Mill Pond Lagoon and Cherry Tree Pond were created when the railroad grade enclosed a historic spit at the north end of the bay. The restoration aims to restore the connections between Salmon and Snow Creeks and Discovery Bay by elevating Highway 101, removing the old railroad grade from the estuary, reconfiguring tidal channels, and removing fill. These activities will restore tidal flows and the movement of sediment, nutrients, and animals through the site and allow development of larger, longer tidal channels which may benefit fish.



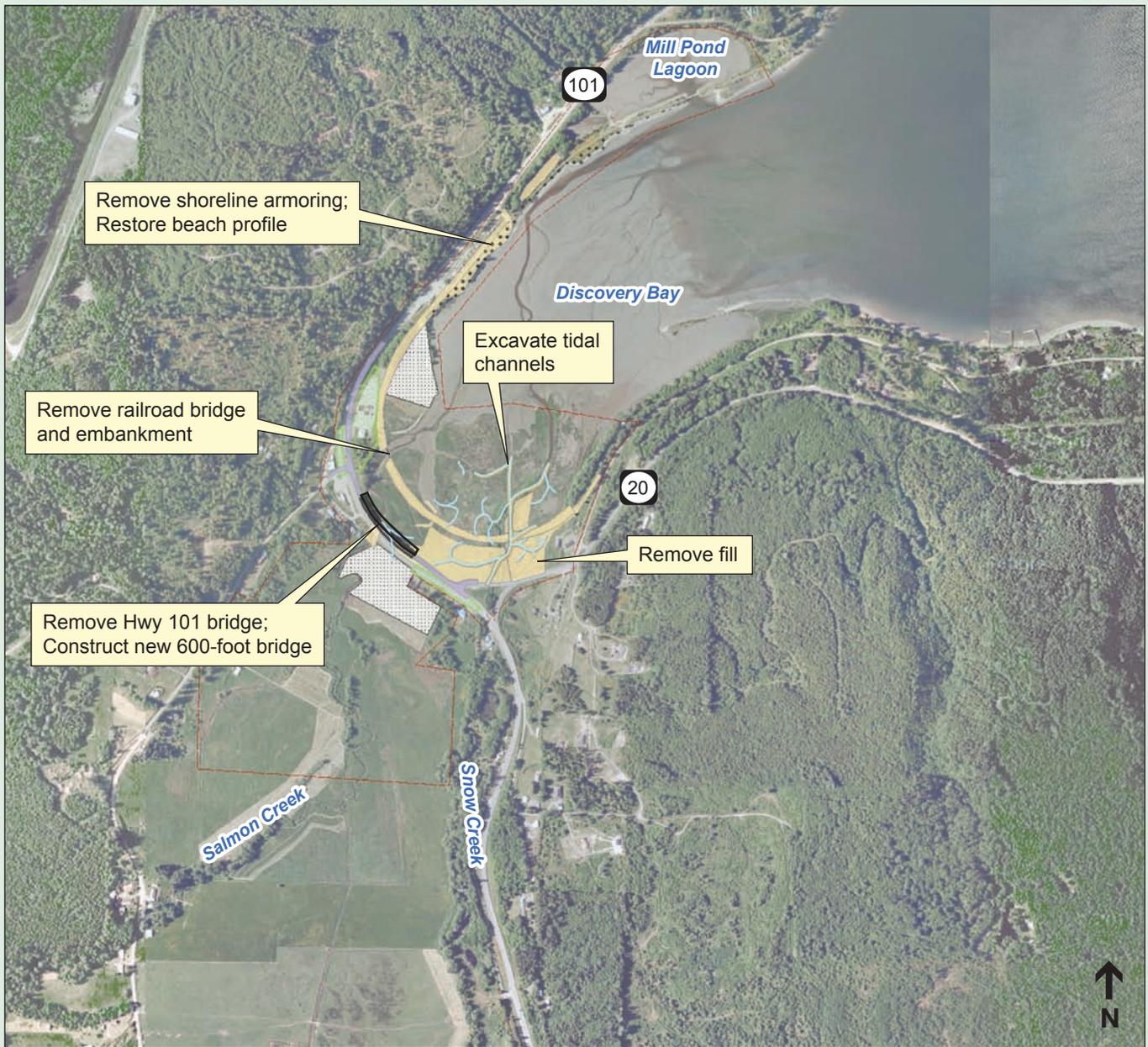
IMAGE: Washington State Department of Ecology (2006)

Processes Restored

- Natural formation of tidal channels in estuaries.
- Unrestricted flow of freshwater rivers and streams into estuaries.
- Unrestricted movement of saltwater through tidal channels in estuaries.
- 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.
- Restored intertidal and shallow subtidal areas that are habitat for recreationally and culturally important shellfish such as oysters, mussels, and clams.
- Improved quality of the water flowing through the estuary.
- Improved public access to the shore and recreational opportunities.



SOURCE: ESA (2011); USDA-NAIP (2006)

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

Key Design Elements

The restoration includes replacement of the Highway 101 bridge with a longer bridge (600-feet) across the estuary. The culvert in the railroad grade at Cherry Tree Pond would be removed and the opening widened. The abandoned railroad embankment will be removed from east of Snow Creek to west of Salmon Creek, removing a major barrier to tidal flows. The restoration would also remove fill from the intertidal zone and excavate new tidal channels. Existing oyster beds would also be protected.

Site Summary Statistics

- Area of Restored Process: 52 acres
- Total Project Cost: \$37.8 million

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