

# a pocket estuary for Puget Sound

**Washington** 



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# Livingston Bay

Nestled within the nurturing arc of Camano Island's eastern shore, Livingston Bay is a quiet inlet branching off of the much larger Port Susan Bay, which in turn is connected to Puget Sound. This place is a quiet haven for wildlife and people alike. Here tides and rivers still mingle along unbroken shores. Ancient fish and clouds of migrating shorebirds and waterfowl still find refuge.

Livingston Bay is home to a pocket estuary – a small sub-estuary that forms behind a spit or barrier within a larger estuary system (such as Port Susan Bay). These special places provide vital habitat for a host of wildlife species, including juvenile Chinook salmon. They are also all too rare today, and even the one in Livingston Bay has been heavily altered and requires restoration.

### An important part of the whole

Restoration of the Livingston Bay pocket estuary builds on – and is supported by – a decade of conservation work in Port Susan Bay. The Washington state Skagit Wildlife Area sits at the top of Port Susan Bay. In 2001, The Nature Conservancy acquired more than 4,100 acres of salt marsh and tidal flats nearby. In 2005, the Whidbey Camano Land Trust permanently protected 3,000 acres of tidelands in and around Livingston Bay. Then the Conservancy purchased 43 acres on Livingston Bay, adding a rare pocket estuary and mature shoreline forest to the mix.

These conservation efforts are part of much broader work to restore Puget Sound. The Sound has lost a great deal of its estuaries, tidal marshes and undeveloped shorelines. Protection and restoration in Livingston Bay and Port Susan Bay means better habitat for wildlife and a healthier Puget Sound for people to enjoy.



### Fast Facts

Size of pocket estuary to be restored: 10 acres

Number of acres protected in the greater Port Susan Bay in the past decade: more than 7,100

Federally listed Species expected to directly benefit from the pocket estuary restoration: Chinook salmon, coho salmon, steelhead trout, Orca whales

### Restoring Livingston Bay

With so much of Livingston Bay – and the larger Port Susan Bay – successfully protected, the next step is targeted restoration that will bring back the most important habitats for struggling wildlife. In Livingston Bay, the third phase of coordinated conservation efforts with partners involves restoring the 10 acre pocket estuary.

These 10 acres have been heavily altered. Natural inlets and outlets have been blocked by a dike. Parts of the shoreline have been armored, breaking the processes by which sediments and nutrients would otherwise move and accumulate over time. The lagoon inside this estuary has become inaccessible to fish.

The Nature Conservancy will undo much of this damage. We will breach the manmade dike so fish can once again swim in and out. We will remove much of the material now acting as an artificial enclosure. We will re-contour what remains to a more natural shape to allow natural water flows to once again reach the lagoon.

### **Benefits**

This project will bring immediate and clear benefits for fish, including the at-risk species Chinook salmon, coho salmon, steelhead trout, and bull trout. Juvenile fish migrating out of the nearby Stillaguamish River will find refuge and food in Livingston Bay.

This restoration project will also greatly benefit waterfowl and shorebirds. Estuaries within north Puget Sound provide migration and wintering habitat for over one million migratory birds. The Port Susan Bay area in particular has been recognized as vital for the survival and recovery of these birds.

Ultimately, the Livingston Bay pocket estuary will function naturally once again. Daily tides will flow in and out. Juvenile fish will be able to access protected waters. Native marshes will grow back. Birds will float on its lagoon and patrol its shores. And the system will benefit from its connection to a mature forest along the coastline and to vast, protected tidal flats. All the species that depend on these environments will once again flourish in this part of Port Susan Bay.



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The National Partnership between the NOAA Community-based Restoration Program and The Nature Conservancy implements innovative conservation activities that benefit marine, estuarine and riparian habitats across the United States. The NOAA Restoration Center has worked with community organizations to support locally-driven projects that provide strong on-the-ground habitat restoration components that offer educational and social benefits for people and their communities, as well as long-term ecological benefits.



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### Working Together

Many partners have been working for years to protect and restore the Stillaguamish River and Port Susan and Livingston bays:

- The Nature Conservancy
- Whidbey Camano Land Trust
- U.S. Fish and Wildlife Service
- National Oceanographic and Atmospheric Institute
- Washington Department of Fish and Wildlife
- Washington State Salmon Recovery Funding Board
- Washington State University Beach Watchers
- Island County
- Skagit Audubon
- The Stillaguamish Tribe
- Local residents and volunteers

Partnerships like these can solve our greatest conservation challenges and create a Puget Sound where nature once again thrives and enriches lives.

## For more information, please contact:

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The Nature Conservancy works with partners and local communities to conserve the lands and waters on which all life depends.