Telegraph Slough

Telegraph Slough is located in a diked area between Swinomish Channel and Padilla Bay. Major regional road and railway transportation and utility infrastructure bisects the site in an east and west direction. Tidal influence, blocked by State Route 20 and adjacent BNSF railroad, is limited to a small historical slough remnant north of the highway. South of this highway, Telegraph Slough and three other distributary channels are cutoff from Swinomish Channel and Padilla Bay. A series of tide gates drain the Slough’s south portion to the Swinomish Channel. Most of the land outside public road rights-of-way is privately owned and in agricultural use or largely abandoned. Levees turned the area into a freshwater marsh dominated by invasive species in the south and limited salt marsh and mudflat area north of State Route 20. This project aims to restore tidal hydrology and channel-forming processes to historic distributary slough channels connecting Swinomish Channel to Padilla Bay, restore tidal hydrology to diked farmland that was historically estuarine marsh, and increase freshwater inputs to Padilla Bay by constructing bridges at causeway crossings, removing levees and creating and reconnecting channels.

Ecosystem Restoration Benefits

- Restore large river delta that provides valuable nursery habitat for juvenile threatened salmon species, increasing survival and supporting Puget Sound population recovery
- Restore sand and gravel beaches that serve as spawning grounds for forage fish, such as surf smelt and Pacific sand lance, key elements of the marine food chain
- Re-establish intertidal and shallow subtidal areas to encourage kelp and eelgrass growth, increasing nearshore productivity for fish, birds and other marine species

Significance

- Opens another fish pathway into Padilla Bay, a National Estuarine Research Reserve with the largest existing Puget Sound eelgrass meadow
- Provides restoration beneficial to fish and wildlife using the North Fork Skagit River, where opportunities are limited
- Included in the Puget Sound Chinook Salmon Federal Recovery Plan
- Increases juvenile salmon rearing habitat
- More than doubles existing nearshore shoreline habitat available
Key Design Elements
The restoration removes most of the levees along Telegraph Slough, Padilla Bay and eastern Swinomish Channel. Levee removal requires raising the railroad and State Route 20 between Swinomish Channel to Telegraph Slough to keep them above the inundation and wave action limits. The railroad and State Route 20 will cross the Slough on elevated long-span bridges. A new levee along east and south Telegraph Slough will contain flood flows and extreme tides. Levee removal restores about 832 acres of former salt marsh to tidal influence.

Site Summary Statistics
- Area of Restored Process: 832 acres
- Total Project Cost: $279.7 million