

Natural Resources

Snohomish River Estuary Qwuloolt Restoration Project

RIVER AND TIDES

The Snohomish River watershed drains 1,980 square miles of the western Cascades and deposits rich, silty sediments and nutrients in the lowlands of the estuary delta. These sediments and the eroding power of the river help form the estuary marshes, forested islands, sloughs, mudflats, and connecting channels. Tides also influence the Qwuloolt twice daily.

Today, like most of the historic estuary, the Qwuloolt Marsh is cutoff by dikes and levees from the natural influences of the river and tides, drained by ditches instead of stream channels, and stripped of its native vegetation.

This project will return the historic and natural influences of the river and tides to the Qwuloolt in order to restore the tidal marsh that benefit many plants and animals.

MARSH VEGETATION

The height of the tides and the balance of salt and fresh water determine the composition and diversity of plants and habitats found in the estuary.

Mudflats, tidal marsh, stream channels, and upland riparian forest habitats are expected to reestablish at the Qwuloolt once river and tidal connection is restored. Lyngby's sedge, hard stem bulrush, and cattail will be some of the dominant marsh species to establish first, while upland riparian areas will be planted with Sitka spruce, rose, fir, and pine to accelerate natural recovery.

SALMON

One of the most important functions of the estuary is providing spawning, rearing, and feeding areas for many fish and wildlife including salmon. Salmon species utilize the estuary twice, as adults and juveniles, when they migrate between the river basin and marine waters of Puget Sound.

The estuary continues to support a large commercial and recreational salmon fishery. Multiple stocks of anadromous fish include four Pacific salmon (Chinook, coho, chum and pink; anadromous and resident trout (cutthroat, steelhead/rainbow); and anadromous and resident char (Dolly Varden, bull trout, and brook trout. Chinook and bull trout are listed as threatened species under the Endangered Species Act. All stocks are at risk because of historic losses of estuary habitat and continued environmental degradation. Restoration of the Snohomish estuary is a high priority for salmon recovery in the region.

BIRDS AND WILDLIFE

The mosaic of marsh habitats within the estuary provides a wide range of foraging, nesting, and roosting habitats for over 350 species of migratory and resident birds including: Canada geese, brant, green-winged teal, wood ducks, redheads, tundra and trumpeter swans, great-blue herons, arctic terns, Bonaparte's gulls, ring-billed and mew gulls, red-tailed hawks, kingfishers, bald eagles, osprey and great-horned owls.

The estuary and Qwuloolt Marsh also support diverse populations of mammals including seals, beaver, otter, muskrat, mink, raccoon, deer, coyote, and porcupine.



TIDAL MARSH



BULRUSH

*Qwuloolt means
"Great Marsh" in the
lushootseed language
of the Tulalip People.*



CATTAIL



SALMON



ADOLESCENT
GREAT-BLUE HERON

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