



North Fork Skagit River Delta

Since the 1860s, extensive diking of the North Fork Skagit River has caused a substantial loss of estuarine habitat. The tidal channels and wetlands of the estuary provide a critical transition zone for juvenile salmonids as they migrate downstream from freshwater habitats to the salt water of Puget Sound. The proposed restoration would set back flood protection levees on a section of the North Fork to expand the river's floodplain and tidal connections. The existing levees would be altered to allow water to enter the newly restored floodplain. Forested floodplain habitat would be created along the altered levee adjacent to the river channel. This restoration action offers a rare opportunity to restore freshwater tidal wetlands, a nearshore ecosystem that has experienced significant losses in Puget Sound.



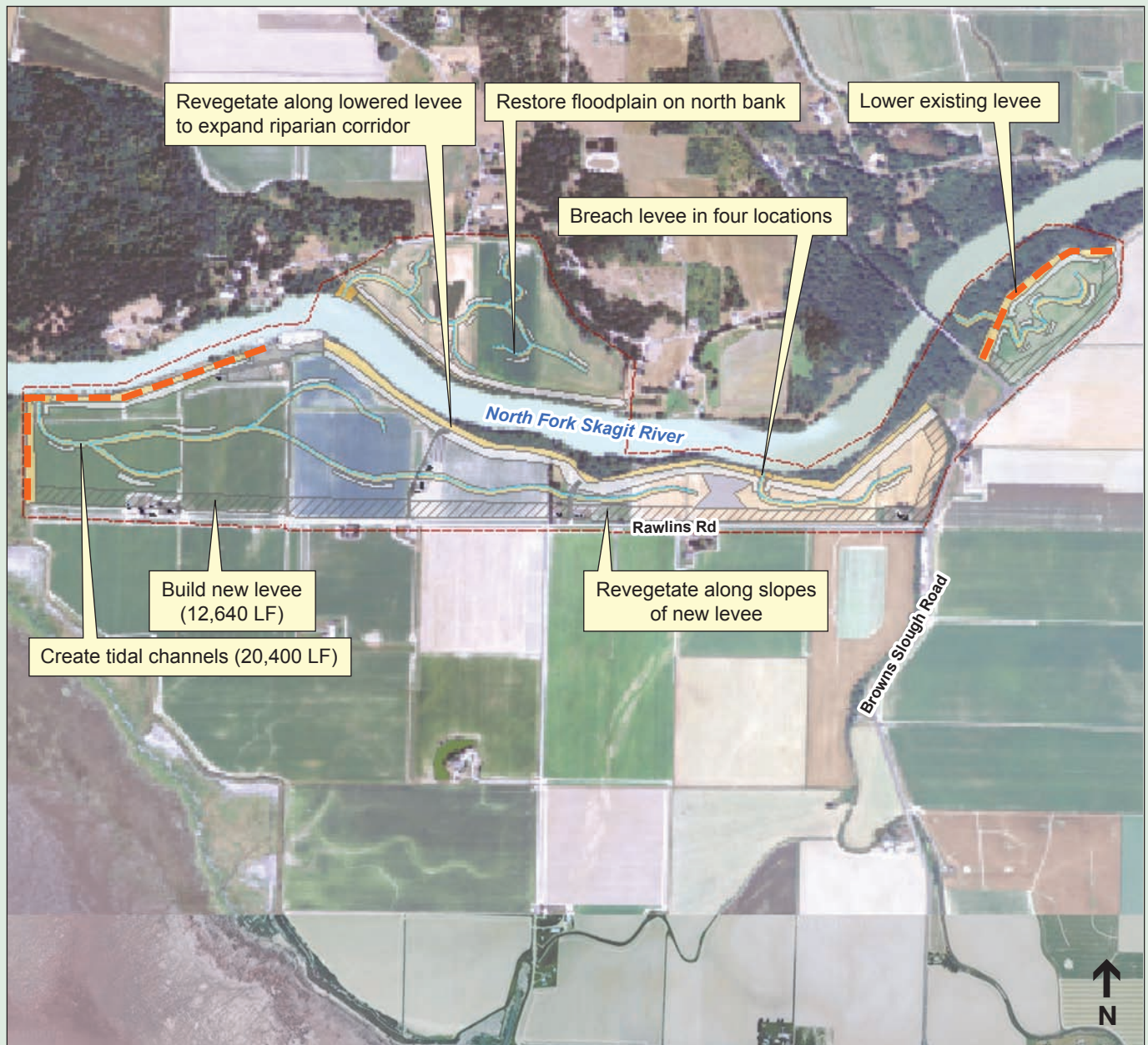
IMAGE: Washington State Department of Ecology (2006)

Processes Restored

- Natural formation of tidal channels in estuaries.
- Unrestricted movement of saltwater through tidal channels in estuaries.
- Accumulation and retention of organic material from plants and aquatic animals.
- Unrestricted movement and migration of fish and wildlife.

Conditions Improved

- Restored tidal freshwater wetlands, which are highly productive habitats that support biodiversity and provide connectivity between the land and sea.
- Restored large river delta that provides valuable nursery habitat for threatened species of juvenile salmon such as Chinook, increasing their survival and supporting population recovery in Puget Sound.
- Re-established historic tidal flat habitats that are important foraging and resting areas for large flocks of shorebirds, such as Dunlin, as well as other marine birds like Great Blue Heron.
- Improved connectivity between nearshore and adjacent uplands.
- Improved quality of the water flowing through the estuary.



SOURCE: ESA (2011); (20)

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

Key Design Elements

The restoration proposal would lower 13,000 LF of existing levee along the south bank of the North Fork Skagit River. A new flood protection dike would be constructed along Rawlins Road and several structures removed. Along the north bank, 3,140 LF of levee would be lowered. Existing topography would provide flood protection without the need for a new setback levee in this location. Breaches in the lowered levees would allow for water to access the newly restored floodplain and tidal channels will be excavated in the new floodplain. The lowered dikes would be revegetated to restore a natural riparian corridor along the river.

Site Summary Statistics

- Area of Restored Process: 256 acres
- Total Project Cost: \$64.4 million

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