

Lower Stillaguamish



Groups to Engage

Sustainable Lands Strategy, Stillaguamish Technical Advisory Committee, Snohomish Agricultural Advisory Board, Snohomish-Stillaguamish Lead Integrating Organization, Stillaguamish Flood Control District

Characteristics

- West Stanwood, Florence Island, and Areas near Miller Road are below high tide elevations. Stanwood is vulnerable to flooding from Skagit and Stillaguamish rivers, and tides.
- Lower Stillaguamish floodplain farmlands are very productive and frequently moist without irrigation, with high value seed crop, dairy feed, and vegetable production.
- Increasing peak flows appear to be driven by a climate trend over time (Hall et al 2014). (Would improved conveyance within reach, or storage upstream support flood control?)
- Without regulation the number of homes in the mainstem floodplain could triple based on zoning alone (Turner et al 2004).
- This lower reach of the river is critical rearing habitat for out-migrating salmon. Flood control activities since the 1930s has resulted in a loss of approximately 1/3rd of mainstem channel area (Collins).
- Temperatures in the mainstem river exceed 72 degrees or close to lethal temperatures for juvenile salmon. With restoration the river should run around 64 degrees with around half that gain from system-wide riparian shading (Pelletier & Bilhimer 2004)

Flood Reduction Goals (Turner et al 2004)	• Protection of the City of Stanwood and its WWTP (built below sea level) • Reduce risk to people and damage to infrastructure and residences • Minimize natural resource impacts of flood defenses • Reduce cost of maintaining flood defenses • Allow natural floodplain processes
Salmon Recovery Goals (SIRC 2005)	• Restore tidal flooding and freshwater flows to estuary • Restore floodplain area to channel migration and flooding and restore riparian forests • Protect existing unarmored and forested shorelines • Restore side channel and shallow water rearing habitats particularly associated with cold water refugia • Cool river temperatures and ensure sufficient flows in summer • Reduce nutrient loading to river and Puget Sound
Agriculture Goals	• Maintain ability to drain fields in spring • Maintain land base and viability of farming businesses • Distribute irrigation water (and rights) among farmers in dry years • Distribute dairy nutrients easily across landscape • Reduce regulatory burdens for farming operations and maintenance • Ensure continued harvest of shellfish in Port Susan
Projects	• Leque Island restoration (PSAR/NOAA) • Zis a ba restoration • Stanwood stormwater upgrade (FbD 17-19) • Stanwood floodplain preservation (FbD 17-19) • Increase flood conveyance through Irvine Slough (Werner et al 2004) • DD7 diking and drainage upgrade (FbD 17-19) • Anaerobic digester and floodplain infrastructure (FbD 17-19) • South slough reconnection (FbD 17-19) • Elingson Property (failed attempt to use NRCS easements in combination with Conservation Futures due to federal complexity) • Relocate fire stations in flood zone (done?) • Portage Creek Wildlife Reserve Restoration and Flood Hazard Reduction (Werner et al 2004). • Joergenson Slough (Church Creek) Restoration and Flood Hazard Reduction (Werner et al 2004). • Purchase of Development Rights (Lower Stillaguamish Heritage Project)