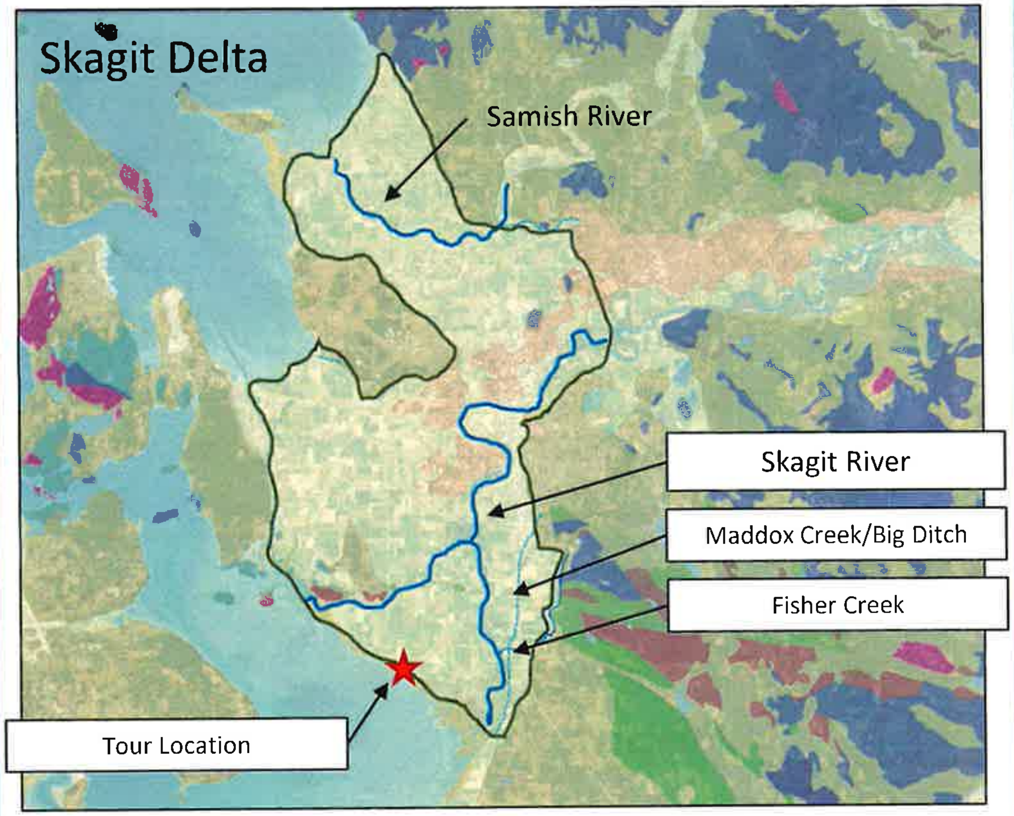
Skagit Delta - Overview

❖ River deltas are landforms created by the deposition of sediment at a river mouth when it enters the ocean
❖ The Skagit delta was formed over thousands of years by a combination of riverine processes and episodic volcanic lahars.
❖ Deltas are fundamentally different from streams and valleys
❖ There is only one freshwater tributary to the Skagit River in the historic delta: Fisher Creek



[Washington Geologic Information Portal]

Contact. Jenna Friebel
Skagit Drainage and Irrigation Districts Consortium LLC
jfriebel@skagitdidc.org

Skagit Delta Farmland

Most agriculturally productive farmland worldwide

❖ 89,000 acres of globally significant soil
❖ Resilient Maritime Climate
❖ Major worldwide producer of vegetable seeds
  - Unique combination of maritime climate and soils
❖ Complex system of crop rotation
  - Some seeds require 20-year crop rotations
  - Rotation is critical to maintaining viability of specialty crops
❖ Under unique development pressures due to location on 1-5

Produces more than 80 specialty crops

- shellfish, honey, fresh vegetables, potatoes, bulbs, seeds, berries
- Highest number of organic farmers in Puget Sound
- Provides local, diverse and high quality food to the Emerald Corridor
- Center for the Pacific Northwest's local food movement
- One of two remaining ag-economies in Puget Sound

Skagit Sub-Tidal Drainage 101

Key concepts:

1) Water in the interior watercourses is not connected to the Skagit River

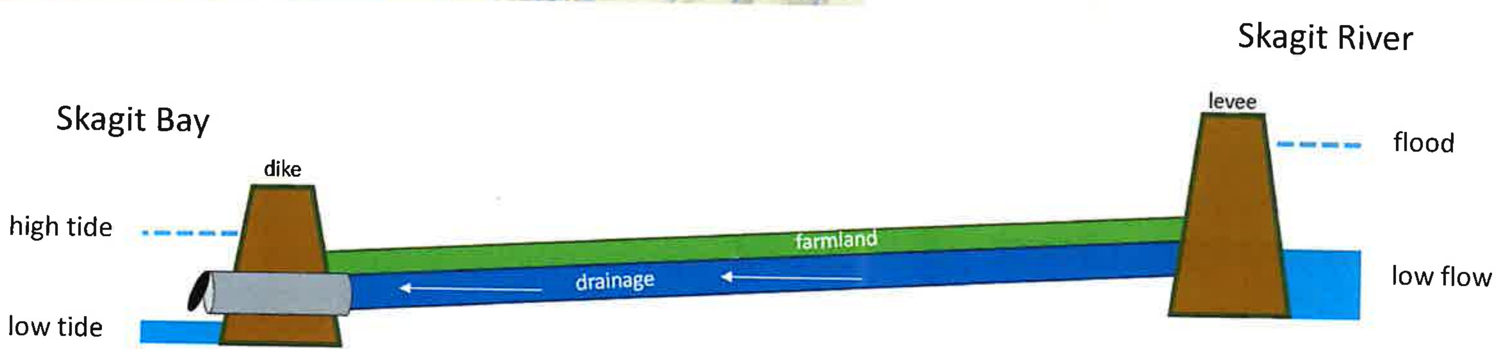
2) Interior ditches drain to saltwater at low tide via tidegates and/or via pump station

3) Agricultural land is low and flat

4) Watercourses are a combination of artificial channels and historic, remnant, blind tidal channels.

5) Watercourses are routinely maintained by special purpose diking and drainage districts

6) If ditches are allowed to fill in with sediment and/or vegetation, agricultural land within the entire drainage area is negatively impacted



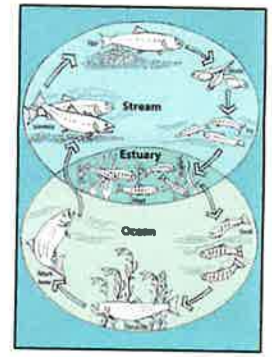
Drainage Systems are Critical

- 60,000 acres of prime farmland rely on diking and drainage infrastructure to be viable
    - Skagit Diking and Drainage Districts were formed in the late 1800s under RCW 85
    - Districts own and operate appx. 650 miles of watercourses
    - Water drained from the agricultural land drains to salt water, not the Skagit River
    - Drainage systems are extremely low gradient (drain at low tide via tidegates)
- Diking and drainage systems in the Skagit delta are highly integrated
    - if one elements fails the entire system fails, this is why we have drainage districts
- Drainage systems require frequent maintenance to stay functional
    - Buffers impact the ability of drainage districts to maintain these critical drainage systems, which has far reaching impacts to agricultural land

Maddox Creek/Big Ditch is a low gradient watercourse within the ag zone and is maintained by Drainage District 17. Headwaters include industrial land in Mount Vernon. This watercourse is located between I-5 and frontage road for several miles and flows to salt water. This reach is listed as temperature and DO impaired – but this is not an "ag-landowner problem" – but if the drainage is not maintained, agricultural lands are impaired.

We need a local-led integrated plan, common understanding of resources, and balanced set of goals

- 2005 Skagit Chinook Recovery Plan (SCRP) focuses on estuary habitat restoration – not freshwater habitat and not linear amount of trees planted
- Estuary restoration projects are large scale diking and drainage infrastructure relocation projects
  - They are significantly more complex than riparian plantings
  - They require strong partnerships among multiple stakeholders to implement.
- A combination of salmon recovery funding, CREP, and VSP are working well to plant buffers in freshwater stream systems located outside the Skagit delta.



Riparian plantings would impact Skagit delta farming far beyond the footprint of the vegetation

- Impacts drainage far beyond the planting project site
- Shade and soil moisture problems
- Reduces wind – leads to pests / weeds – additional problems particularly for organic farmers

2011. Fisher Slough Restoration Project.
The Nature Conservancy worked with Districts 3 and 17 to implement this project. 60 acres of private farmland converted to tidally influenced wetlands. Identified in the SCRP. Required relocation of diking and drainage infrastructure and strong partnerships. Does not target riparian planting.