

# South Skagit Bay Water Quality Assessment Update

September, 2018

Department of Ecology (Ecology) and the Washington State Department of Health Shellfish Division identified South Skagit Bay as a priority area for outreach and technical assistance to improve water quality. To help the local community identify where and how to reduce bacteria levels, Ecology started sampling surface waters in the Big Ditch / Maddox Slough drainage. This area discharges to South Skagit Bay and has not had extensive monitoring in the past.



Figure 1. Mouth of Big Ditch

## Currently

We have enjoyed learning more about the Big Ditch-Maddox Slough Watershed over the past few months. In addition to sampling, Ecology water quality specialists conducted a summer windshield survey in the Big Ditch-Maddox Slough watershed. We observed many well-managed pastures with livestock and identified a few conditions that could become problematic during the wet season. A follow-up survey will be conducted at the onset of the rainy season to reassess sites of concern for potential runoff, timing of removal from high risk pastures, and appropriate management and storage of manure.

Ecology has also been working with the city of Mount Vernon and Skagit County Health investigating high bacteria numbers south of East Blackburn Road. Ecology has also been accompanying the Washington State Department of Health in marine sampling.

Just south of Big Ditch, Snohomish County measured high bacteria counts in Douglas Creek downstream from a local meat packing facility. Ecology is working with Snohomish County to monitor and fix the source of bacteria to Douglas Creek.

## Upcoming

What's next? Ecology started monthly sampling in the Big Ditch / Maddox Slough drainage in March of 2018 and will continue to do monthly sampling in this drainage through February of 2019. Additionally, our field staff will continue visual surveys from public roads seasonally to look for obvious changes in the watershed during the rainy season. We will also have another

meeting with our core stakeholders towards the end of our Big Ditch / Maddox Slough assessment to discuss findings and recommendations.

You can follow along with us on our webpage, and view our water quality data on the [WSDA Water Quality Interactive Map](#) to see exactly what we are seeing with our sampling program.

### Data

- Highest result: 3,500cfu/100mL @ SSB.Sno.01 (286<sup>th</sup> st NW, Stanwood) on July 23<sup>rd</sup>, 2018.
- Top 3 sites; highest geomean (average):
  - SSB.Sno.01 = 345cfu/100mL
  - SSB.Sno.04 = 244 cfu/100mL
  - SS.Ska.09 = 198 cfu/100mL

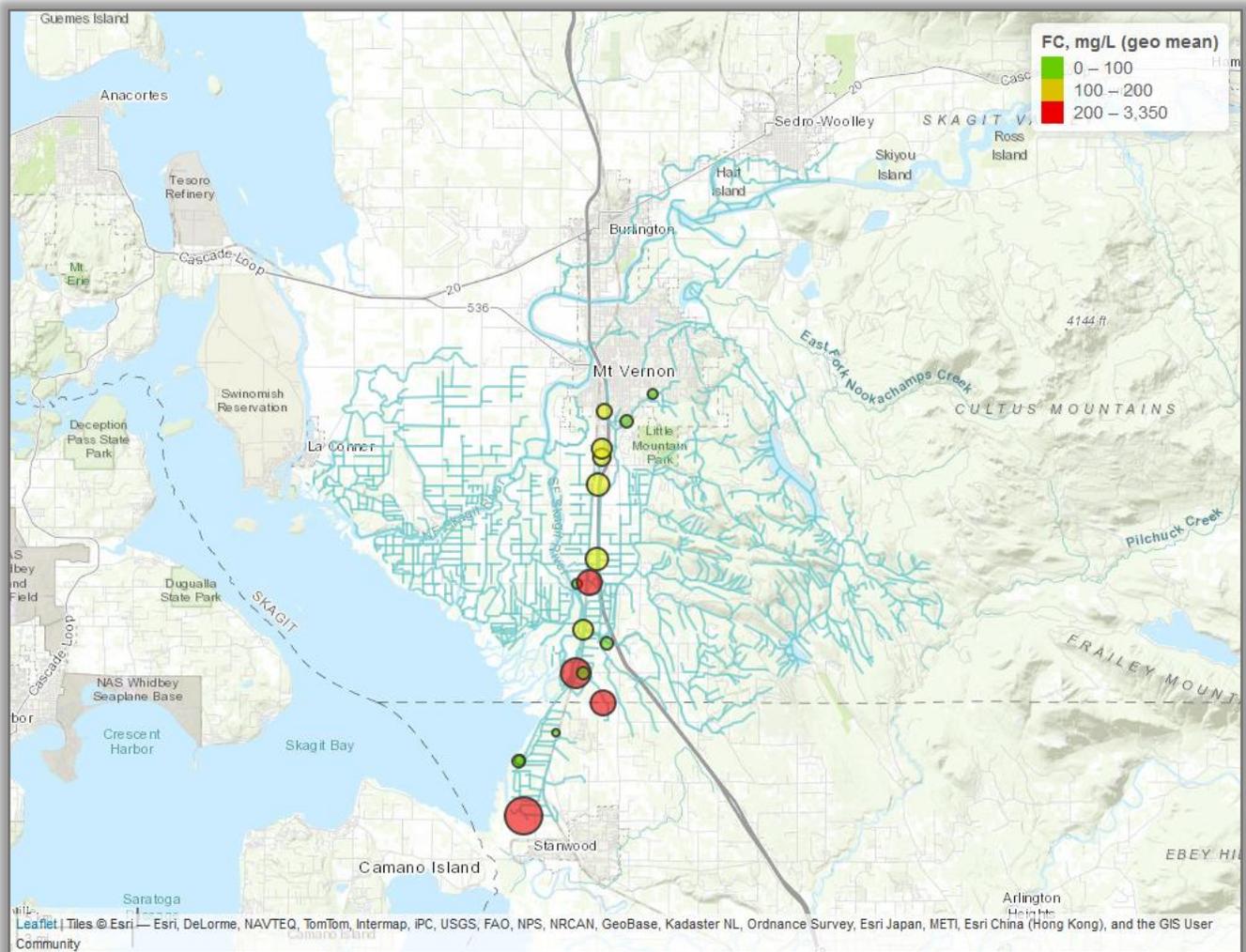


Figure 2. Map of sampling results