

# Port Susan

## Annual Shellfish Growing Area Review



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Area: Port Susan

Year Ending: December 31, 2021

Classification: Approved, Prohibited

### Activities in the Growing Area in 2021

The Port Susan Growing Area was sampled six times in accordance with National Shellfish Sanitation Program (NSSP) Systematic Random Sampling criteria. A routine shoreline survey was conducted, and no Direct or Indirect Impacts were identified. An evaluation of the Warm Beach WWTP was conducted in August and no changes to the existing shellfish closure zone were recommended. In November 2021, 183 acres were reclassified from Approved to Prohibited due to Station 295 failing the NSSP standard for an Approved classification.

Snohomish County and local partners continued working in the Stillaguamish River watershed using National Estuary Program grant funds for on-site septic system operations and maintenance incentives and pollution identification and control projects.

### Analytical Results of Water Samples

Table 1 summarizes results of the 30 most recent samples collected from each of the sampling stations. Station 411 has 29 samples. Station 335 fails the NSSP Approved standard with an estimated 90<sup>th</sup> percentile of 51.4 FC/100mL. Stations 290 and 292 are in Threatened status with estimated 90<sup>th</sup> percentiles of 40.5 FC/100mL and 37.3 FC/100mL, respectively. Stations 293, 294, and 296 are in Concerned status. Table 2 includes individual sample results for stations 290, 292, and 335.

### Change in Actual Pollution Sources that Impact the Growing Area

We currently have no information indicating the area has any new sources of pollution.

### Classification Status

- Well within the classification standards
- Meets standards, but some concerns
- Meets standards, but threatened with downgrade in classification
- Fails to meet current classification standards

### Remarks and Recommendations

Table 1 shows that Station 335 fails the NSSP water quality standard for an Approved classification. The Department should evaluate the classification of this station.

The Department should continue to work with Snohomish County and others to identify and correct sources of pollution in the Stillaguamish River watershed.

**TABLE 1. Summary of Marine Water Data (SRS) for the Port Susan Growing Area**

Sampling Event Type: Regulatory

Maximum Number of Samples: 30

Tides Included: All

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90 <sup>th</sup> Percentile (FC/100mL)	Meets Standard
290	Approved	12/7/2015 - 12/7/2021	1.7 - 540.0	6.5	40.5	Y
292	Approved	7/7/2016 - 12/7/2021	1.7 - 140.0	6.0	37.3	Y
293	Approved	1/19/2016 - 12/7/2021	1.7 - 130.0	4.9	23.9	Y
294	Approved	12/7/2015 - 12/7/2021	1.7 - 170.0	4.1	21.2	Y
296	Approved	1/19/2016 - 12/7/2021	1.7 - 79.0	5.3	27.0	Y
335	Approved	5/17/2016 - 12/7/2021	1.7 - 350.0	7.9	51.4	N
344	Approved	6/15/2017 - 12/7/2021	1.7 - 79.0	3.9	16.4	Y
345	Approved	6/15/2017 - 12/7/2021	1.7 - 70.0	3.1	11.0	Y
346	Approved	6/15/2017 - 12/7/2021	1.7 - 70.0	3.3	12.6	Y
291	Prohibited	7/7/2016 - 9/28/2021	1.7 - 240.0	7.0	59.1	N
295	Prohibited	7/7/2016 - 12/7/2021	1.7 - 350.0	10.7	115.6	N
297	Prohibited	9/8/2016 - 12/7/2021	1.7 - 350.0	9.6	99.9	N
298	Prohibited	7/7/2016 - 12/7/2021	1.7 - 130.0	5.9	34.5	Y
299	Prohibited	7/7/2016 - 9/28/2021	1.7 - 170.0	7.1	47.8	N
357	Unclassified	5/17/2016 - 12/7/2021	1.7 - 130.0	3.4	15.2	Y
411	Unclassified	7/7/2016 - 9/28/2021	1.7 - 70.0	4.2	20.5	*N/A

The standard for approved shellfish growing waters is fecal coliform geometric mean not greater than 14 organisms/ 100 mL with an estimated 90th percentile not greater than 43 organisms/ 100 mL. The above table shows bacteriological results in relation to program standards.

\*N/A – SRS criteria require a minimum of 30 samples from each station.

**TABLE 2. Marine Water Quality Summary for the Threatened and Failing Stations in Port Susan Growing Area**

Station: 335

Classification: Approved

Method: SRS

<b>Total Samples: 30</b> <b>Range (FC/100 mL): 1.7 – 350.0</b> <b>GeoMean (FC/100 mL): 7.9</b>				<b>Date Range: 05/17/2016 – 12/07/2021</b> <b>E90th (FC/100 mL): 51.4</b> <b>Meets Standard: N</b>		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
05/17/2016	Regulatory	13:38	Flood	20	10	4.5
07/07/2016	Regulatory	07:39	Ebb	15	26	33.0
09/08/2016	Regulatory	11:26	Ebb	17	24	4.5
11/07/2016	Regulatory		Ebb			49.0
12/05/2016	Regulatory	09:55	Ebb	5	4	7.8
08/15/2017	Regulatory	10:58	Flood	18	24	14.0
10/12/2017	Regulatory	11:57	Flood	12	27	1.7
12/13/2017	Regulatory	11:37	Flood	5	18	4.5
02/08/2018	Regulatory	11:40	Ebb	7	0	4.5
08/15/2018	Regulatory	08:20	Flood	17	28	21.0
10/15/2018	Regulatory	10:37	Flood	12	28	2.0
12/12/2018	Regulatory	10:01	Ebb	5	0	23.0
02/28/2019	Regulatory	10:45	Flood	6	21	1.7
06/06/2019	Regulatory	06:56	Flood	14	21	17.0
07/08/2019	Regulatory	10:14	Ebb	17	26	1.7
09/04/2019	Regulatory	09:57	Flood	17	31	1.7
10/23/2019	Regulatory	12:09	Flood	10	1	170.0
11/04/2019	Regulatory	10:48	Flood	9	21	2.0
12/04/2019	Regulatory	11:12	Flood	9	20	1.7
01/09/2020	Regulatory	12:53	Flood	5	0	1.7
03/04/2020	Regulatory	11:05	Flood	6	0	2.0
08/24/2020	Regulatory	09:53	Flood	17	21	33.0
10/21/2020	Regulatory	10:21	Flood	10	7	70.0
12/08/2020	Regulatory	13:20	Ebb	8	5	11.0
01/20/2021	Regulatory	10:58	Ebb	5	2	7.8
02/08/2021	Regulatory	12:58	Flood	6	0	2.0
03/23/2021	Regulatory	11:47	Flood	9	3	7.8
08/26/2021	Regulatory	08:27	Flood	18	26	4.5
09/28/2021	Regulatory	12:20	Flood	13	4	350.0
12/07/2021	Regulatory	09:58	Ebb	6	4	7.8

**TABLE 2 Continued**

Station: 290

Classification: Approved

Method: SRS

<b>Total Samples: 30</b> <b>Range (FC/100 mL): 1.7 – 540.0</b> <b>GeoMean (FC/100 mL): 6.5</b>				<b>Date Range: 12/07/2015 – 12/07/2021</b> <b>E90th (FC/100 mL): 40.5</b> <b>Meets Standard: Y</b>		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
12/07/2015	Regulatory	10:15	Flood	8	14	4.5
01/19/2016	Regulatory	14:18	Ebb	6	2	7.8
03/15/2016	Regulatory	11:37	Ebb	7	1	26.0
07/07/2016	Regulatory	07:36	Ebb	15	26	2.0
09/08/2016	Regulatory	11:22	Flood	17	25	1.7
11/07/2016	Regulatory	12:26	Ebb	10	1	23.0
12/05/2016	Regulatory	09:31	Flood	6	2	4.5
10/12/2017	Regulatory	11:48	Flood	12	27	1.7
12/13/2017	Regulatory	11:48	Flood	5	17	32.0
02/08/2018	Regulatory	12:16	Ebb	7	0	9.3
08/15/2018	Regulatory	08:15	Flood	17	26	11.0
09/17/2018	Regulatory	12:02	Flood	15	4	33.0
02/28/2019	Regulatory	10:38	Flood	6	26	2.0
06/06/2019	Regulatory	06:50	Flood	15	23	79.0
07/08/2019	Regulatory	10:09	Ebb	16	26	1.7
09/04/2019	Regulatory	09:53	Flood	16	31	1.7
10/23/2019	Regulatory	11:58	Flood	10	0	33.0
11/04/2019	Regulatory	10:45	Flood	9	20	1.7
12/04/2019	Regulatory	11:46	Flood	9	20	1.7
01/09/2020	Regulatory	12:58	Flood	5	0	4.5
03/04/2020	Regulatory	11:01	Flood	6	0	2.0
08/24/2020	Regulatory	09:49	Flood	16	26	14.0
10/21/2020	Regulatory	10:16	Flood	12	15	14.0
12/08/2020	Regulatory	13:24	Ebb	8	8	4.5
01/20/2021	Regulatory	10:52	Ebb	6	9	1.7
02/08/2021	Regulatory	13:08	Flood	6	1	7.8
03/23/2021	Regulatory	11:54	Flood	7	14	2.0
08/26/2021	Regulatory	08:34	Flood	18	29	1.7
09/28/2021	Regulatory	12:24	Flood	13	2	540.0
12/07/2021	Regulatory	09:52	Ebb	5	1	4.5

**TABLE 2 Continued**

Station: 292

Classification: Approved

Method: SRS

<b>Total Samples: 30</b> <b>Range (FC/100 mL): 1.7 – 140.0</b> <b>GeoMean (FC/100 mL): 6.0</b>				<b>Date Range: 07/07/2016 – 12/07/2021</b> <b>E90th (FC/100 mL): 37.3</b> <b>Meets Standard: Y</b>		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
07/07/2016	Regulatory	07:46	Ebb	15	26	1.7
09/08/2016	Regulatory	11:37	Ebb	17	25	1.8
11/07/2016	Regulatory	13:10	Ebb	10	1	33.0
12/05/2016	Regulatory	10:40	Ebb	6	5	33.0
08/15/2017	Regulatory	11:26	Flood	17	26	1.7
10/12/2017	Regulatory	12:39	Ebb	12	27	1.7
12/13/2017	Regulatory	12:08	Flood	4	13	140.0
02/08/2018	Regulatory	11:10	Flood	7	0	7.8
08/15/2018	Regulatory	08:44	Flood	16	28	1.7
09/17/2018	Regulatory	12:25	Flood	16	10	22.0
10/15/2018	Regulatory	11:08	Flood	12	29	1.7
12/12/2018	Regulatory	10:13	Ebb	6	3	79.0
02/28/2019	Regulatory	11:18	Flood	6	24	1.7
06/06/2019	Regulatory	07:21	Ebb	14	25	4.5
07/08/2019	Regulatory	10:53	Ebb	18	25	1.7
09/04/2019	Regulatory	10:06	Flood	15	31	1.7
10/23/2019	Regulatory	12:28	Flood	11	1	70.0
11/04/2019	Regulatory	10:59	Flood	9	22	2.0
12/04/2019	Regulatory	11:04	Flood	9	20	1.7
01/09/2020	Regulatory	12:40	Flood	5	1	4.5
03/04/2020	Regulatory	11:24	Flood	6	2	13.0
08/24/2020	Regulatory	10:12	Flood	16	29	2.0
10/21/2020	Regulatory	10:36	Ebb	12	21	6.8
12/08/2020	Regulatory	13:01	Ebb	8	18	2.0
01/20/2021	Regulatory	11:28	Ebb	6	4	33.0
02/08/2021	Regulatory	12:26	Flood	5	1	4.5
03/23/2021	Regulatory	11:26	Flood	8	6	7.8
08/26/2021	Regulatory	08:13	Flood	17	30	1.7
09/28/2021	Regulatory	12:10	Flood	13	11	49.0
12/07/2021	Regulatory	10:57	Ebb	7	9	4.5

