

# Portage Bay

## Annual Shellfish Growing Area Review



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Area: Portage Bay

Year Ending: December 31, 2024

Classification: Approved, Conditionally Approved, Prohibited

### Activities in the Growing Area in 2024

The growing area was sampled 13 times in accordance with the National Shellfish Sanitation Program (NSSP) Systematic Random Sampling method. One of the sets of samples was to make up for a missed run in 2023. Eight samples were collected during Open status. The Conditionally Approved area was closed from September through November for a total of 91 days. In August, the Department changed the classification of 360 acres near stations 49 and 272 from Conditionally Approved to Approved due to pollution identification and correction efforts and improved water quality. Additionally, the Department removed December from the closure period of the remaining Conditionally Approved period due to a special study finding that FC results are low when the Nooksack River impacts the growing area during the month of December. The Conditionally Approved area is now closed September 1 through November 30 of each year.

A reliability evaluation was completed for the City of Bellingham Post Point WWTP. The area is not currently classified. A comprehensive evaluation report is in the central growing area file.

The Whatcom Clean Water Program, Whatcom County Public Works, and Whatcom Conservation District received National Estuary Program (NEP) funding for coordinating and implementing a pollution identification and control program in the watershed. Washington State Department of Agriculture (WSDA) and Washington State Department of Ecology (Ecology) received NEP funding for enhanced water compliance monitoring and referral and technical assistance, with WSDA focusing on dairies and Ecology addressing nonpoint pollution stemming from nondairy agriculture. The Portage Bay Shellfish Protection District continued quarterly meetings.

### Analytical Results of Water Samples

Table 1 summarizes the results of the last 30 samples collected from the area. It includes samples collected when the Conditionally Approved area was in Closed status. This summary shows that all stations meet the NSSP water quality standard for an Approved classification with all data, however stations 49 and 272 are considered Threatened with estimated 90<sup>th</sup> percentiles of 27.5 FC/100mL and 27.9 FC/100mL, respectively. Table 2 shows an APC evaluation of the last 15 samples collected from the Conditionally Approved stations during Closed status (September – November). Table 3 shows Threatened station individual data. All stations in the Conditionally Approved area fail the APC standard for an Approved classification during Closed status.

### 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 threatened with downgrade in classification
- Fails to meet current classification standards

## Remarks and Recommendations

Table 1 shows that all stations meet the NSSP water quality standard for an Approved classification. While Station 52 has an unsorted estimated 90<sup>th</sup> percentile of 42.2 FC/100mL, sorting it for its Open period (Dec – Aug) brings the estimated 90<sup>th</sup> percentile to 15.0 FC/100mL.

## Management Plan Evaluation

1. Have all parties involved complied with the conditions of the management plan ..... Yes
2. Has reporting been adequate to manage the conditional area..... Yes
3. Does the area consistently meet approved area criteria when it is open for harvest ..... Yes
4. Has a field inspection of critical pollution sources been conducted ..... Yes

**TABLE 1. Summary of Marine Water Data (SRS) for the Portage Bay 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
49	Approved	8/9/2022 - 12/4/2024	1.7 - 350.0	4.9	27.5	Y
53	Approved	8/9/2022 - 12/4/2024	1.7 - 130.0	3.2	12.9	Y
54	Approved	8/9/2022 - 12/4/2024	1.7 - 79.0	3.5	15.1	Y
55	Approved	8/9/2022 - 12/4/2024	1.7 - 170.0	4.6	22.4	Y
57	Approved	8/9/2022 - 12/4/2024	1.7 - 170.0	4.1	20.5	Y
58	Approved	8/9/2022 - 12/4/2024	1.7 - 110.0	4.4	16.4	Y
272	Approved	8/9/2022 - 12/4/2024	1.7 - 350.0	5.3	27.9	Y
50	Conditionally Approved	8/9/2022 - 12/4/2024	1.7 - 240.0	5.0	26.9	Y
51	Conditionally Approved	8/9/2022 - 12/4/2024	1.7 - 350.0	4.6	26.3	Y
52	Conditionally Approved	8/9/2022 - 12/4/2024	1.7 - 240.0	6.0	42.2	Y
271	Conditionally Approved	8/9/2022 - 12/4/2024	1.7 - 540.0	4.2	23.8	Y
48	Prohibited	8/9/2022 - 12/4/2024	1.7 - 170.0	2.9	10.6	Y

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.

**TABLE 2. Summary of Conditionally Approved Marine Water Data (APC) during Closed Status for the Portage Bay Growing Area**

Sampling Event Type: Regulatory

Maximum Number of Samples: 15

Tides Included: All

Includes data from the Closed period (September through December)

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	% Samples > 43	Meets Standard
50	Conditionally Approved	9/24/2020 - 11/19/2024	1.7 - 240.0	9.8	26.67	N
51	Conditionally Approved	9/24/2020 - 11/19/2024	1.7 - 350.0	8.6	26.67	N
52	Conditionally Approved	9/24/2020 - 11/19/2024	1.7 - 240.0	10.3	33.33	N
271	Conditionally Approved	9/24/2020 - 11/19/2024	1.7 - 540.0	8.1	26.67	N

The above table shows bacteriological results in relation to NSSP criteria. NSSP standards for approved shellfish growing waters are a fecal coliform geometric mean not greater than 14 organisms/100 mL and an estimated 90th percentile not greater than 43 organisms/100mL.

**TABLE 3. Marine Water Quality Summary for Threatened Stations in Portage Bay**

Station: 49

Classification: Conditionally Approved

Method: SRS

<b>Total Samples: 30</b> <b>Range (FC/100 mL): 1.7 - 350.0</b> <b>GeoMean (FC/100 mL): 4.9</b>				<b>Date Range: 08/09/2022 - 12/04/2024</b> <b>E90th (FC/100 mL): 27.5</b> <b>Meets Standard: Y</b>		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
08/09/2022	Regulatory	16:50	Flood	20	22	1.7
09/07/2022	Regulatory	17:16	Flood	14	27	1.7
10/12/2022	Regulatory	06:35	Flood	11	21	4.5
10/19/2022	Regulatory	12:58	Flood	12	22	13.0
11/15/2022	Regulatory	12:13	Ebb	8	24	1.7
12/14/2022	Regulatory	08:12	Flood	4	19	33.0
01/04/2023	Regulatory	07:31	Flood	4	13	6.8
02/09/2023	Regulatory	06:26	Flood	6	5	49.0
03/14/2023	Regulatory	06:28	Flood	7	29	1.7
04/12/2023	Regulatory	09:34	Ebb	8	7	4.5
05/09/2023	Regulatory	05:03	Flood	10	27	1.7
06/08/2023	Regulatory	08:24	Ebb	15	28	1.7
07/06/2023	Regulatory	04:54	Flood	17	10	23.0
08/09/2023	Regulatory	13:36	Flood	19	21	1.7
09/19/2023	Regulatory	08:26	Flood	15	29	1.7
11/01/2023	Regulatory	07:20	Flood	8	26	13.0
12/12/2023	Regulatory	12:00	Flood	8	19	2.0
01/31/2024	Regulatory	09:47	Ebb	9	3	4.5
02/06/2024	Regulatory	05:54	Ebb	7	20	4.5
03/06/2024	Regulatory	11:29	Flood	5	12	1.7
04/24/2024	Regulatory	19:12	Flood	11	28	2.0
05/02/2024	Regulatory	09:44	Flood	11	11	2.0
06/25/2024	Regulatory	04:30	Flood	14	2	27.0
07/30/2024	Regulatory	14:48	Flood	18	22	1.7
08/22/2024	Regulatory	06:58	Flood	17	22	7.8
09/24/2024	Regulatory	11:45	Flood	17	24	2.0
10/08/2024	Regulatory	11:11	Flood	14	28	2.0
10/22/2024	Regulatory	09:16	Flood	11	3	350.0
11/19/2024	Regulatory	10:30	Ebb	8	12	23.0
12/04/2024	Regulatory	07:09	Flood	7	25	2.0

**TABLE 3 continued.**

Station: 272

Classification: Conditionally Approved

Method: SRS

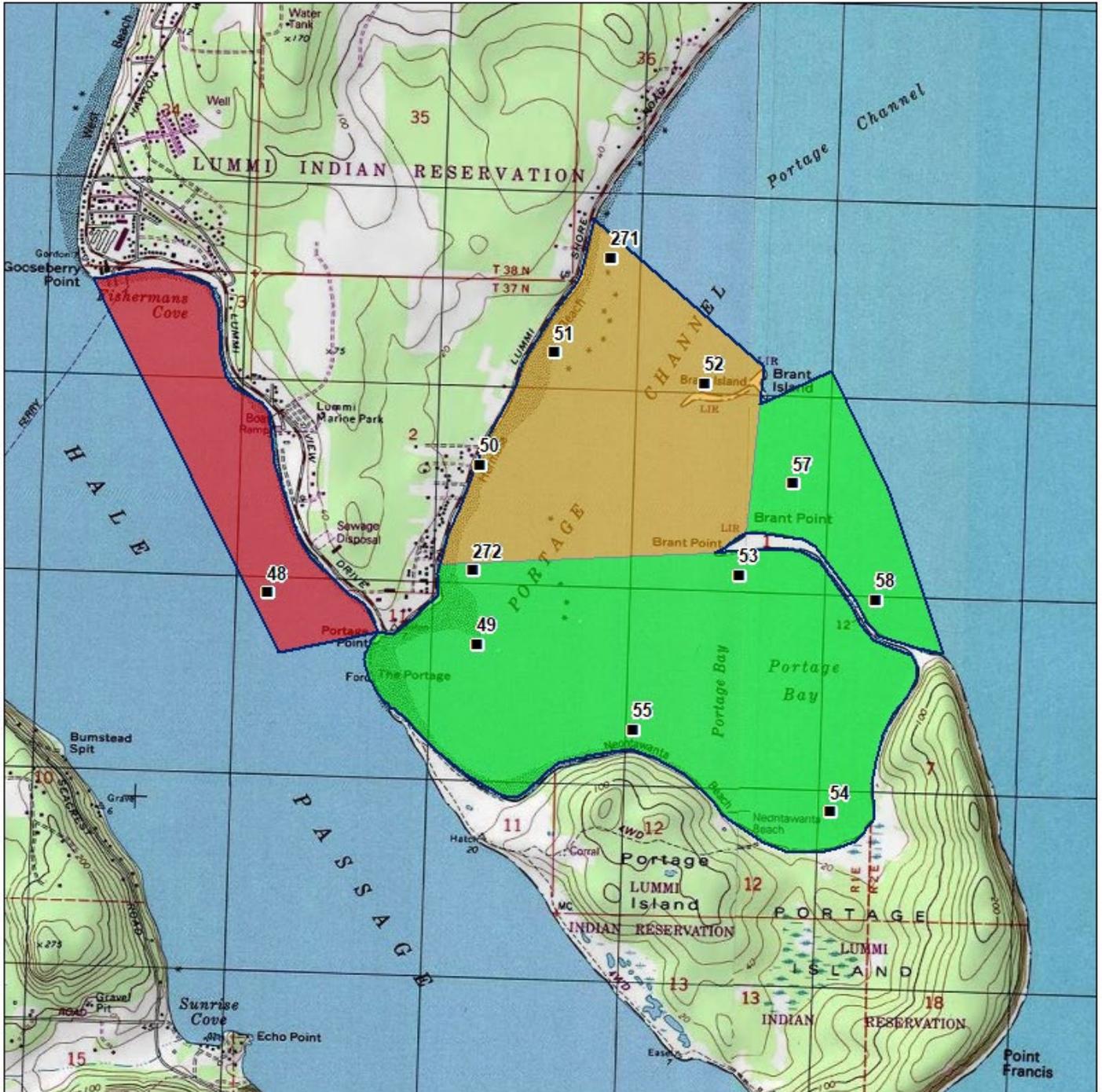
<b>Total Samples: 30</b> <b>Range (FC/100 mL): 1.7 - 350.0</b> <b>GeoMean (FC/100 mL): 5.3</b>				<b>Date Range: 08/09/2022 - 12/04/2024</b> <b>E90th (FC/100 mL): 27.9</b> <b>Meets Standard: Y</b>		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
08/09/2022	Regulatory	17:00	Flood	20	22	1.7
09/07/2022	Regulatory	17:17	Flood	15	26	4.5
10/12/2022	Regulatory	06:49	Flood	12	25	4.0
10/19/2022	Regulatory	13:00	Flood	12	19	6.1
11/15/2022	Regulatory	12:15	Ebb	8	25	1.7
12/14/2022	Regulatory	08:21	Flood	4	20	4.0
01/04/2023	Regulatory	07:43	Flood	4	13	4.0
02/09/2023	Regulatory	06:34	Flood	5	3	46.0
03/14/2023	Regulatory	06:39	Flood	7	29	1.7
04/12/2023	Regulatory	09:36	Ebb	8	10	1.7
05/09/2023	Regulatory	05:13	Flood	11	21	2.0
06/08/2023	Regulatory	08:26	Ebb	15	28	1.7
07/06/2023	Regulatory	05:10	Flood	17	14	70.0
08/09/2023	Regulatory	13:38	Flood	19	20	7.8
09/19/2023	Regulatory	08:15	Flood	15	29	2.0
11/01/2023	Regulatory	07:32	Flood	8	23	4.5
12/12/2023	Regulatory	12:04	Flood	8	18	6.8
01/31/2024	Regulatory	09:48	Ebb	9	2	11.0
02/06/2024	Regulatory	06:07	Ebb	7	22	7.8
03/06/2024	Regulatory	11:31	Flood	5	10	7.8
04/24/2024	Regulatory	19:00	Flood	11	26	4.5
05/02/2024	Regulatory	09:45	Flood	11	12	2.0
06/25/2024	Regulatory	04:49	Flood	15	3	23.0
07/30/2024	Regulatory	14:50	Flood	18	23	1.7
08/22/2024	Regulatory	06:46	Flood	17	22	6.8
09/24/2024	Regulatory	11:48	Flood	17	25	1.7
10/08/2024	Regulatory	11:12	Flood	14	28	2.0
10/22/2024	Regulatory	09:30	Flood	11	3	350.0
11/19/2024	Regulatory	10:32	Ebb	8	6	23.0
12/04/2024	Regulatory	07:18	Flood	7	24	2.0

MAP 1. Portage Bay Growing Area

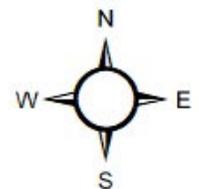
Portage Bay



Date Updated: 9/12/2024



Classification	Sampling Stations
<span style="display:inline-block; width:15px; height:15px; background-color: #00FF00; border: 1px solid black;"></span> Approved	<span style="display:inline-block; width:10px; height:10px; background-color: black; border: 1px solid grey;"></span>
<span style="display:inline-block; width:15px; height:15px; background-color: #FFA500; border: 1px solid black;"></span> Conditional	
<span style="display:inline-block; width:15px; height:15px; background-color: #FF0000; border: 1px solid black;"></span> Prohibited	
<span style="display:inline-block; width:15px; height:15px; background-color: #0000FF; border: 1px solid black;"></span> Restricted	
<span style="display:inline-block; width:15px; height:15px; background-color: #808080; border: 1px solid black;"></span> Unclassified	



\* Some sampling stations are highlighted with grey box for ease of reading.