

Oakland Bay

Annual Shellfish Growing Area Review



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Area: Oakland Bay

Year Ending: December 31, 2022

Classification: Approved, Conditionally Approved, Prohibited

Activities in the Growing Area in 2022

The growing area was sampled 11 times in accordance with National Shellfish Sanitation Program (NSSP) Systematic Random Sampling (SRS) criteria. Nine samples were collected at stations in the Conditionally Approved area during the Open status. The Conditionally Approved area was closed 10 times for 67 days due to rainfall (≥ 1 inch in 24 hours). All of Oakland Bay was closed three times for 15 days due to excessive rainfall. The Conditionally Approved area around stations 129 and 614 was Restricted from June through September.

The Department updated the condition upon which shellfish harvest closures occur in the Conditionally Approved area around Station 129. In addition to closing when 1 inch of rain or more falls in 24 hours, the area is also Restricted during the months of June through September. The Department completed an annual CAAMP evaluation of the Shelton WWTP. No changes to the classification or the CAAMP were needed.

Follow up sampling continued at a shoreline drainage flowing through an agricultural site of concern. Bacteria levels continue to be slightly elevated but not impacting the growing area. The Washington State Department of Ecology continued to work with the landowner on best management practices and investigated other potential sources of bacteria in the drainage.

Mason County received EPA National Estuary Program (NEP) funding for pollution identification and correction in the watershed. Mason Conservation District received NEP funds through the Washington State Conservation Commission to provide technical assistance and education and outreach to landowners to promote the implementation of livestock best management practices. The Mason County Clean Water District met quarterly.

Analytical Results of Water Samples

Table 1 summarizes the most recent 30 samples collected from each of the sampling stations. It includes samples collected when the Conditionally Approved area was closed to harvest. Table 2 summarizes the most recent 30 samples sorted for 1 inch of rainfall in the Conditionally Approved area. Five of the last thirty marine water sampling events occurred during Closed status. Table 3 summarizes data sorted for 1 inch of rainfall at stations 129 and 614 during the non-Restricted period. Table 4 shows data from stations 129 and 614 during the Restricted period.

All stations meet the NSSP standard. Station 125 is categorized as Threatened with an estimated 90th percentile of 31.8 FC/100mL. Stations 118, 119, 126, 128, 129 (open/non-restricted data), 614 (open/non-restricted data), 615, 639, and 758 have a Concerned status. Table 5 shows the most recent individual 30 samples at Threatened Station 125.

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 standard

Remarks and Recommendations

The area is correctly classified. The Department should continue to collaborate with Mason County and others during quarterly Clean Water District meetings.

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 Oakland 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 th Percentile (FC/100mL)	Meets Standard
116	Approved	5/26/2020 - 12/19/2022	1.7 - 70.0	4.0	14.3	Y
117	Approved	5/26/2020 - 12/19/2022	1.7 - 33.0	5.3	17.8	Y
118	Approved	5/26/2020 - 12/19/2022	1.7 - 110.0	5.8	27.9	Y
119	Approved	5/26/2020 - 12/19/2022	1.7 - 130.0	4.4	25.6	Y
120	Approved	5/26/2020 - 12/19/2022	1.7 - 33.0	3.5	10.8	Y
121	Approved	5/26/2020 - 12/19/2022	1.7 - 79.0	4.3	15.3	Y
123	Approved	5/26/2020 - 12/19/2022	1.7 - 70.0	4.5	17.0	Y
125	Approved	2/13/2020 - 12/19/2022	1.7 - 130.0	6.6	31.8	Y
126	Approved	2/13/2020 - 12/19/2022	1.7 - 130.0	4.9	23.9	Y
127	Approved	2/13/2020 - 12/19/2022	1.7 - 70.0	4.4	15.6	Y
128	Approved	5/26/2020 - 12/19/2022	1.7 - 130.0	4.2	21.8	Y
615	Approved	5/26/2020 - 12/19/2022	1.7 - 240.0	4.7	24.1	Y
639	Approved	5/26/2020 - 12/19/2022	1.7 - 130.0	4.3	20.9	Y
758	Approved	2/13/2020 - 12/19/2022	1.7 - 110.0	5.5	25.2	Y
858	Approved	5/26/2020 - 12/19/2022	1.7 - 79.0	3.3	13.0	Y
129	Conditionally Approved	3/2/2020 - 12/19/2022	1.7 - 350.0	10.0	84.6	N
614	Conditionally Approved	3/2/2020 - 12/19/2022	1.7 - 240.0	13.6	126.9	N
114	Prohibited	5/26/2020 - 12/19/2022	1.7 - 79.0	3.8	14.9	Y
115	Prohibited	5/26/2020 - 12/19/2022	1.7 - 49.0	4.2	15.5	Y
122	Prohibited	5/26/2020 - 12/19/2022	1.7 - 49.0	4.2	13.9	Y
124	Prohibited	5/26/2020 - 12/19/2022	1.7 - 33.0	3.5	12.7	Y

The standard for Approved shellfish growing waters is a 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 (SRS) in Open Status for the Oakland Bay Growing Area

Sampling Event Type: Regulatory

Number of Samples: 30

Tides Included: All

Includes data for rainfall amounts: 0 - 0.99" on days 0 – 4 previous to the sampling event.

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90 th Percentile (FC/100mL)	Meets Standard
129	Conditionally Approved	9/17/2019 - 12/19/2022	1.7 - 350.0	7.7	56.0	N
614	Conditionally Approved	9/17/2019 - 12/19/2022	1.7 - 170.0	12.5	102.6	N

The standard for Approved shellfish growing waters is a 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 3. Summary of Conditionally Approved Marine Water Data (SRS) in Open, non-Restricted Status in the Oakland Bay Growing Area

Sampling Event Type: Regulatory

Number of Samples: 30

Tides Included: All

Includes data for rainfall amounts: 0 - 0.99" on days 0 – 4 previous to the sampling event.

Includes data for the open period (October through May)

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90 th Percentile (FC/100mL)	Meets Standard
129	Conditionally Approved	10/9/2017 - 12/19/2022	1.7 - 130.0	5.0	20.5	Y
614	Conditionally Approved	10/9/2017 - 12/19/2022	1.7 - 130.0	4.8	23.6	Y

The standard for Approved shellfish growing waters is a 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 4. Summary of Conditionally Approved Marine Water Data (APC) during the Restricted Period in the Oakland Bay Growing Area

Sampling Event Type: Regulatory

Number of Samples: 15

Tides Included: All

Includes data for the Restricted period (June through September).

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	% Samples > 260	Meets Standard
129	Conditionally Approved	6/20/2019 - 9/1/2022	1.7 - 350	21.0	6.7	Y
614	Conditionally Approved	6/20/2019 - 9/1/2022	12.0 - 170	50.7	0.0	Y

The standard for Restricted shellfish growing waters is a fecal coliform geometric mean not greater than 88 organisms / 100 mL with not more than 10 percent greater than 260 organisms / 100 mL. The above table shows bacteriological results in relation to program standards.

TABLE 5. Marine Water Quality Summary for the Threatened Station in the Oakland Bay Growing Area

Station: 125

Classification: Approved

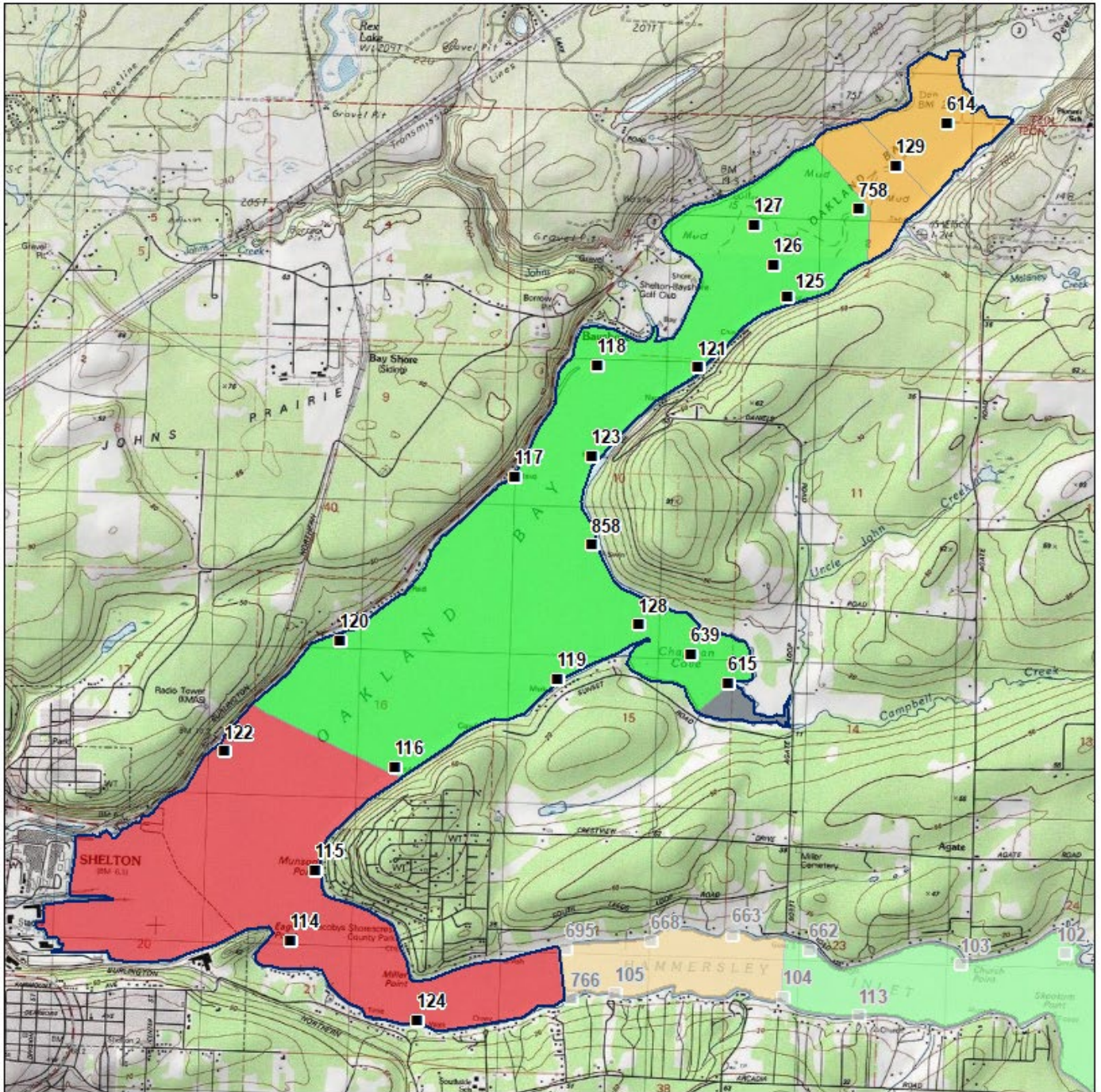
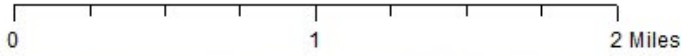
Method: SRS

Total Samples: 30 Range (FC/100 mL): 1.7 - 130.0 GeoMean (FC/100 mL): 6.6				Date Range: 02/13/2020 - 12/19/2022 E90th (FC/100 mL): 31.8 Meets Standard: Y		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
02/13/2020	Regulatory	10:44	Ebb	9	19	4.5
03/02/2020	Regulatory	10:29	Flood	8	20	2.0
05/26/2020	Regulatory	09:49	Ebb	16	25	2.0
06/24/2020	Regulatory	09:22	Ebb	19	26	2.0
07/08/2020	Regulatory	09:11	Ebb	18	26	2.0
08/24/2020	Regulatory	11:12	Flood	20	27	4.5
09/21/2020	Regulatory	10:18	Flood	17	28	4.5
10/07/2020	Regulatory	10:16	Flood	17	27	1.7
11/18/2020	Regulatory	10:32	Ebb	10	15	130.0
12/07/2020	Regulatory	11:59	Flood	9	24	33.0
01/06/2021	Regulatory	10:21	Flood	8	4	79.0
02/23/2021	Regulatory	13:40	Flood	8	14	14.0
03/31/2021	Regulatory	09:44	Ebb	10	16	2.0
04/15/2021	Regulatory	09:32	Ebb	12	23	1.7
05/27/2021	Regulatory	08:48	Ebb	15	22	7.8
06/14/2021	Regulatory	09:32	Ebb	16	25	17.0
07/14/2021	Regulatory	09:01	Flood	20	26	1.7
08/11/2021	Regulatory	10:00	Ebb	21	27	49.0
09/13/2021	Regulatory	12:21	Flood	19	27	7.8
12/07/2021	Regulatory	10:05	Ebb	10	22	14.0
01/10/2022	Regulatory	11:53	Flood	6	9	13.0
02/07/2022	Regulatory	10:38	Flood	8	20	2.0
03/07/2022	Regulatory	09:59	Ebb	9	10	13.0
04/06/2022	Regulatory	10:16	Ebb	10	14	13.0
05/04/2022	Regulatory	09:11	Ebb	13	21	2.0
07/18/2022	Regulatory	10:12	Flood	18	25	7.8
08/15/2022	Regulatory	10:20	Ebb	20	26	1.7
09/01/2022	Regulatory	10:11	Flood	20	26	7.8
10/13/2022	Regulatory	10:22	Flood	16	27	4.5
12/19/2022	Regulatory	12:04	Flood	7	23	17.0

MAP 1. Oakland Bay Growing Area

Oakland Bay

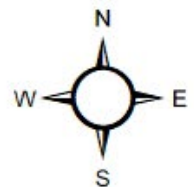
Washington State Department of Health
Date Updated: 12/13/2019



Classification

- Approved
- Conditional
- Prohibited
- Restricted
- Unclassified

Sampling Stations



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