# Oakland Bay

*Annual Shellfish Growing Area Review*

Prepared By: Trevor Swanson

Area: Oakland Bay

Year Ending: December 31, 2024

Classification: Approved, Conditionally Approved, Prohibited

## Activities in the Growing Area in 2024

The growing area was sampled 11 times in accordance with National Shellfish Sanitation Program (NSSP) Systematic Random Sampling (SRS) criteria. All samples were collected at stations in the Conditionally Approved area during the Open status. The Conditionally Approved area was closed 10 times for 57 days due to rainfall (≥ 1 inch in 24 hours). All of Oakland Bay was closed on an emergency basis from December 18-23 due to excessive rainfall. The Conditionally Approved area around stations 129 and 614 was Restricted from June through September. No relays occurred during this time.

A routine three-year shoreline evaluation was completed. It was recommended that the Department maintain contact with Mason County Public Health regarding additional sampling in High Risk drainages. No new or changes in pollution sources were identified that impacted the growing area.

Based on a harvest request, a reevaluation of the Shelton WWTP was completed in 2023. Due to improvements at the plant and increased holding capacity, a portion of the Prohibited area was reclassified to Conditionally Approved in February 2024. An annual Oakland Bay/Hammersley Inlet CAAMP evaluation of the Shelton WWTP was completed. No changes to the classification or the CAAMP were needed. A comprehensive evaluation report is in the central growing area file.

The Mason Conservation District received EPA National Estuary Program funds for education and outreach activities throughout Mason County. The Mason County Clean Water District continued to implement pollution identification and correction activities identified in the Oakland Bay pollution closure response plan.

## Analytical Results of Water Samples

All stations meet NSSP standards. 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 the open period and 1 inch of rainfall in the Conditionally Approved area. Table 2 also includes various other data sorts for comparison purposes. Stations 129 and 614 are considered Threatened after sorting with estimated 90$^{th}$ percentiles of 34.4 FC/100mL and 40.8 FC/100mL, respectively. Only one of the last thirty marine water sampling events (4/6/2022 event) occurred during a rainfall closure.

## 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 standard



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## Remarks and Recommendations

The area is correctly classified. The Department should continue to meet and work with Mason County and others to find and fix pollution sources in the watershed.

## 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. 90th Percentile (FC/100mL) | Meets Standard |
|---|---|---|---|---|---|---|
| 116 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 23.0 | 2.6 | 5.9 | Y |
| 117 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 33.0 | 3.4 | 9.6 | Y |
| 118 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 27.0 | 3.4 | 10.2 | Y |
| 119 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 13.0 | 2.6 | 5.6 | Y |
| 120 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 13.0 | 2.5 | 5.5 | Y |
| 121 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 79.0 | 3.9 | 12.5 | Y |
| 123 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 11.0 | 2.8 | 6.0 | Y |
| 125 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 33.0 | 3.8 | 12.6 | Y |
| 126 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 170.0 | 4.3 | 14.6 | Y |
| 127 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 240.0 | 3.7 | 14.2 | Y |
| 128 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 23.0 | 2.2 | 4.6 | Y |
| 615 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 33.0 | 3.8 | 13.5 | Y |
| 639 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 17.0 | 2.9 | 7.0 | Y |
| 758 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 170.0 | 4.5 | 24.5 | Y |
| 858 | Approved | 3/7/2022 - 12/5/2024 | 1.7 - 33.0 | 2.8 | 7.3 | Y |
| 129 | Conditionally Approved | 3/7/2022 - 12/5/2024 | 1.7 - 240.0 | 8.8 | 63.6 | N |
| 614 | Conditionally Approved | 3/7/2022 - 12/5/2024 | 1.7 - 1600.0 | 13.5 | 136.5 | N |
| 114 | Prohibited | 3/7/2022 - 12/5/2024 | 1.7 - 17.0 | 3.3 | 9.1 | Y |
| 115 | Prohibited | 3/7/2022 - 12/5/2024 | 1.7 - 17.0 | 2.7 | 6.3 | Y |
| 122 | Prohibited | 3/7/2022 - 12/5/2024 | 1.7 - 17.0 | 3.1 | 8.0 | Y |
| 124 | Prohibited | 3/7/2022 - 12/5/2024 | 1.7 - 7.8 | 2.0 | 3.0 | 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. Conditionally Approved stations with various data sorts. The same date range is used for all sorts.**

| Station | Classification | Date Range | Number of samples | Range (FC/100mL) | Geometric Mean (FC/100mL) | E90th (FC/100 mL) | Meets Standard |
|---|---|---|---|---|---|---|---|
| **Open period** (October through May) **with rainfall sort** (does not include data collected 0-4 days after rainfall event of 1 inch or greater in 24 hours) | | | | | | | |
| 129 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 30 | 1.7 - 240.0 | 5.7 | 34.4 | Y |
| 614 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 30 | 1.7 - 350.0 | 6.3 | 40.8 | Y |
| **Unsorted** | | | | | | | |
| 129 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 55 | 1.7 - 350.0 | 8.9 | 67.5 | N |
| 614 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 55 | 1.7 - 1600.0 | 14.1 | 126.9 | N |
| **Rainfall sorted only** | | | | | | | |
| 129 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 49 | 1.7 - 350.0 | 8.1 | 60.3 | N |
| 614 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 49 | 1.7 - 1600.0 | 14.1 | 130.4 | N |
| **Open period not sorted for rainfall** | | | | | | | |
| 129 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 36 | 1.7 - 240.0 | 7.0 | 47.1 | N |
| 614 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 36 | 1.7 - 350.0 | 7.2 | 49.5 | N |
| **Closed period** (June through September) | | | | | | | |
| 129 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 19 | 1.7 - 350.0 | 14.1 | | |
| 614 | Conditionally Approved | 12/26/2019 - 12/5/2024 | 19 | 2.0 - 1600.0 | 50.3 | | |

## TABLE 3. Marine Water Data Summary during Open Status for Threatened Stations in Oakland Bay

Station: 129

Classification: Conditionally Approved

Method: SRS

Includes data for rainfall amounts 0-.99 on days 0-4 previous to the sampling event.

| | |
|---|---|
| **Total Samples: 30**<br>**Range (FC/100 mL): 1.7 - 240.0**<br>**GeoMean (FC/100 mL): 5.7** | **Date Range: 12/26/2019 - 12/05/2024**<br>**E90th (FC/100 mL): 34.4**<br>**Meets Standard: Y** |

| Sample Date | Event Type | Time | Tide | SWT | Salinity | Fecal Coliform |
|---|---|---|---|---|---|---|
| 12/26/2019 | Regulatory | 10:17 | Ebb | 7 | 14 | 17.0 |
| 02/13/2020 | Regulatory | 10:50 | Ebb | 8 | 8 | 11.0 |
| 03/02/2020 | Regulatory | 10:37 | Flood | 8 | 12 | 1.7 |
| 04/13/2020 | Regulatory | 11:31 | Ebb | 13 | 20 | 1.7 |
| 05/26/2020 | Regulatory | 09:55 | Ebb | 14 | 11 | 130.0 |
| 10/07/2020 | Regulatory | 10:22 | Flood | 17 | 19 | 2.0 |
| 12/07/2020 | Regulatory | 12:05 | Flood | 9 | 16 | 2.0 |
| 03/31/2021 | Regulatory | 09:49 | Ebb | 10 | 17 | 1.7 |
| 04/15/2021 | Regulatory | 09:38 | Ebb | 11 | 21 | 1.7 |
| 05/27/2021 | Regulatory | 08:54 | Ebb | 15 | 16 | 13.0 |
| 12/07/2021 | Regulatory | 10:11 | Ebb | 10 | 11 | 2.0 |
| 02/07/2022 | Regulatory | 10:43 | Flood | 8 | 17 | 4.0 |
| 03/07/2022 | Regulatory | 10:04 | Ebb | 8 | 11 | 2.0 |
| 05/04/2022 | Regulatory | 09:16 | Ebb | 12 | 18 | 1.7 |
| 10/13/2022 | Regulatory | 10:27 | Flood | 15 | 25 | 13.0 |
| 12/19/2022 | Regulatory | 12:11 | Flood | 5 | 8 | 7.8 |
| 01/25/2023 | Regulatory | 11:00 | Ebb | 8 | 15 | 2.0 |
| 02/07/2023 | Regulatory | 10:13 | Ebb | 8 | 7 | 7.8 |
| 03/14/2023 | Regulatory | 10:36 | Flood | 7 | 11 | 1.7 |
| 04/11/2023 | Regulatory | 10:10 | Ebb | 9 | 10 | 7.8 |
| 05/09/2023 | Regulatory | 10:13 | Ebb | 14 | 5 | 46.0 |
| 10/17/2023 | Regulatory | 10:09 | Ebb | 15 | 22 | 17.0 |
| 11/01/2023 | Regulatory | 11:15 | Ebb | 11 | 21 | 1.7 |
| 01/02/2024 | Regulatory | 11:23 | Flood | 8 | 16 | 1.7 |
| 02/13/2024 | Regulatory | 10:07 | Ebb | 8 | 20 | 1.7 |
| 03/12/2024 | Regulatory | 10:15 | Ebb | 8 | 14 | 11.0 |
| 04/01/2024 | Regulatory | 10:56 | Ebb | 12 | 18 | 2.0 |
| 05/13/2024 | Regulatory | 10:14 | Flood | 16 | 8 | 240.0 |
| 11/06/2024 | Regulatory | 10:39 | Ebb | 11 | 20 | 7.8 |
| 12/05/2024 | Regulatory | 10:45 | Ebb | 8 | 18 | 46.0 |

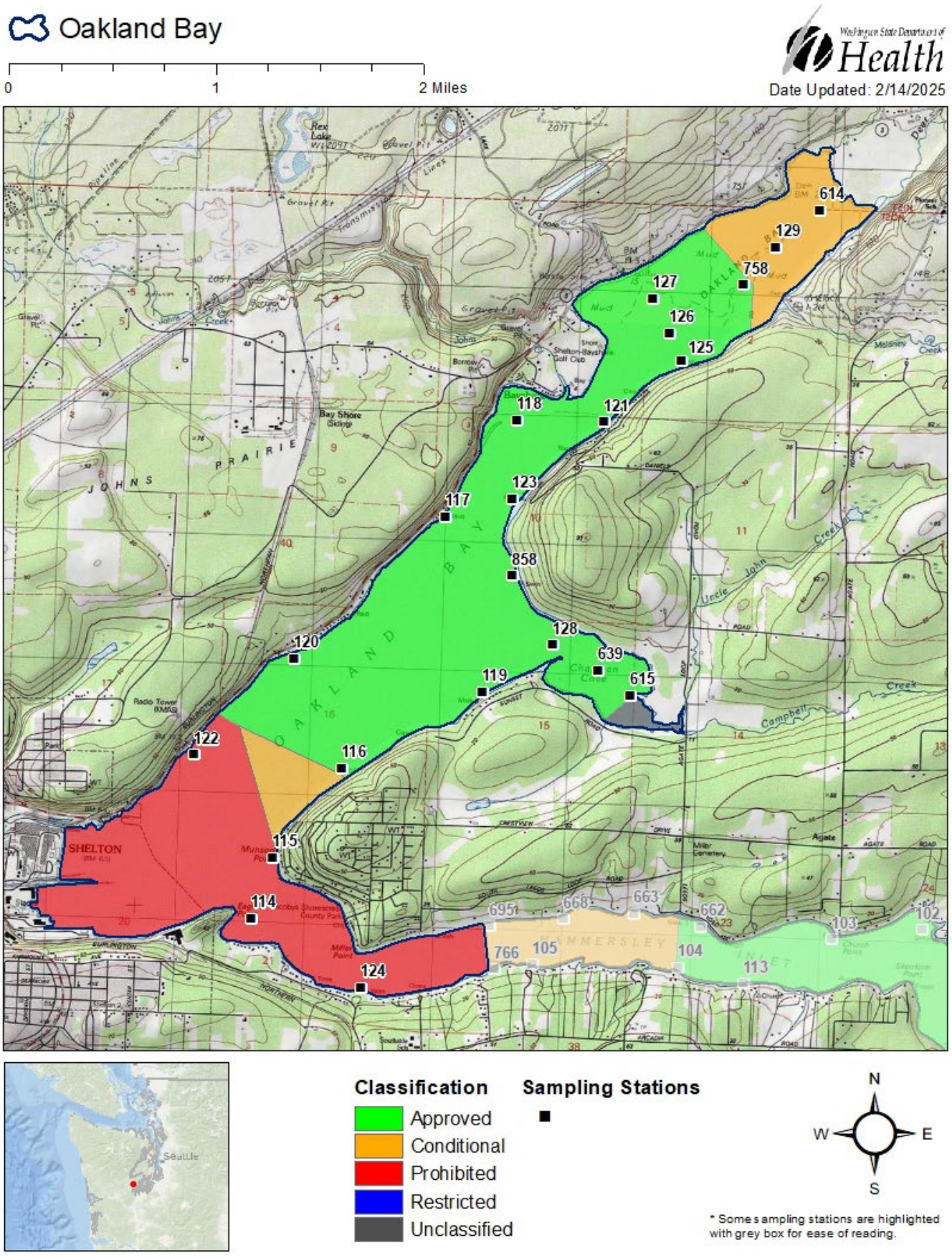
Station: 614

Classification: Conditionally Approved

Method: SRS

Includes data for rainfall amounts 0-.99 on days 0-4 previous to the sampling event.

| **Total Samples: 30**<br>**Range (FC/100 mL): 1.7 - 350.0**<br>**GeoMean (FC/100 mL): 6.3** | **Date Range: 12/26/2019 - 12/05/2024**<br>**E90th (FC/100 mL): 40.8**<br>**Meets Standard: Y** |
|---|---|

| Sample Date | Event Type | Time | Tide | SWT | Salinity | Fecal Coliform |
|---|---|---|---|---|---|---|
| 12/26/2019 | Regulatory | 10:18 | Ebb | 7 | 14 | 7.8 |
| 02/13/2020 | Regulatory | 10:52 | Ebb | 8 | 6 | 7.8 |
| 03/02/2020 | Regulatory | 10:40 | Flood | 7 | 4 | 1.7 |
| 04/13/2020 | Regulatory | 11:33 | Ebb | 12 | 6 | 1.7 |
| 05/26/2020 | Regulatory | 09:57 | Ebb | 15 | 14 | 33.0 |
| 10/07/2020 | Regulatory | 10:23 | Flood | 16 | 18 | 2.0 |
| 12/07/2020 | Regulatory | 12:06 | Flood | 9 | 14 | 2.0 |
| 03/31/2021 | Regulatory | 09:50 | Ebb | 10 | 17 | 2.0 |
| 04/15/2021 | Regulatory | 09:39 | Ebb | 11 | 16 | 2.0 |
| 05/27/2021 | Regulatory | 08:55 | Ebb | 14 | 13 | 130.0 |
| 12/07/2021 | Regulatory | 10:13 | Ebb | 10 | 16 | 4.5 |
| 02/07/2022 | Regulatory | 10:45 | Flood | 8 | 6 | 13.0 |
| 03/07/2022 | Regulatory | 10:06 | Ebb | 8 | 14 | 1.7 |
| 05/04/2022 | Regulatory | 09:18 | Ebb | 13 | 19 | 1.7 |
| 10/13/2022 | Regulatory | 10:28 | Flood | 15 | 24 | 4.5 |
| 12/19/2022 | Regulatory | 12:13 | Flood | 5 | 12 | 1.7 |
| 01/25/2023 | Regulatory | 11:02 | Ebb | 8 | 11 | 1.7 |
| 02/07/2023 | Regulatory | 10:15 | Ebb | 8 | 7 | 49.0 |
| 03/14/2023 | Regulatory | 10:37 | Flood | 7 | 10 | 2.0 |
| 04/11/2023 | Regulatory | 10:11 | Ebb | 9 | 5 | 6.8 |
| 05/09/2023 | Regulatory | 10:14 | Ebb | 14 | 6 | 23.0 |
| 10/17/2023 | Regulatory | 10:10 | Ebb | 15 | 19 | 23.0 |
| 11/01/2023 | Regulatory | 11:17 | Ebb | 11 | 22 | 4.5 |
| 01/02/2024 | Regulatory | 11:24 | Flood | 8 | 20 | 2.0 |
| 02/13/2024 | Regulatory | 10:10 | Ebb | 8 | 18 | 1.7 |
| 03/12/2024 | Regulatory | 10:16 | Ebb | 8 | 6 | 22.0 |
| 04/01/2024 | Regulatory | 10:58 | Ebb | 12 | 4 | 23.0 |
| 05/13/2024 | Regulatory | 10:16 | Flood | 15 | 4 | 350.0 |
| 11/06/2024 | Regulatory | 10:40 | Ebb | 11 | 21 | 17.0 |
| 12/05/2024 | Regulatory | 10:47 | Ebb | 8 | 23 | 2.0 |

**MAP 1. Oakland Bay Growing Area**