

Dungeness Bay

Annual Shellfish Growing Area Review



Prepared By: Trevor Swanson

Area: Dungeness Bay

Year Ending: December 31, 2023

Classification: Approved, Conditionally Approved, Prohibited

Activities in the Growing Area in 2023

The growing area was sampled 12 times in accordance with National Shellfish Sanitation Program (NSSP) Systematic Random Sampling (SRS) criteria. Nine sampling events occurred during Open status. Station 105 was only sampled 11 times due to bottle leakage during April. The Conditionally Approved portion of the growing area was closed November through January per the current management plan.

Clallam Conservation District received EPA National Estuary Program (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. Clallam County Environmental Health continued implementing a pollution identification and correction plan and enhanced their on-site sewage system operations and maintenance program in the Sequim Bay-Dungeness Watershed Clean Water District. Clean Water Work Group meetings continued 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 in Closed status. Approved Station 113 is failing the NSSP standard with an estimated 90th percentile of 52.8 FC/100mL. Station 199, in the Prohibited area, fails the NSSP standard, although Station 182 in the Jamestown Growing Area supports the sanitary line placement. Table 2 shows open period data for the Conditionally Approved stations. Table 3 shows closed period data for the Conditionally Approved stations based on 15 samples and an APC evaluation. Conditionally Approved Station 197 is Threatened with an estimated 90th percentile of 31.6 FC/100mL during the open period. Table 4 includes the last 30 individual sampling results from stations 113 and 197.

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

Station 113 fails the NSSP standard for an Approved classification. The Department should evaluate the classification of the area near this station. The Department should continue working with Clallam County, the Jamestown S'Klallam Tribe, and others to identify and correct sources of pollution in the Dungeness Bay 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 Dungeness 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
103	Approved	6/17/2021 - 12/12/2023	1.7 - 33.0	2.5	6.9	Y
108	Approved	6/17/2021 - 12/12/2023	1.7 - 240.0	4.6	28.1	Y
109	Approved	6/17/2021 - 12/12/2023	1.7 - 33.0	3.3	10.4	Y
110	Approved	6/17/2021 - 12/12/2023	1.7 - 33.0	2.9	9.7	Y
111	Approved	6/17/2021 - 12/12/2023	1.7 - 79.0	3.1	10.5	Y
112	Approved	6/17/2021 - 12/12/2023	1.7 - 17.0	2.7	6.2	Y
113	Approved	6/17/2021 - 12/12/2023	1.7 - 540.0	6.3	52.8	N
114	Approved	6/17/2021 - 12/12/2023	1.7 - 49.0	3.4	11.1	Y
115	Approved	6/17/2021 - 12/12/2023	1.7 - 49.0	3.8	12.1	Y
104	Conditionally Approved	8/16/2021 - 12/12/2023	1.7 - 110.0	5.9	31.0	Y
105	Conditionally Approved	8/3/2021 - 12/12/2023	1.7 - 350.0	4.1	25.3	Y
106	Conditionally Approved	8/16/2021 - 12/12/2023	1.7 - 79.0	4.1	21.7	Y
107	Conditionally Approved	8/16/2021 - 12/12/2023	1.7 - 49.0	4.5	21.2	Y
197	Conditionally Approved	8/16/2021 - 12/12/2023	1.7 - 240.0	6.4	37.7	Y
207	Conditionally Approved	8/16/2021 - 12/12/2023	1.7 - 130.0	4.5	23.6	Y
198	Prohibited	5/4/2021 - 12/12/2023	1.7 - 79.0	6.6	27.6	Y
199	Prohibited	5/4/2021 - 12/12/2023	1.7 - 1600.0	6.8	48.0	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 2. Summary of Open Period Marine Water Data (SRS) for the Dungeness Bay Growing Area

Sampling Event Type: Regulatory

Number of Samples: 30

Tides Included: All

Includes data from the open period (February through October) only.

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90 th Percentile (FC/100mL)	Meets Standard
104	Conditionally Approved	8/25/2020 - 10/17/2023	1.7 - 110.0	4.7	22.4	Y
105	Conditionally Approved	7/27/2020 - 10/17/2023	1.7 - 130.0	2.5	8.0	Y
106	Conditionally Approved	8/25/2020 - 10/17/2023	1.7 - 79.0	2.6	9.8	Y
107	Conditionally Approved	8/25/2020 - 10/17/2023	1.7 - 33.0	3.3	11.2	Y
197	Conditionally Approved	6/16/2020 - 10/17/2023	1.7 - 240.0	5.3	31.6	Y
207	Conditionally Approved	8/25/2020 - 10/17/2023	1.7 - 130.0	2.7	9.1	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 3. Summary of Closed Period Marine Water Data (APC) for the Dungeness Bay Growing Area

Sampling Event Type: Regulatory

Number of Samples: 15

Tides Included: All

Includes data from the closed period (November through January) only.

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	% of samples > 43 FC/100mL	Meets Standards
104	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 49.0	7.9	6.67	Y
105	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 350.0	9.7	13.33	N
106	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 540.0	12.5	13.33	N
107	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 49.0	11.2	13.33	N
197	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 33.0	10.0	0.00	Y
207	Conditionally Approved	11/5/2019 - 12/12/2023	1.7 - 79.0	11.6	13.33	N

The standard for approved shellfish growing waters is a fecal coliform geometric mean not greater than 14 organisms/ 100 mL with not more than 10 percent greater than 43 organisms / 100 mL. The above table shows bacteriological results in relation to program standards.

TABLE 4. Marine Water Data Summary of Failing and Threatened Stations in Dungeness Bay

Station: 113

Classification: Approved

Method: SRS

Total Samples: 30 Range (FC/100 mL): 1.7 - 540.0 GeoMean (FC/100 mL): 6.3				Date Range: 06/17/2021 - 12/12/2023 E90th (FC/100 mL): 52.8 Meets Standard: N		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
06/17/2021	Regulatory	08:04	Ebb	9	29	1.7
08/03/2021	Regulatory	15:09	Flood	14	31	1.7
08/16/2021	Regulatory	11:02	Flood	12	20	49.0
09/27/2021	Regulatory	10:57	Ebb	11	27	130.0
10/12/2021	Regulatory	11:37	Ebb	6	14	6.8
12/20/2021	Regulatory	10:34	Ebb	4	12	33.0
01/12/2022	Regulatory	11:52	Ebb	7	5	49.0
02/15/2022	Regulatory	08:13	Ebb	8	32	4.5
03/15/2022	Regulatory	09:42	Ebb	7	29	1.7
04/12/2022	Regulatory	09:44	Flood	9	25	17.0
05/11/2022	Regulatory	09:12	Flood	11	31	4.5
06/29/2022	Regulatory	17:53	Flood	14	22	1.7
07/19/2022	Regulatory	09:04	Ebb	11	29	2.0
08/17/2022	Regulatory	18:06	Flood	19	29	540.0
09/15/2022	Regulatory	10:51	Ebb	11	31	2.0
10/13/2022	Regulatory	10:00	Ebb	10	32	1.7
11/14/2022	Regulatory	11:11	Ebb	8	32	11.0
12/14/2022	Regulatory	10:36	Ebb	8	27	13.0
01/19/2023	Regulatory	10:57	Flood	7	30	1.7
02/28/2023	Regulatory	11:17	Ebb	6	30	2.0
03/15/2023	Regulatory	09:54	Ebb	8	31	1.7
04/27/2023	Regulatory	08:23	Ebb	10	30	1.7
05/11/2023	Regulatory	06:47	Ebb	12	32	1.7
06/08/2023	Regulatory	07:07	Ebb	12	30	1.7
07/31/2023	Regulatory	15:10	Flood	13	32	1.7
08/21/2023	Regulatory	10:36	Ebb	13	31	1.7
09/27/2023	Regulatory	14:27	Flood	13	13	79.0
10/17/2023	Regulatory	11:40	Ebb	11	30	49.0
11/28/2023	Regulatory	11:47	Flood	8	31	1.7
12/12/2023	Regulatory	11:26	Flood	8	24	17.0

TABLE 4 Continued.

Station: 197

Classification: Conditionally Approved

Method: SRS

Includes data from the open period (February through October) only.

Total Samples: 30 Range (FC/100 mL): 1.7 - 240.0 GeoMean (FC/100 mL): 5.3				Date Range: 06/16/2020 - 10/17/2023 E90th (FC/100 mL): 31.6 Meets Standard: Y		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
06/16/2020	Regulatory	11:38	Flood	13	5	49.0
07/27/2020	Regulatory	10:26	Flood	13	15	2.0
08/24/2020	Regulatory	11:07	Ebb	9	30	4.5
09/28/2020	Regulatory	13:01	Flood	10	22	11.0
10/21/2020	Regulatory	09:05	Flood	9	30	2.0
02/09/2021	Regulatory	10:30	Flood	5	27	2.0
04/05/2021	Regulatory	09:50	Ebb	5	25	2.0
05/04/2021	Regulatory	10:49	Ebb	8	31	4.0
06/17/2021	Regulatory	08:10	Ebb	10	29	4.5
08/16/2021	Regulatory	11:05	Flood	13	15	79.0
09/27/2021	Regulatory	09:39	Flood	10	32	240.0
10/12/2021	Regulatory	11:41	Ebb	6	28	4.5
02/14/2022	Regulatory	11:44	Flood	8	28	13.0
03/15/2022	Regulatory	09:45	Ebb	7	29	1.7
05/09/2022	Regulatory	11:07	Ebb	9	30	1.7
05/23/2022	Regulatory	10:43	Ebb	12	30	1.7
07/06/2022	Regulatory	09:05	Flood	13	30	1.7
07/19/2022	Regulatory	09:07	Ebb	11	29	1.7
08/17/2022	Regulatory	09:15	Ebb	14	27	13.0
09/15/2022	Regulatory	10:54	Ebb	11	31	2.0
10/17/2022	Regulatory	11:46	Flood	10	31	4.5
02/28/2023	Regulatory	11:20	Ebb	7	31	1.7
03/16/2023	Regulatory	10:25	Ebb	7	31	6.8
04/27/2023	Regulatory	08:26	Ebb	9	30	1.7
05/10/2023	Regulatory	09:06	Ebb	11	30	2.0
06/08/2023	Regulatory	07:10	Ebb	12	30	1.7
07/26/2023	Regulatory	10:37	Flood	15	13	46.0
08/21/2023	Regulatory	10:39	Ebb	13	31	2.0
09/11/2023	Regulatory	11:44	Flood	14	20	22.0
10/17/2023	Regulatory	11:45	Ebb	11	31	33.0

MAP 1. Dungeness Bay Growing Area

