

Hood Canal 6

Annual Shellfish Growing Area Review



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Area: Hood Canal 6

Year Ending: December 31, 2022

Classification: Approved, Conditionally Approved

Activities in the Growing Area in 2022

The growing area was sampled five times in accordance with the National Shellfish Sanitation Program (NSSP) Systematic Random Sampling (SRS) criteria. The sampling event scheduled for December was canceled due to hazardous weather conditions. The Alderbrook Marina Conditionally Approved area was closed from May 1 through September 30 due to increased boating activities. The growing area was closed twice for a total of 12 days due to more than three inches of rain in 24 hours.

Analytical Results of Water Samples

Table 1 summarizes the most recent 30 samples collected from each of the sampling stations. All stations meet NSSP criteria except for Station 217. Station 217 fails the NSSP standard for an Approved classification with an estimated 90th percentile of 60.4 FC/100mL. Station 316 is Threatened with an estimated 90th percentile of 29.6 FC/100mL. Stations 192, 215, 216, 218, 225, 230, 292, 309, and 318 have a Concerned status with estimated 90th percentiles ranging from 20.2 – 25.4 FC/100mL. Table 2 summarizes the most recent individual 30 samples collected at Stations 217 and 316. All Concerned, Threatened, and Failing stations had elevated fecal coliform results collected on 6/29/21. From approximately June 26 through July 2, 2021 the Pacific Northwest experienced a “Heat Dome” effect, with air temperatures breaking historical records, reaching 100+ degrees for consecutive days. This intense heat wave likely caused bacteria to multiply rapidly, leading to abnormally high results.

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

Station 217 fails the NSSP standard for an Approved classification. The Department should evaluate the classification the area near this station.

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 Hood Canal 6 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
192	Approved	12/5/2017 - 10/31/2022	1.7 - 920.0	3.4	20.8	Y
207	Approved	12/5/2017 - 10/31/2022	1.7 - 49.0	2.6	8.3	Y
209	Approved	12/5/2017 - 10/31/2022	1.7 - 70.0	3.5	14.3	Y
210	Approved	12/5/2017 - 10/31/2022	1.7 - 79.0	3.4	14.4	Y
212	Approved	1/29/2018 - 10/31/2022	1.7 - 240.0	3.2	14.2	Y
213	Approved	1/29/2018 - 10/31/2022	1.7 - 49.0	4.3	18.3	Y
214	Approved	1/29/2018 - 10/31/2022	1.7 - 49.0	3.1	12.7	Y
215	Approved	12/5/2017 - 10/31/2022	1.7 - 240.0	4.1	21.7	Y
216	Approved	12/5/2017 - 10/31/2022	1.7 - 350.0	4.3	23.2	Y
217	Approved	12/5/2017 - 10/31/2022	1.7 - 540.0	7.9	60.4	N
218	Approved	12/5/2017 - 10/31/2022	1.7 - 130.0	4.3	20.2	Y
219	Approved	12/5/2017 - 10/31/2022	1.7 - 49.0	3.1	11.4	Y
220	Approved	12/5/2017 - 10/31/2022	1.7 - 49.0	2.8	8.0	Y
221	Approved	12/5/2017 - 10/31/2022	1.7 - 13.0	2.4	5.1	Y
222	Approved	12/5/2017 - 10/31/2022	1.7 - 170.0	3.4	16.3	Y
223	Approved	1/29/2018 - 10/31/2022	1.7 - 240.0	3.3	17.8	Y
224	Approved	12/5/2017 - 10/31/2022	1.7 - 350.0	3.3	15.2	Y
225	Approved	12/5/2017 - 10/31/2022	1.7 - 350.0	3.9	25.4	Y
226	Approved	12/5/2017 - 10/31/2022	1.7 - 350.0	2.8	11.4	Y
227	Approved	12/5/2017 - 10/31/2022	1.7 - 140.0	2.9	13.4	Y
228	Approved	12/5/2017 - 10/31/2022	1.7 - 79.0	2.5	7.6	Y
229	Approved	12/5/2017 - 10/31/2022	1.7 - 79.0	3.0	11.5	Y

TABLE 1. Continued

Station Number	Classification	Date Range	Range (FC/100mL)	Geomean (FC/100mL)	Est. 90 th Percentile (FC/100mL)	Meets Standard
230	Approved	12/5/2017 - 10/31/2022	1.7 - 350.0	4.2	24.5	Y
231	Approved	12/5/2017 - 10/31/2022	1.7 - 240.0	3.2	15.0	Y
232	Approved	12/5/2017 - 10/31/2022	1.7 - 79.0	3.5	13.7	Y
233	Approved	10/26/2017 - 10/31/2022	1.7 - 120.0	2.6	9.4	Y
292	Approved	9/4/2018 - 10/31/2022	1.7 - 70.0	4.1	21.4	Y
298	Approved	12/5/2017 - 10/31/2022	1.7 - 130.0	3.0	11.3	Y
309	Approved	8/16/2018 - 10/31/2022	1.7 - 240.0	3.5	21.3	Y
316	Approved	12/5/2017 - 10/31/2022	1.7 - 170.0	5.5	29.6	Y
317	Approved	12/5/2017 - 10/31/2022	1.7 - 23.0	2.3	5.2	Y
318	Approved	12/5/2017 - 10/31/2022	1.7 - 240.0	4.0	20.2	Y
319	Approved	12/5/2017 - 10/31/2022	1.7 - 240.0	3.3	17.3	Y
320	Approved	12/5/2017 - 10/31/2022	1.7 - 1600.0	3.0	18.0	Y
291	Conditionally Approved	10/17/2018 - 10/31/2022	1.7 - 170.0	3.2	15.5	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. Marine Water Quality Summary for Failing and Threatened Stations in Hood Canal 6

Station: 217

Classification: Approved

Method: SRS

Total Samples: 30 Range (FC/100 mL): 1.7 – 540.0 GeoMean (FC/100 mL): 7.9				Date Range: 12/05/2017 – 10/31/2022 E90th (FC/100 mL): 60.4 Meets Standard: N		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
12/05/2017	Regulatory	13:26	Flood	7	2	2.0
01/29/2018	Regulatory	13:08	Flood	8	0	17.0
05/09/2018	Regulatory	13:44	Ebb	16	6	13.0
07/19/2018	Regulatory	12:20	Ebb	19	22	13.0
09/04/2018	Regulatory	14:43	Ebb	20	25	1.7
11/19/2018	Regulatory	14:23	Ebb	8	18	1.7
02/28/2019	Regulatory	10:32	Flood	5	5	1.7
04/15/2019	Regulatory	14:38	Ebb	12	10	1.7
05/09/2019	Regulatory	10:01	Ebb	17	14	23.0
06/27/2019	Regulatory	14:48	Flood	18	24	1.7
08/07/2019	Regulatory	12:56	Ebb	20	25	4.5
10/02/2019	Regulatory	11:19	Ebb	12	21	2.0
12/04/2019	Regulatory	12:36	Ebb	10	27	4.5
01/21/2020	Regulatory	12:42	Flood	7	25	7.8
03/03/2020	Regulatory	11:26	Ebb	9	3	1.7
05/13/2020	Regulatory	11:12	Ebb	14	15	23.0
07/28/2020	Regulatory	11:19	Flood	21	22	13.0
09/08/2020	Regulatory	09:23	Flood	19	26	1.7
11/04/2020	Regulatory	10:09	Ebb	12	15	33.0
02/24/2021	Regulatory	10:46	Flood	8	8	1.7
04/19/2021	Regulatory	09:38	Flood	14	6	9.2
06/29/2021	Regulatory	08:28	Flood	23	19	540.0
08/30/2021	Regulatory	11:45	Flood	17	22	4.5
10/26/2021	Regulatory	10:16	Flood	11	9	79.0
12/08/2021	Regulatory	10:33	Ebb	9	9	13.0
03/23/2022	Regulatory	09:32	Ebb	11	8	170.0
05/23/2022	Regulatory	11:02	Flood	16	2	33.0
07/26/2022	Regulatory	16:01	Flood	26	21	1.7
09/20/2022	Regulatory	13:31	Flood	19	21	2.0
10/31/2022	Regulatory	10:38	Flood	12	22	70.0

TABLE 2. Continued

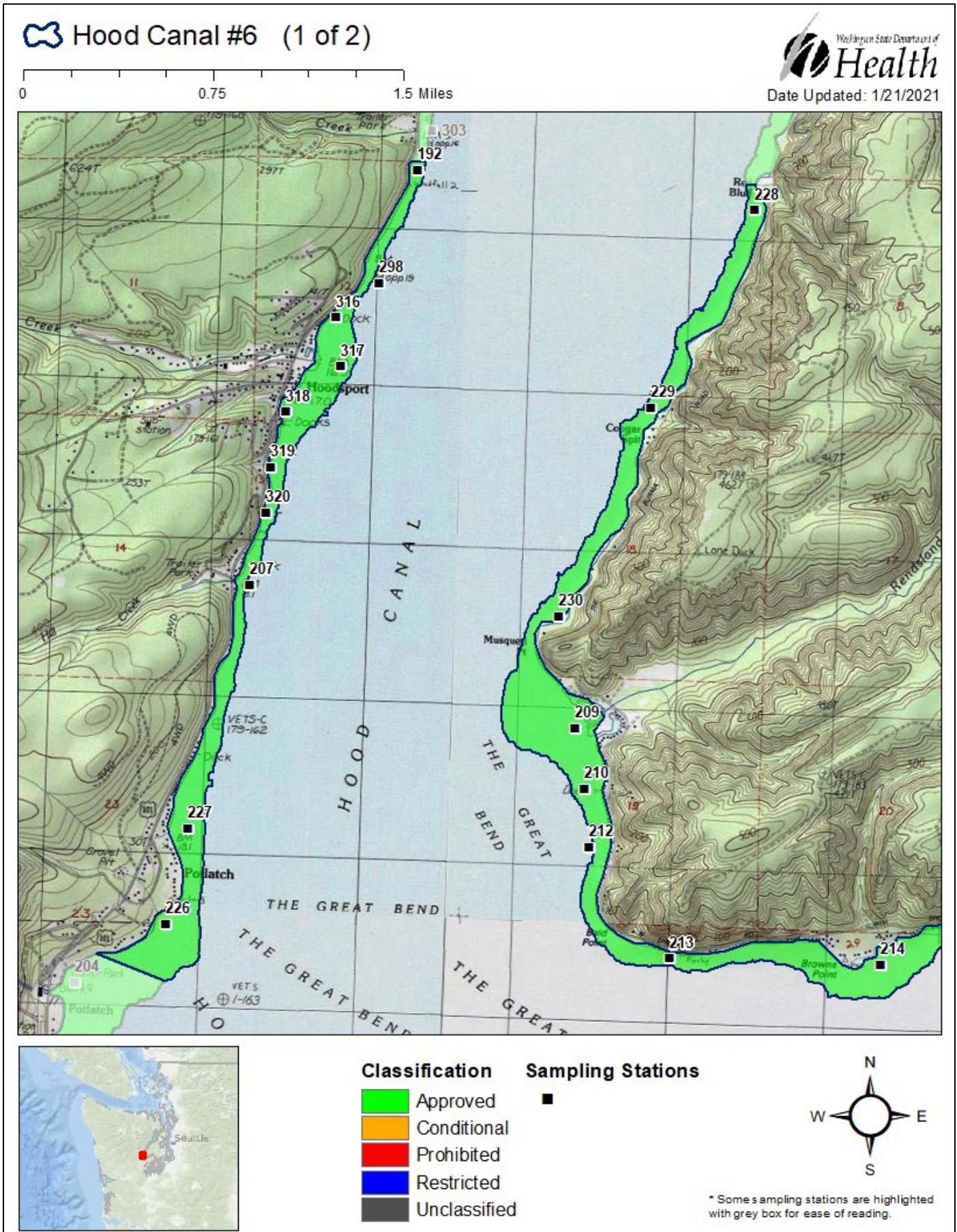
Station: 316

Classification: Approved

Method: SRS

Total Samples: 30 Range (FC/100 mL): 1.7 - 170.0 GeoMean (FC/100 mL): 5.5				Date Range: 12/05/2017 - 10/31/2022 E90th (FC/100 mL): 29.6 Meets Standard: Y		
Sample Date	Event Type	Time	Tide	SWT	Salinity	Fecal Coliform
12/05/2017	Regulatory	10:31	Ebb	7	10	4.5
01/29/2018	Regulatory	10:44	Flood	9	10	14.0
03/07/2018	Regulatory	10:12	Ebb	8	26	1.7
05/09/2018	Regulatory	10:59	Flood	13	22	6.8
07/19/2018	Regulatory	09:46	Flood	17	25	2.0
09/04/2018	Regulatory	11:48	Flood	18	23	1.7
11/19/2018	Regulatory	11:53	Flood	8	12	2.0
04/15/2019	Regulatory	12:07	Flood	11	23	1.7
05/09/2019	Regulatory	07:47	Flood	16	25	2.0
06/27/2019	Regulatory	12:26	Flood	17	23	1.7
08/07/2019	Regulatory	10:17	Flood	17	26	6.8
10/02/2019	Regulatory	09:03	Flood	11	22	7.8
12/04/2019	Regulatory	10:20	Flood	11	30	1.7
01/21/2020	Regulatory	10:01	Flood	8	30	4.5
03/03/2020	Regulatory	08:58	Flood	9	23	1.7
05/13/2020	Regulatory	09:02	Flood	12	28	17.0
07/28/2020	Regulatory	13:53	Ebb	21	24	1.7
09/08/2020	Regulatory	11:49	Ebb	18	26	1.7
11/04/2020	Regulatory	12:30	Ebb	12	26	9.3
02/24/2021	Regulatory	12:59	Flood	9	20	1.8
04/19/2021	Regulatory	11:57	Ebb	14	12	23.0
06/29/2021	Regulatory	10:40	Ebb	22	20	170.0
08/30/2021	Regulatory	14:02	Ebb	17	28	1.7
10/26/2021	Regulatory	12:33	Ebb	11	22	33.0
12/08/2021	Regulatory	12:46	Ebb	11	27	33.0
03/23/2022	Regulatory	12:06	Ebb	11	24	4.5
05/23/2022	Regulatory	12:54	Ebb	15	15	13.0
07/26/2022	Regulatory	18:07	Flood	24	24	1.7
09/20/2022	Regulatory	15:49	Flood	19	24	33.0
10/31/2022	Regulatory	13:17	Ebb	11	28	49.0

MAP 1. Hood Canal 6 Growing Area 1 of 2



MAP 2. Hood Canal 6 Growing Area 2 of 2

