

Hammersley Inlet

Annual Shellfish Growing Area Review



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Area: Hammersley Inlet

Year Ending: December 31, 2019

Classification: Approved, Conditionally Approved, Restricted

Activities in the Growing Area in 2019

The Approved and Restricted portions of the growing area were sampled a minimum of six times using the Systematic Random Sampling (SRS) method. The Conditionally Approved portion was sampled six times using the Adverse Pollution Condition (APC) method.

In response to a dye and microbial study at the Shelton WWTP in late 2017, a portion of the growing area was downgraded from Approved to Conditionally Approved. The Conditionally Approved portion is dependent on continuous monitoring of disinfection at the Shelton WWTP. A 21 day closure (13 days in 2019) of the Conditionally Approved area occurred in December. An emergency closure due to excessive rainfall also closed the Approved portion of Hammersley Inlet for five days at the same time the Conditionally Approved portion was closed.

A study using sentinel cages of oysters to track bioaccumulation of bacterial and viral indicators was completed in July. Results showed significant seasonal differences in male specific coliphage (MSC) concentrations in oysters, with elevated numbers in colder months and particularly after rainfall events under saturated soil conditions.

A water quality study of secondary effluent from the Shelton WWTP was also completed in July, which resulted in an upgrade of approximately 44 acres in Hammersley Inlet from Conditionally Approved to Approved.

Using National Estuary Program grant funds, the Mason County Health Department conducted enhanced OSS O&M evaluations in the growing area.

Analytical Results of Water Samples

Tables 1 and 2 summarize the results of the last 30 most recent samples collected from the area. This summary shows that all stations pass the NSSP water quality standard.

Change in Actual Pollution Sources that Impact the Growing Area

We currently have no information indicating that the area has 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

Tables 1 and 2 show that all stations meet the NSSP water quality standards for their classification.

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) Hammersley Inlet 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
96	Approved	2/9/2015 - 12/26/2019	1.7 - 7.8	2.0	3.4	Y
97	Approved	2/9/2015 - 12/26/2019	1.7 - 13.0	1.9	3.1	Y
98	Approved	2/9/2015 - 12/26/2019	1.7 - 4.5	2.0	3.1	Y
99	Approved	2/9/2015 - 12/26/2019	1.7 - 7.8	2.2	4.0	Y
101	Approved	2/9/2015 - 12/26/2019	1.7 - 17.0	2.3	4.9	Y
102	Approved	2/9/2015 - 12/26/2019	1.7 - 7.8	2.4	4.7	Y
103	Approved	2/9/2015 - 12/26/2019	1.7 - 6.8	2.2	3.9	Y
104	Approved	12/29/2015-12/26/2019	1.7 - 23.0	2.9	7.1	Y
111	Approved	2/9/2015 - 12/26/2019	1.7 - 11.0	2.5	5.6	Y
112	Approved	2/9/2015 - 12/26/2019	1.7 - 6.8	2.2	3.9	Y
113	Approved	4/8/2015 - 12/26/2019	1.7 - 13.0	2.6	5.9	Y
662	Approved	12/29/2015-12/26/2019	1.7 - 13.0	2.1	3.9	Y
100	Restricted	2/9/2015 - 12/26/2019	1.7 - 170.0	11.2	64.6	N

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 Marine Water Data (APC) Hammersley Inlet 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)	% of Samples >43 FC/100mL	Meets Standard
105	Conditionally Approved	12/29/2015-12/26/2019	1.7 - 49.0	2.9	3.33	Y
663	Conditionally Approved	12/29/2015-12/26/2019	1.7 - 11.0	2.5	0.00	Y
668	Conditionally Approved	2/3/2016 - 12/26/2019	1.7 - 13.0	2.3	0.00	Y
695	Conditionally Approved	12/29/2015-12/26/2019	1.7 - 33.0	2.4	0.00	Y
766	Conditionally Approved	12/29/2015-12/26/2019	1.7 - 23.0	2.5	0.00	Y

The standard for approved shellfish growing waters is 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.

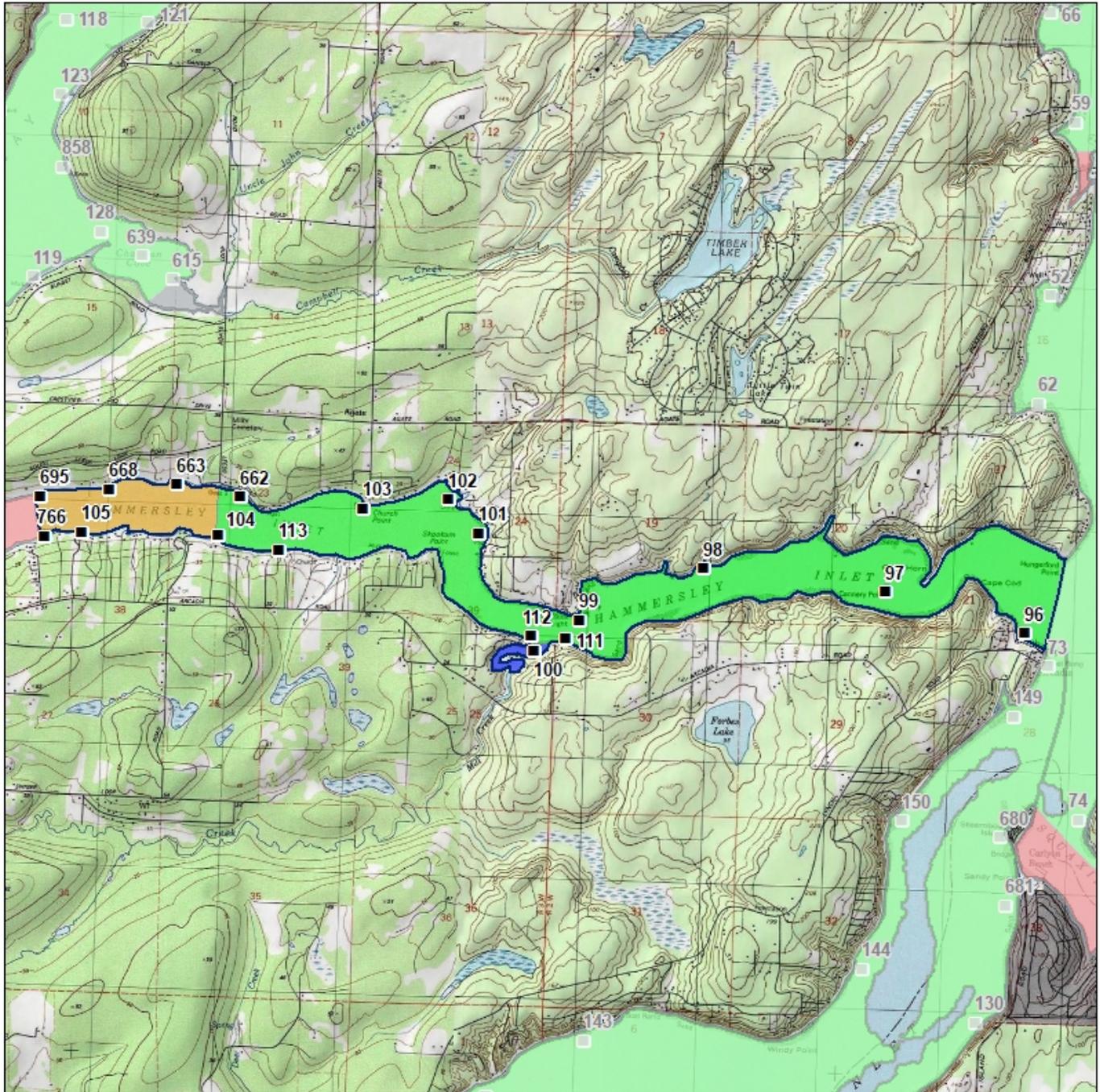
MAP 1. Hammersley Inlet Growing Area

 Hammersley Inlet

0 1 2 Miles

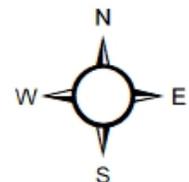


Date Updated: 12/13/2019



- Classification**
- Approved
 - Conditional
 - Prohibited
 - Restricted
 - Unclassified

Sampling Stations



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