

**Washington State Department of Health
Office of Environmental Health and Safety**

Annual Growing Area Review

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AREA: Grays Harbor
YEAR ENDING: December 31, 2015
CLASSIFICATION: Approved, Unclassified, Prohibited

Activities In The Growing Area in 2015

All parts of Grays Harbor shellfish growing area were sampled at least six times following the Systematic Random Sampling method. The central and south bays in the growing area were closed three times for a total of 30 days due to Chehalis River flooding; one event was concurrent with another emergency closure for 6.8 inches of rainfall on January 5. There were also four emergency closures of the central bay (with 4 extensions) totaling 42 days due to high fecal coliform bacteria levels discharged from Cosmo Specialty Fibers. Additionally, there was one closure of 9 days from a sewage spill from the City of Hoquiam that necessitated a product recall.

Analytical Results Of Water Samples

Table 1 summarizes the most recent 30 samples collected from all of the marine water stations. Sampling ceased at Station 210, the area is currently Unclassified. All Approved stations pass the water quality standard.

Station 36 is Threatened, and stations 27 and 34 are Concerned, but estimated 90th percentile values are lower than they were in 2014. All Threatened and Concerned stations are located in the Elk River area. Table 2 includes individual sample results for the Threatened station.

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

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Remarks and Recommendations

The classification of the central bay should be evaluated due to repeated elevated fecal coliform discharges from the Cosmo plant. A dye study of the Cosmo Specialty Fibers wastewater outfall is scheduled for April 2016.

Table 1
Summary of Marine Water Data (SRS)
Growing Area: Grays Harbor

Tides Included: ALL

Sampling Event Type: Regulatory

Maximum Number of Samples: 30

Station Number	Classification	Date Range	Range (FC/100 mL)	GeoMean (FC/100 mL)	E90th (FC/100 mL)	Meets Standard
13	Approved	1/4/2011 - 11/9/2015	1.7 - 33.0	4.9	16.2	Y
16	Approved	8/23/2010 - 11/9/2015	1.7 - 23.0	3.6	11.4	Y
18	Approved	8/23/2010 - 11/9/2015	1.7 - 17.0	2.5	5.9	Y
19	Approved	8/23/2010 - 11/9/2015	1.7 - 33.0	2.2	4.9	Y
22	Approved	1/4/2011 - 11/9/2015	1.7 - 33.0	2.9	8.3	Y
23	Approved	1/4/2011 - 11/9/2015	1.7 - 33.0	2.7	7.2	Y
24	Approved	10/11/2011 - 11/9/2015	1.7 - 23.0	3.1	9.0	Y
25	Approved	11/28/2011 - 11/9/2015	1.7 - 22.0	3.1	8.6	Y
26	Approved	10/11/2011 - 11/9/2015	1.7 - 33.0	3.6	10.6	Y
27	Approved	10/11/2011 - 11/9/2015	1.7 - 79.0	5.9	21.8	Y
28	Approved	8/23/2010 - 11/9/2015	1.7 - 33.0	3.3	9.6	Y
29	Approved	8/23/2010 - 11/9/2015	1.7 - 49.0	3.3	10.6	Y
30	Approved	11/28/2011 - 11/9/2015	1.7 - 23.0	3.0	7.0	Y
31	Approved	1/4/2011 - 11/9/2015	1.7 - 17.0	2.6	6.0	Y
32	Approved	8/23/2010 - 11/9/2015	1.7 - 17.0	2.0	3.9	Y
33	Approved	1/4/2011 - 11/9/2015	1.7 - 23.0	3.8	11.2	Y
34	Approved	10/11/2011 - 11/9/2015	1.7 - 49.0	6.2	25.2	Y
35	Approved	10/11/2011 - 11/9/2015	1.7 - 49.0	5.7	19.7	Y
36	Approved	9/12/2011 - 11/9/2015	1.7 - 79.0	7.5	31.7	Y
38	Approved	1/4/2011 - 11/9/2015	1.7 - 23.0	2.5	5.8	Y
188	Approved	1/4/2011 - 11/9/2015	1.7 - 13.0	2.2	4.5	Y
191	Approved	8/23/2010 - 11/9/2015	1.7 - 17.0	2.4	5.0	Y
192	Approved	8/23/2010 - 11/9/2015	1.7 - 7.8	2.1	3.9	Y
193	Approved	8/23/2010 - 11/9/2015	1.7 - 13.0	2.5	5.6	Y
194	Approved	10/6/2010 - 11/9/2015	1.7 - 70.0	3.1	10.6	Y
199	Approved	8/23/2010 - 11/9/2015	1.7 - 33.0	4.4	16.0	Y
202	Approved	8/23/2010 - 11/9/2015	1.7 - 17.0	2.0	3.7	Y
37	Unclassified	9/12/2011 - 11/9/2015	1.7 - 49.0	7.3	32.8	Y
209	Unclassified	8/23/2010 - 11/9/2015	1.7 - 23.0	2.9	8.1	Y
218	Unclassified	4/28/2014 - 11/9/2015	1.7 - 13.0	2.9	7.2	*N/A

Table 2

Station: 36

Classification: Approved

Method: SRS

Total Samples: 30

Date Range: 09/12/2011 - 11/09/2015

Range (FC/100 mL): 1.7 - 79.0

E90th (FC/100 mL): 31.7

GeoMean (FC/100 mL): 7.5

Meets Standard: Y

Sample	Event Type	Time	Tide	SWT	Salinity	Fecal
09/12/2011	Regulatory	12:09	Flood	16	29	7.8
10/11/2011	Regulatory	12:03	Flood	14	23	11.0
11/28/2011	Regulatory	12:43	Flood	9	18	33.0
12/19/2011	Regulatory	10:29	Ebb	6	22	2.0
01/12/2012	Regulatory	12:48	Flood	6	20	1.7
02/22/2012	Regulatory	13:12	Flood	8	19	7.8
03/08/2012	Regulatory	14:34	Ebb	9	10	1.7
04/04/2012	Regulatory	10:49	Flood	9	13	4.5
05/03/2012	Regulatory	10:54	Flood	11	15	2.0
06/19/2012	Regulatory	14:39	Flood	16	21	13.0
07/16/2012	Regulatory	11:08	Flood	16	23	7.8
08/02/2012	Regulatory	11:45	Flood	17	25	49.0
10/18/2012	Regulatory	11:52	Flood	12	23	79.0
01/10/2013	Regulatory	10:47	Flood	7	18	4.5
05/08/2013	Regulatory	13:02	Flood	14	25	4.0
07/22/2013	Regulatory	12:22	Flood	15	29	79.0
09/04/2013	Regulatory	11:29	Flood	19	26	14.0
11/04/2013	Regulatory	11:11	Flood	9	27	17.0
01/30/2014	Regulatory	12:37	Ebb	7	26	1.7
04/28/2014	Regulatory	11:56	Flood	11	17	4.5
06/24/2014	Regulatory	11:00	Flood	17	25	23.0
08/26/2014	Regulatory	12:23	Flood	19	22	2.0
10/06/2014	Regulatory	10:40	Flood	17	26	4.5
11/20/2014	Regulatory	10:54	Flood	7	24	4.5
03/04/2015	Regulatory	10:51	Flood	10	20	1.7
04/01/2015	Regulatory	10:56	Ebb	12	16	4.5
04/30/2015	Regulatory	10:42	Flood	14	22	13.0
07/15/2015	Regulatory	12:08	Flood	19	27	17.0
09/01/2015	Regulatory	13:02	Flood	16	27	13.0
11/09/2015	Regulatory	12:34	Ebb	12	17	6.8

Map 1 – Grays Harbor Growing Area Map

