

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

**Annual Growing Area Review**

**PREPARED BY:** Trevor Swanson  
**AREA:** Naselle River  
**YEAR ENDING:** December 31, 2015  
**CLASSIFICATION:** Approved, Unclassified

**Activities in the Growing Area in 2015**

The Naselle River Growing Area was sampled six times in accordance with National Shellfish Sanitation Program (NSSP) Systematic Random Sampling criteria. No additional activities have been documented in the growing area.

**Analytical Results of Water Samples**

Table 1 summarizes results of the 30 most recent samples collected from each of the sampling stations. Stations 152, 153, 158, 159, 160, and 161 are categorized as Concerned and stations 156, 157, 162, and 187 are categorized as Threatened in the program's Early Warning System. Tables 2 - 5 show individual results for Threatened stations. All stations in the Approved area meet NSSP water quality standards.

**Change in Actual Pollution Sources that Impact the Growing Area**

There is 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**

The area is correctly classified. If bacterial water quality continues to degrade, conditions affecting stations 156, 157, 162 and 187 should be examined.

**TABLE 1**

**Summary of Marine Water Data (SRS)  
Growing Area: Naselle River**

Sampling Event Type: Regulatory  
Maximum Number of Samples: 30

Tides Included: ALL

Station Number	Classification	Date Range	Range (FC/100 mL)	GeoMean (FC/100 mL)	E90th (FC/100 mL)	Meets Standard
147	Approved	2/2/2011 - 12/9/2015	1.7 - 17.0	2.3	4.8	Y
148	Approved	2/2/2011 - 12/9/2015	1.7 - 33.0	2.1	4.6	Y
149	Approved	2/2/2011 - 12/9/2015	1.7 - 130.0	3.3	14.1	Y
150	Approved	2/2/2011 - 12/9/2015	1.7 - 33.0	2.7	7.0	Y
151	Approved	2/2/2011 - 12/9/2015	1.7 - 23.0	2.3	5.6	Y
152	Approved	2/2/2011 - 12/9/2015	1.7 - 49.0	4.8	20.0	Y
153	Approved	2/2/2011 - 12/9/2015	1.7 - 79.0	4.6	21.4	Y
156	Approved	2/2/2011 - 12/9/2015	1.7 - 350.0	6.1	38.1	Y
157	Approved	2/2/2011 - 12/9/2015	1.7 - 540.0	6.2	36.4	Y
158	Approved	2/2/2011 - 12/9/2015	1.7 - 130.0	5.1	27.1	Y
159	Approved	2/2/2011 - 12/9/2015	1.7 - 170.0	4.8	23.0	Y
160	Approved	2/2/2011 - 12/9/2015	1.7 - 110.0	5.6	25.2	Y
161	Approved	2/2/2011 - 12/9/2015	1.7 - 79.0	5.8	25.7	Y
162	Approved	2/2/2011 - 12/9/2015	1.7 - 70.0	6.8	30.9	Y
187	Approved	2/2/2011 - 12/9/2015	1.7 - 110.0	6.1	33.5	Y
154	Unclassified	2/2/2011 - 12/9/2015	1.7 - 240.0	5.4	32.9	Y
155	Unclassified	2/2/2011 - 12/9/2015	1.7 - 540.0	7.1	54.0	N

The above table shows bacteriological results in relation to NSSP criteria. NSSP standards for approved shellfish growing waters are a fecal coliform geometric mean not greater than 14 organisms/100 mL and an estimated 90th percentile not greater than 43 organisms/100mL.

**TABLE 2**

**Marine Water Quality Summary  
Growing Area: Naselle River  
Station 156**

Classification: Approved  
Meets Standard: Y

Total Samples: 30

Sample Date	Event Type	Time	Tide	Surface Water Temperature	Salinity (ppt)	Fecal Coliform (FC/100 mL)
02/02/2011	Regulatory	11:44	Flood	8	11	1.7
04/14/2011	Regulatory	11:43	Ebb	12	5	4.0
06/15/2011	Regulatory	12:56	Flood	17	12	79.0
08/24/2011	Regulatory	11:48	Ebb	21	17	2.0
10/12/2011	Regulatory	11:59	Flood	15	22	17.0
12/13/2011	Regulatory	12:03	Flood	6	18	1.7
01/12/2012	Regulatory	12:47	Flood	7	14	7.8
03/06/2012	Regulatory	12:19	Flood	8	12	1.7
05/03/2012	Regulatory	12:33	Flood	13	10	1.7
07/31/2012	Regulatory	12:08	Flood	19	18	4.5
09/27/2012	Regulatory	11:23	Flood	17	22	1.7
10/31/2012	Regulatory	12:42	Flood	12	10	350.0
01/30/2013	Regulatory	12:36	Flood	7	9	4.5
03/12/2013	Regulatory	12:28	Flood	9	12	1.7
05/09/2013	Regulatory	12:46	Flood	16	20	6.8
08/20/2013	Regulatory	12:50	Flood	20	28	23.0
10/03/2013	Regulatory	11:43	Flood	14	18	22.0
01/16/2014	Regulatory	11:55	Flood	8	16	1.7
02/11/2014	Regulatory	12:13	Ebb	5	20	1.7
04/10/2014	Regulatory	11:40	Flood	13	14	1.7
06/25/2014	Regulatory	12:33	Flood	19	24	33.0
08/26/2014	Regulatory	13:30	Flood	21	28	1.7
10/08/2014	Regulatory	12:23	Flood	19	26	14.0
12/03/2014	Regulatory	11:37	Ebb	7	12	11.0
01/22/2015	Regulatory	12:12	Flood	9	10	33.0
04/28/2015	Regulatory	12:47	Ebb	14	24	2.0
05/14/2015	Regulatory	11:46	Flood	15	24	2.0
07/28/2015	Regulatory	11:49	Flood	21	30	6.8
09/10/2015	Regulatory	11:50	Flood	20	30	4.5
12/09/2015	Regulatory	11:36	Flood	11	5	49.0

**TABLE 3**

**Marine Water Quality Summary  
Growing Area: Naselle River  
Station 157**

Classification: Approved  
Meets Standard: Y

Total Samples: 30

Sample Date	Event Type	Time	Tide	Surface Water Temperature	Salinity (ppt)	Fecal Coliform (FC/100 mL)
02/02/2011	Regulatory	11:41	Flood	8	12	2.0
04/14/2011	Regulatory	11:38	Flood	11	5	1.7
06/15/2011	Regulatory	12:54	Flood	17	14	49.0
08/24/2011	Regulatory	11:46	Ebb	21	17	4.5
10/12/2011	Regulatory	11:56	Flood	15	24	7.8
12/13/2011	Regulatory	12:01	Flood	6	18	1.7
01/12/2012	Regulatory	12:43	Flood	7	15	1.7
03/06/2012	Regulatory	12:17	Flood	8	14	1.7
05/03/2012	Regulatory	12:31	Flood	13	10	7.8
07/31/2012	Regulatory	12:06	Flood	19	18	11.0
09/27/2012	Regulatory	11:21	Flood	17	25	2.0
10/31/2012	Regulatory	12:40	Flood	12	6	540.0
01/30/2013	Regulatory	12:35	Flood	7	5	33.0
03/12/2013	Regulatory	12:26	Flood	9	12	1.7
05/09/2013	Regulatory	12:45	Flood	16	20	4.5
08/20/2013	Regulatory	12:49	Flood	20	28	11.0
10/03/2013	Regulatory	11:41	Flood	14	18	17.0
01/16/2014	Regulatory	11:54	Flood	8	18	4.0
02/11/2014	Regulatory	12:11	Ebb	5	22	1.7
04/10/2014	Regulatory	11:38	Flood	13	14	1.7
06/25/2014	Regulatory	12:31	Flood	19	24	7.8
08/26/2014	Regulatory	13:29	Flood	21	28	4.5
10/08/2014	Regulatory	12:22	Flood	19	26	4.5
12/03/2014	Regulatory	11:35	Ebb	7	14	6.8
01/22/2015	Regulatory	12:10	Flood	9	12	7.8
04/28/2015	Regulatory	12:43	Ebb	14	24	2.0
05/14/2015	Regulatory	11:45	Flood	15	24	4.0
07/28/2015	Regulatory	11:47	Flood	21	30	33.0
09/10/2015	Regulatory	11:48	Flood	20	30	2.0
12/09/2015	Regulatory	11:34	Flood	11	5	79.0

**TABLE 4**

**Marine Water Quality Summary  
Growing Area: Naselle River  
Station 162**

Classification: Approved  
Meets Standard: Y

Total Samples: 30

Sample Date	Event Type	Time	Tide	Surface Water Temperature	Salinity (ppt)	Fecal Coliform (FC/100 mL)
02/02/2011	Regulatory	12:07	Flood	8	9	2.0
04/14/2011	Regulatory	12:14	Ebb	12	10	7.8
06/15/2011	Regulatory	13:19	Flood	16	12	33.0
08/24/2011	Regulatory	12:19	Ebb	21	16	4.5
10/12/2011	Regulatory	12:25	Flood	15	22	33.0
12/13/2011	Regulatory	12:29	Flood	5	16	2.0
01/12/2012	Regulatory	13:14	Flood	6	12	2.0
03/06/2012	Regulatory	12:39	Ebb	8	6	1.8
05/03/2012	Regulatory	12:55	Ebb	13	5	4.5
07/31/2012	Regulatory	12:30	Flood	19	18	17.0
09/27/2012	Regulatory	11:48	Flood	17	24	2.0
10/31/2012	Regulatory	13:04	Flood	12	14	70.0
01/30/2013	Regulatory	12:55	Flood	7	10	4.5
03/12/2013	Regulatory	12:49	Flood	9	12	2.0
05/09/2013	Regulatory	13:07	Flood	17	18	13.0
08/20/2013	Regulatory	13:09	Flood	20	28	22.0
10/03/2013	Regulatory	12:06	Flood	14	15	31.0
01/16/2014	Regulatory	12:14	Flood	8	15	1.7
02/11/2014	Regulatory	12:34	Ebb	5	20	1.7
04/10/2014	Regulatory	11:59	Ebb	13	12	1.7
06/25/2014	Regulatory	12:52	Flood	19	22	17.0
08/26/2014	Regulatory	13:50	Flood	21	27	2.0
10/08/2014	Regulatory	12:45	Flood	19	25	17.0
12/03/2014	Regulatory	12:00	Ebb	7	15	11.0
01/22/2015	Regulatory	12:35	Flood	9	10	13.0
04/28/2015	Regulatory	13:09	Ebb	15	24	33.0
05/14/2015	Regulatory	12:07	Ebb	16	18	4.5
07/28/2015	Regulatory	12:09	Flood	21	28	1.8
09/10/2015	Regulatory	12:11	Flood	20	30	7.8
12/09/2015	Regulatory	11:57	Flood	11	15	23.0

**TABLE 5**

**Marine Water Quality Summary  
Growing Area: Naselle River  
Station 187**

Classification: Approved  
Meets Standard: Y

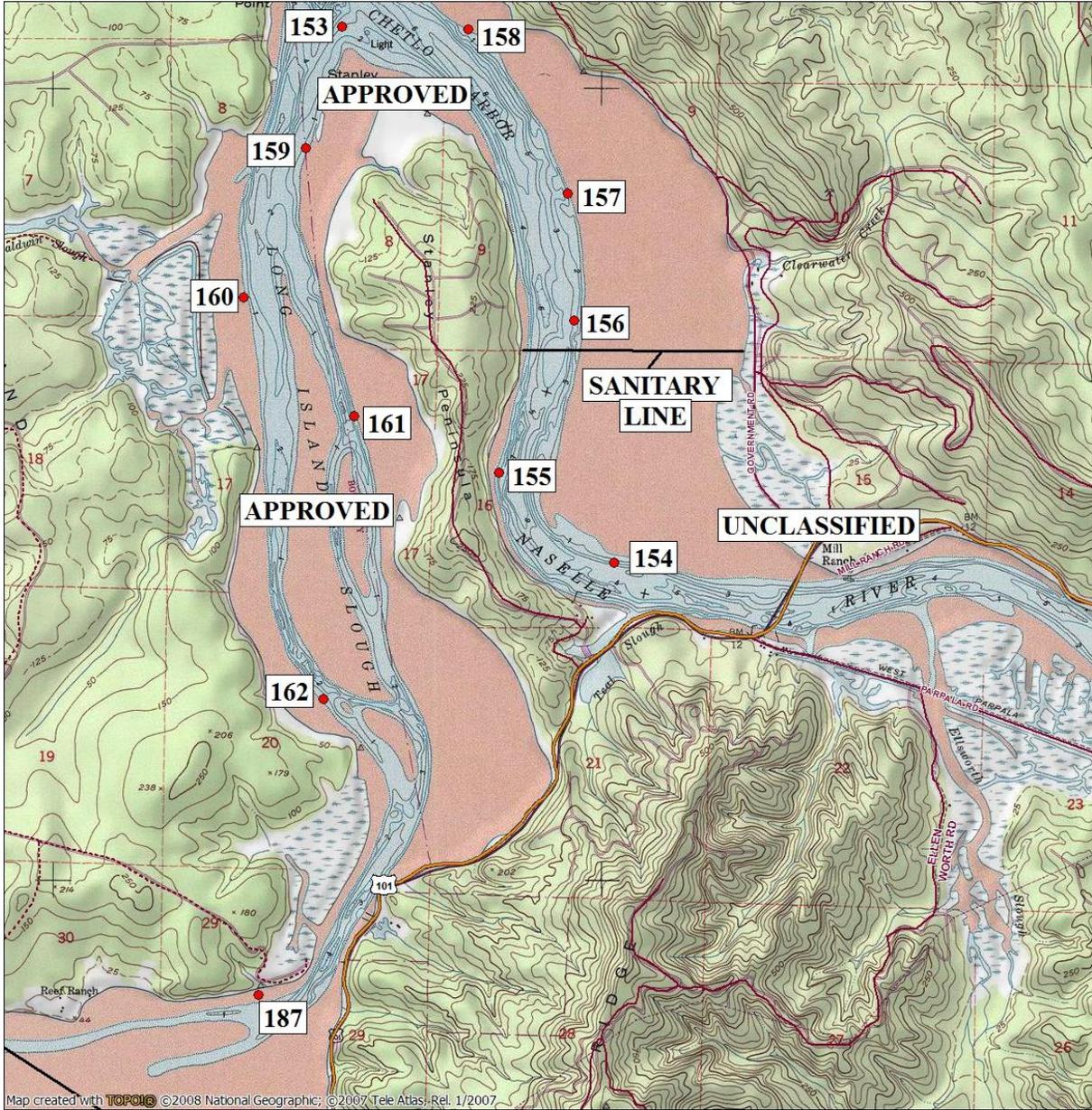
Total Samples: 30

Sample Date	Event Type	Time	Tide	Surface Water Temperature	Salinity (ppt)	Fecal Coliform (FC/100 mL)
02/02/2011	Regulatory	12:12	Flood	8	9	1.7
04/14/2011	Regulatory	12:22	Ebb	11	10	1.7
06/15/2011	Regulatory	13:26	Flood	16	14	79.0
08/24/2011	Regulatory	12:28	Ebb	21	17	4.5
10/12/2011	Regulatory	12:31	Flood	15	22	23.0
12/13/2011	Regulatory	12:35	Flood	5	19	1.7
01/12/2012	Regulatory	13:20	Flood	6	15	1.7
03/06/2012	Regulatory	12:45	Ebb	8	10	2.0
05/03/2012	Regulatory	13:02	Ebb	13	6	2.0
07/31/2012	Regulatory	12:36	Flood	19	18	33.0
09/27/2012	Regulatory	11:53	Flood	17	25	1.7
10/31/2012	Regulatory	13:08	Flood	12	14	110.0
01/30/2013	Regulatory	13:01	Flood	7	12	6.8
03/12/2013	Regulatory	12:55	Flood	9	15	1.7
05/09/2013	Regulatory	13:12	Flood	17	20	7.8
08/20/2013	Regulatory	13:14	Flood	21	26	22.0
10/03/2013	Regulatory	12:11	Flood	14	16	33.0
01/16/2014	Regulatory	12:19	Flood	8	15	1.7
02/11/2014	Regulatory	12:39	Ebb	5	20	1.7
04/10/2014	Regulatory	12:04	Ebb	13	12	1.7
06/25/2014	Regulatory	12:57	Flood	20	22	13.0
08/26/2014	Regulatory	13:55	Flood	22	27	6.8
10/08/2014	Regulatory	12:49	Flood	19	26	4.5
12/03/2014	Regulatory	12:05	Ebb	6	12	2.0
01/22/2015	Regulatory	12:39	Flood	9	10	13.0
04/28/2015	Regulatory	11:15	Ebb	15	20	1.7
05/14/2015	Regulatory	12:12	Ebb	16	22	7.8
07/28/2015	Regulatory	12:14	Flood	22	30	6.8
09/10/2015	Regulatory	12:15	Flood	20	28	17.0
12/09/2015	Regulatory	12:02	Flood	11	14	49.0

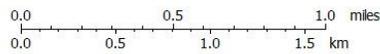


# MAP 2

NASELLE RIVER south



Map created with TOPO! © 2008 National Geographic; © 2007 Tele Atlas; Rel. 1/2007



TN/MN  
16°  
11/17/15