

# Washington State Department of Health Office of Shellfish and Water Protection

## Annual Growing Area Review

**PREPARED BY:** Tim Determan  
**AREA:** Stretch Island  
**YEAR ENDING:** December 31, 2011  
**CLASSIFICATION:** Approved, Unclassified

### Activities in the Growing Area in 2011

Samples were collected from the growing area six times during the year using the Systematic Random Sampling method. Marine water quality at Stations 671 and 672 and shoreline conditions meet NSSP standards and allows for the expansion of the growing area to the area around these marine water stations.

### Analytical Results Of Water Samples

Table 1 summarizes the results of all samples collected from the area. This summary shows that all stations in the area meet the NSSP water quality standard for Approved areas. Individual sampling results for Stations 671 and 672 are shown in Tables 2 and 3, respectively.

### 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

Table 1 shows that all stations meet the NSSP water quality standards. A minimum of 30 samples have been collected at Stations 671, and 672 and a shoreline survey revealed no Direct or Indirect impacts allowing the expansion of the growing area.

## TABLE 1

### SUMMARY OF MARINE WATER DATA (SRS)

Growing Area: **STRETCH ISLAND**

Classification: **Approved,Unclassified**

From **01/18/2007** To **12/21/2011**

### FECAL COLIFORM ORGANISMS/100 ML

<b>Station Number</b>	<b>Classification</b>	<b>Number of Samples</b>	<b>Range</b>	<b>Geometric Mean</b>	<b>Est. 90th Percentile</b>	<b>Meets Std.</b>
31	Approved	30	1.7 - 49.0	2.3	6.0	Yes
32	Approved	30	1.7 - 33.0	2.0	4.0	Yes
33	Approved	30	1.7 - 79.0	2.2	6.0	Yes
671	Approved	30	1.7 - 23.0	2.3	6.0	Yes
672	Approved	30	1.7 - 33.0	2.0	4.0	Yes
30	Unclassified	30	1.7 - 22.0	2.1	4.0	Yes

All tides information is presented

The standard for approved shellfish growing waters is fecal coliform geometric mean not greater than 14 organisms/100 ml and an estimate of the 90th percentile not greater than 43 organisms/100 ml. The above table shows bacteriological results in relation to program standards.

**TABLE 2**

**SUMMARY OF SHELLFISH GROWING AREAS  
WATER QUALITY STUDY RESULTS**

Growing Area: **STRETCH ISLAND**

Sampling Station Number: **671**

Classification: **Approved**

<b>Sample Date</b>	<b>Sample Time</b>	<b>Tide</b>	<b>Fcoli/100ml</b>	<b>Temperature</b>	<b>Salinity</b>
01/18/2007	10:57	Ebb	1.7	6	25
03/29/2007	11:04	Ebb	1.7	8	22
05/07/2007	11:17	Ebb	1.7	12	26
08/08/2007	11:40	Flood	1.7	16	27
10/03/2007	11:17	Flood	1.7	12	26
12/06/2007	11:09	Flood	23	8	10
02/21/2008	12:12	Ebb	1.7	6	26
03/13/2008	11:01	Ebb	1.7	8	23
05/29/2008	11:05	Flood	2	14	26
06/25/2008	11:54	Ebb	1.7	17	25
09/24/2008	11:59	Flood	7.8	15	25
12/18/2008	13:03	Ebb	1.7	9	25
01/22/2009	12:00	Flood	1.7	7	25
03/12/2009	11:20	Ebb	1.7	8	27
05/20/2009	12:06	Flood	1.7	16	22
07/15/2009	11:10	Flood	1.7	18	27
09/23/2009	11:50	Ebb	1.7		28
11/04/2009	12:12	Ebb	1.7	12	28
01/13/2010	11:44	Ebb	4.5	8	10
03/16/2010	11:33	Ebb	1.7	8	
05/17/2010	11:16	Ebb	6.8	16	23
07/06/2010	12:05	Flood	1.7	18	26
10/12/2010	11:45	Ebb	7.8	14	24
12/16/2010	11:34	Flood	14	8	2
02/23/2011	12:20	Ebb	1.7	8	23
04/11/2011	12:04	Ebb	1.7	10	23
06/06/2011	12:08	Ebb	1.7	15	25
08/10/2011	14:20	Flood	1.7	19	26
10/24/2011	11:59	Flood	1.7	14	30
12/21/2011	12:20	Flood	1.7	9	26

**Number of Samples: 30**

**Geometric Mean: 2.3**

**Range: 1.7 - 23**

**Estimated 90th Percentile: 6**

**TABLE 3****SUMMARY OF SHELLFISH GROWING AREAS  
WATER QUALITY STUDY RESULTS**Growing Area: **STRETCH ISLAND**Sampling Station Number: **672**Classification: **Approved**

<b>Sample Date</b>	<b>Sample Time</b>	<b>Tide</b>	<b>Fcoli/100ml</b>	<b>Temperature</b>	<b>Salinity</b>
01/18/2007	11:00	Ebb	1.8	6	24
03/29/2007	11:06	Ebb	1.7	8	23
05/07/2007	11:13	Ebb	1.7	12	26
08/08/2007	11:43	Flood	1.7	16	28
10/03/2007	11:20	Flood	1.7	12	26
12/06/2007	11:11	Flood	33	8	16
02/21/2008	12:14	Ebb	1.7	6	26
03/13/2008	11:04	Ebb	1.7	8	24
05/29/2008	11:07	Flood	1.7	14	26
06/25/2008	11:59	Ebb	1.7	17	25
09/24/2008	12:01	Flood	1.7	15	25
12/18/2008	13:06	Ebb	2	9	28
01/22/2009	12:04	Flood	1.7	7	25
03/12/2009	11:23	Ebb	1.7	8	27
05/20/2009	12:09	Flood	1.7	16	21
07/15/2009	11:08	Flood	1.7	18	27
09/23/2009	11:52	Ebb	1.7		28
11/04/2009	12:16	Ebb	1.7	12	28
01/13/2010	11:47	Ebb	4.5	8	17
03/16/2010	11:36	Ebb	2	8	
05/17/2010	11:19	Ebb	1.7	16	25
07/06/2010	12:09	Flood	1.7	18	24
10/12/2010	11:46	Ebb	4.5	14	24
12/16/2010	11:37	Flood	4.5	8	10
02/23/2011	12:23	Ebb	1.7	8	24
04/11/2011	12:07	Ebb	1.7	10	24
06/06/2011	12:10	Ebb	1.7	15	24
08/10/2011	14:23	Flood	1.7	19	26
10/24/2011	12:01	Flood	1.7	14	30
12/21/2011	12:21	Flood	1.7	8	25

**Number of Samples: 30****Geometric Mean: 2.0****Range: 1.7 - 33****Estimated 90th Percentile: 4**

MAP 1



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