



**GROWING AREA WH**  
**Spurwink River Area**  
**Scarborough and Cape Elizabeth**  
**ANNUAL REVIEW for 2009**  
**Report Date: 01/31/2012**  
**Eric Sroka**

**APPROVAL**

Division Director:

Kohl Kanwit

A handwritten signature in blue ink, appearing to read "K. Kanwit", written over a light blue rectangular background.

1/31/2012

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Print name

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signature

Date: \_\_\_\_\_



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Figure 1. Growing Area WH, with Active Sampling Stations

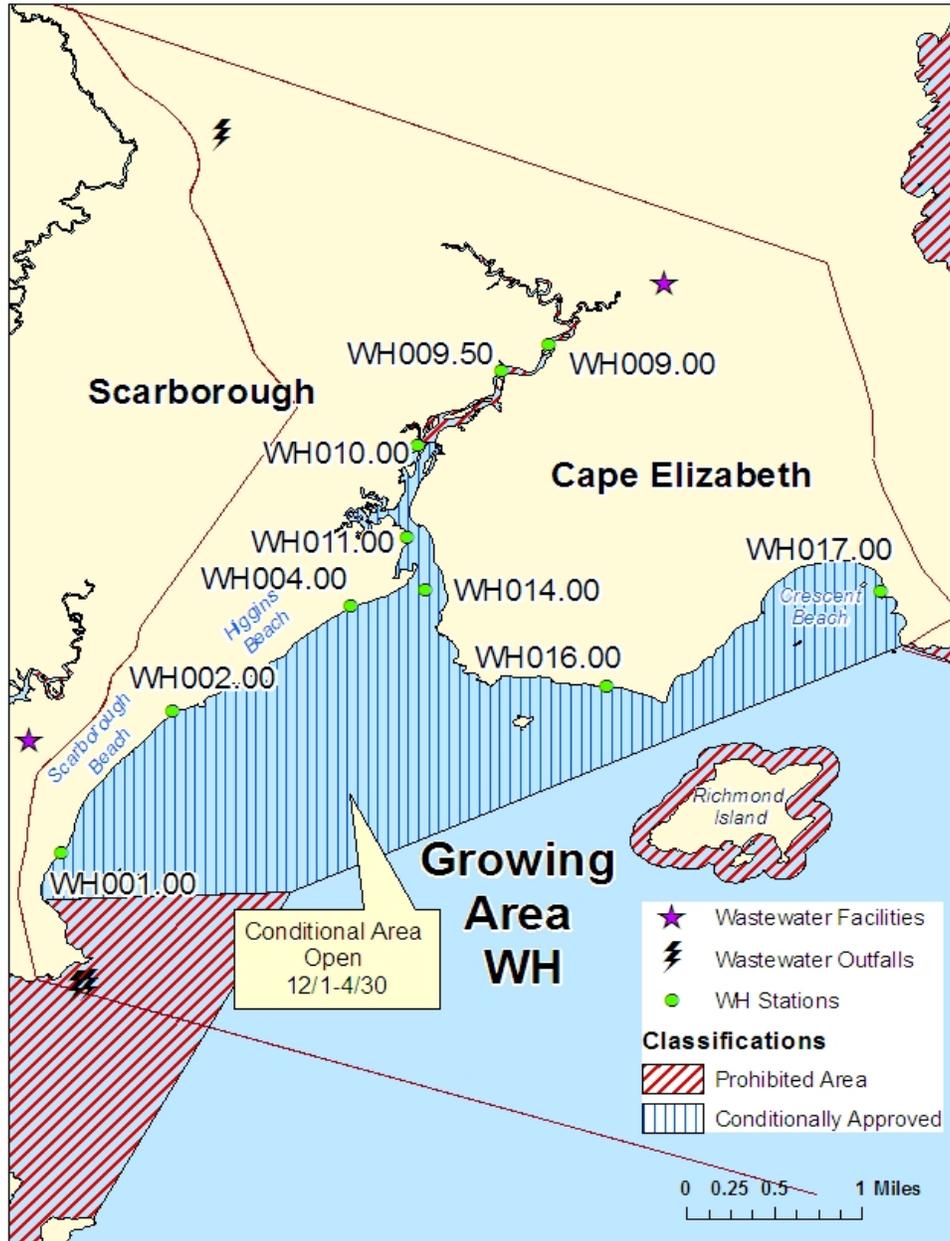


# Department of Marine Resources

Growing Area WH, with active water sampling stations



1/20/11





## Executive Summary

This is an annual report for growing area WH written in compliance with the requirements of the 2007 Model Ordinance and the National Shellfish Sanitation Program. The next triennial review is due in 2012 and the next sanitary survey will be due in 2021.

Growing Area WH includes the shores, flats and waters of the towns of Scarborough and Cape Elizabeth and is located between Prouts Neck, Scarborough and McKenney Point, Cape Elizabeth. Sources of pollution in the area include the Scarborough Sanitary District outfall which is located 800 feet from the southeast end of Prouts Neck, two mooring fields located in Cape Elizabeth between Crescent Beach and Kettle Cove, one malfunctioning septic system, a horse and manure pile in Scarborough and horse trails and horses on the beach on the Cape Elizabeth shore of the Spurwink River and along the beach shore before Crescent Beach.

On January 6, 2009, Area No. 12, Spurwink River, Prouts Neck, Cape Elizabeth (Old Orchard Beach, Scarborough, Cape Elizabeth) was amended to increase the size of the prohibited area around the Scarborough Sanitary Districts outfall due to a review of the prohibited area size calculation using the NSSP approved dilution calculation in order to adequately protect public health. Area No. 12 was amended again on May 22, 2009 after the shoreline survey to reclassify the Spurwink River and surrounding area from restricted and conditionally approved to prohibited due to the presence of five malfunctioning septic systems and horseback riding on the shores and beaches.

## Growing Area Description

Growing Area WH includes the shores, flats and waters of the towns of Scarborough and Cape Elizabeth and is located between Prouts Neck, Scarborough and McKenney Point, Cape Elizabeth (Figure 1). The upland boundary has been defined as lying inside a line from the middle of the south shore of Prouts Neck, Scarborough, extending southeast offshore to the limits of U.S. jurisdiction; the extending north to the intersection of Black Point Road and Beach Road (Scarborough), then north on Black Point Road to Spurwink Road, then north to the intersection of Pleasant Hill Road and Indian Woods Road, then north on Pleasant Hill Road to Route 1, then east to the intersection of Ocean House Road (Cape Elizabeth) and Fowler Road, then south down Ocean House Road to Two Lights Road, then east down Two Lights Road to McKenney Point Road, then east on McKenney Point Road to McKenney Point, Cape Elizabeth, extending south offshore to the limits of U.S. jurisdiction. The growing area has long stretches of public sandy beaches, an island preserve (Richmond Island) that is accessible on foot at low tide, and a stretch of tidal river (Spurwink River) which is less than 5 miles long and a border between Scarborough and Cape Elizabeth.

The towns of Scarborough and Cape Elizabeth are located in Cumberland County, approximately 10 miles from the nearest major city of Portland, Maine. Coastal portions of the



towns in area WH include Scarborough Beach and Higgins Beach in the town of Scarborough, and Crescent Beach in Cape Elizabeth.

The shoreline is typical of this part of Maine, with rockbound points and shoreline separating shallow coves and a harbor (Richmond Island Harbor). The muddy and gravel bottoms in these coves frequently provide excellent habitat for soft shell clams and mussels. Within Area WH, the coves which support significant populations of soft shell clams are the Spurwink River and Higgins Creek. Scarborough Beach, Higgins Beach and Crescent Beach have surf clams offshore. Fresh water influence comes from rainfall and two upland streams; Willow Brook and Pollack Creek. The Spurwink River is a tidal embayment.

The Scarborough Sanitary District outfall is located 800 feet from the southeast end of Prouts Neck. Non-point pollution comes from the increase in shore usage during the summer months and from wildlife in the tidal marshland at the head of the Spurwink River. The Spurwink River has no significant fresh water source and is sandy and shallow. There are two mooring fields located in Cape Elizabeth between Crescent Beach and Kettle Cove. The east side of the Spurwink River and its associated uplands lie within Cape Elizabeth's Town Farm District, which is intended to recognize and protect the special nature of the area representing historic, cultural, scenic, natural, and open space qualities. The Rachel Carson National Wildlife Refuge includes 520 acres of scenic wildlife refuge near the Spurwink River. There is no aquaculture or wet storage activities in the area.

### **Current Classification(s)**

Shellfish growing area WH currently has areas classified as:

**Conditionally Approved:** total of 8 stations

Area No. 12, Scarborough River, Higgins Beach, Spurwink River and Crescent Beach, (Scarborough and Cape Elizabeth), seasonal based on horses using the beaches and river, WH 1, 2, 4, 10, 11, 14, 16 and 17

**Prohibited:** total of 2 stations

Area No. 12, upper Spurwink River, Scarborough and Cape Elizabeth, due to a horse farm on the marsh and a malfunctioning septic system, WH 9 and 9.5. Richmond Island due to lack of shoreline survey and no water quality data.

Please visit the DMR website to view legal notices:

[http://www.maine.gov/dmr/rm/public\\_health/closures/closedarea.htm#H](http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm#H)

### **Activity during Review Period**

**Area No. 12**



January 6, 2009; Area No. 12, Spurwink River, Prouts Neck, Cape Elizabeth (Saco, Scarborough, and Cape Elizabeth) was amended to increase the size of the prohibited area around the Scarborough Sanitary District's outfall due to a review of the prohibited area size calculation using the NSSP approved dilution calculation in order to adequately protect public health.

May 22, 2009; Area No. 12, Spurwink River, Prouts Neck, Cape Elizabeth (Old Orchard Beach, Scarborough, Cape Elizabeth) was amended to reclassify the Spurwink River and surrounding area from restricted and conditionally approved to prohibited due to the presence of five malfunctioning septic systems and horseback riding on the shores and beaches.

November 30, 2009; Area No. 12, Spurwink River, Prouts Neck, Cape Elizabeth (Old Orchard Beach, Scarborough, Cape Elizabeth) was amended to reclassify the lower portion of the Spurwink River and vicinity (Scarborough and Cape Elizabeth) from prohibited to conditionally approved based on season, due to the repair of malfunctioning septic systems and water quality meeting the approved standard during the open status. This legal notice also closed Richmond Island due to the lack of a shoreline survey and no water quality data.

### **Current Management Plan(s) for Conditional Area(s)**

There is one conditionally managed area in growing area WH, the Spurwink River area, Scarborough and Cape Elizabeth. It is a seasonal area (open December 1<sup>st</sup> to April 30<sup>th</sup>), Stations WH 1, 2, 4, 10, 11, 14, 16 and 17. The management plan for the WH conditional area can be found in DMR's central files.

### **Current Annual Review of Management Plan(s)**

In 2009, part of the seasonal conditional area was closed due to the presence of five malfunctioning septic systems (May 22, 2009). On November 30, 2009, the area was reopened following the repair of the malfunctioning septic systems. At this time water quality data was reviewed. Prior to May 22, 2009 the closed period extended from June 1 to November 30. As a result of the data review the open period was shortened from six months to five months; the area was placed in the closed status from May 1 through November 30. A complete annual review can be found in Appendix A.

### **Water Quality Review and Discussion**

All conditionally approved sampling stations were sampled randomly at least six times in the open status, in accordance with NSSP guidelines (Table 1). Restricted stations were collected twice in the open status before being downgraded to prohibited (Table 1).



**Table 1. 2009 Sampling Effort, Growing Area WH**

Station	Class	Random		Total	Comments
		Closed	Open		
WH001.00	CA	4	6	10	
WH002.00	CA	4	6	10	
WH004.00	CA		6	6	
	P	4		4	
WH009.00	P	4		4	
	R		2	2	
WH009.50	P	4		4	
	R		2	2	
WH010.00	CA		6	6	
	P	4		4	
WH011.00	CA		6	6	
	P	4		4	
WH014.00	CA		6	6	
	P	4		4	
WH016.00	CA		4	4	
	P	4		4	
WH017.00	CA	4	6	10	

The individual fecal coliform scores for the two prohibited stations in WH remain above the approved standard (Table 2).

**Table 2. Geomean and P90 Scores, Growing Area WH Prohibited Stations, 2005-2009**

Station	Class	Count	MFCCount	GM	SDV	MAX	P90	Appd_Std	Min_Date
WH009.00	P	30	21	8.3	0.57	120	46.1	35	11/28/2005
WH009.50	P	30	21	9	0.53	200	44	35	11/28/2005

All conditionally approved stations in WH met the NSSP classification during the open status (Table 3).

**Table 3. Geomean and P90 Scores, Growing Area WH Conditional Area, Open Status, 2003-2009**

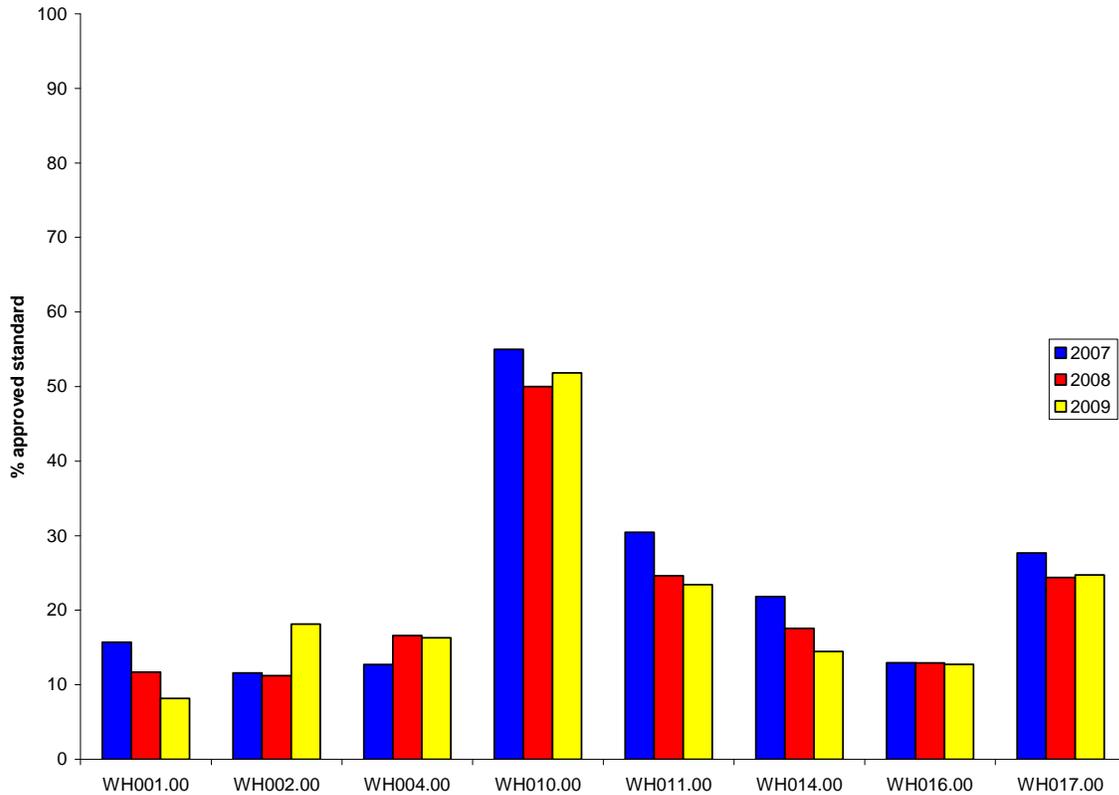
Station	Class	Count	MFCCount	GM	SDV	MAX	P90	Appd_Std	Min_Date
WH001.00	CA	30	16	2.3	0.1	3.6	3.1	38	1/27/2004
WH002.00	CA	30	16	3.1	0.26	36	6.9	38	1/27/2004
WH004.00	CA	30	16	3	0.24	12	6.2	38	1/27/2004
WH010.00	CA	30	16	4.3	0.51	240	20	38	1/27/2004
WH011.00	CA	30	16	3.3	0.33	23	8.9	38	1/27/2004
WH014.00	CA	30	16	2.7	0.23	21	5.5	38	1/27/2004
WH016.00	CA	30	13	2.7	0.2	23	5.1	40	3/5/2003
WH017.00	CA	30	16	3.1	0.36	93	9.4	38	1/27/2004

All conditionally approved stations remain below the approved standard (Figure 2). Stations WH 2, 10, and 17 increased slightly over 2008, but all are under the approved limit. WH 10 has



the highest P90 scores, most likely due to its being further up the Spurwink River than the other conditionally approved stations.

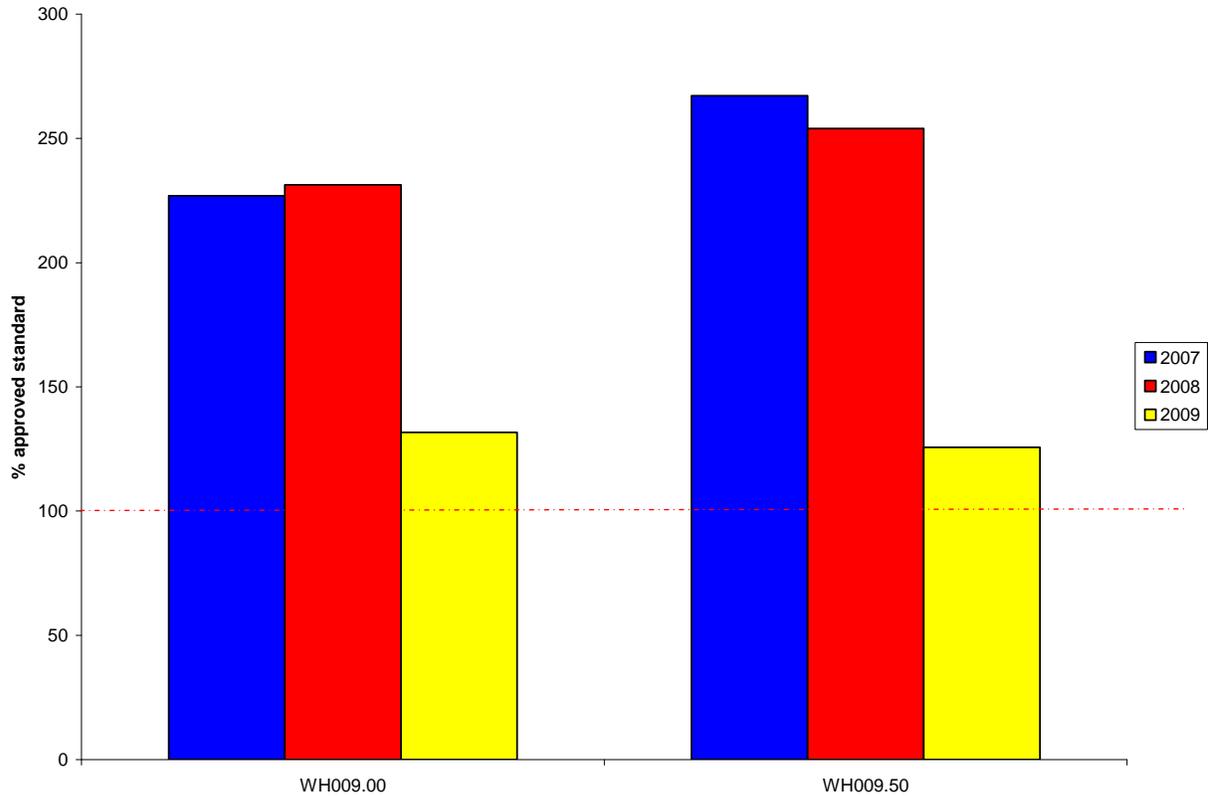
**Figure 2. Area WH P90 Scores for Conditionally Approved Stations (expressed as a percent of the approved standard), Open Status, 2007-2009**



Individual fecal coliform scores at the two Prohibited stations in WH have vastly improved over the previous years (Figure 4). Though they still exceed the approved limit, the fact that 2009 was an extremely wet year and both stations showed significant decreases is a positive sign.



**Figure 3. Area WH P90 Scores for Prohibited Stations (expressed as a percent of the approved standard), 2007-2009**



### Shoreline Survey Activity

On May 8, 2009, 34 properties were surveyed by DEP and DMR in the Spurwink River watershed. A report of one malfunctioning septic system was sent to the Town of Scarborough CEO on May 11, 2009.

Two teams of two staff members from DMR and DEP surveyed 39 properties in the Spurwink River in the town of Scarborough on May 13, 2009. A report of five (5) suspected malfunctioning septic systems was sent to the CEO on May 13, 2009. The Town reported that two were corrected; one was investigated by a sewage site evaluator who found no issues with the system and one property was investigated by a site evaluator who found no issues with the system but DMR, DEP and the CEO went to visit the property again on September 23, 2009. There remains some debate on whether there is a malfunctioning septic system and no



resolution has been reported to the DMR; this is a potential/indirect problem which is not impacting the river.

The survey continued on May 14, 2009 when the DMR surveyed 8 properties including Crescent Beach and Kettle Cove. The DEP joined the DMR again on May 15, 2009 when they surveyed 28 properties along the Cape Elizabeth shore of the Spurwink River continuing south and east to the property boundary with Crescent Beach State Park.

On May 15, 2009 the DMR and DEP surveyed 28 properties along the Cape Elizabeth shore of the Spurwink River continuing south and east to the property boundary with Crescent Beach State Park. Properties were surveyed that abut the upper Crescent Beach State Park area between the Park and Kettle Cove Road. No septic problems were found during the survey.

**Table 4. Identified Domestic Waste Actual (A) and Potential (P), Direct (D) and Indirect (I) Problems, Growing Area WH**

Town	Pollution ID	A or P	D or I	Pollution Description	Survey Date
Scarborough	SCARB PS 1	A	I	Malfunctioning septic system; <b>confirmed fixed in 2009</b>	05.08.09
	SCARB PS 2	A	I	Hole in septic pipe above ground; <b>confirmed fixed in August 2009</b>	05.13.09
	SCARB PS 3	A	I	Malfunctioning septic system; <b>fixed in July 2009</b>	05.13.09
	SCARB PS 4	P	I	Malfunctioning septic system <b>Confirmed nonmalfunction by LPI 2009</b>	05.13.09

### Aquaculture/Wet Storage Activity

There is no aquaculture or wet storage activity in growing area WH.

### Classification Changes Required and Requested

No classification changes are required or proposed at this time.

### Summary

At the end of 2009, all classifications are deemed proper given the data presented in this report. Water quality in the conditional area (open status) has continued to remain within the approved NSSP classification. The improvement at the prohibited stations is encouraging. DMR staff will follow up on known malfunctioning septic systems, which may help to reduce pollution entering the upper river.





## Appendix A. Annual Review of Conditional Area Management Plan

### Spurwink River Conditional Areas, C 12, Growing Area WH

#### Scope

One section of Growing Area WH is conditionally approved, based on season. This area is currently open from December 1 through April 30.

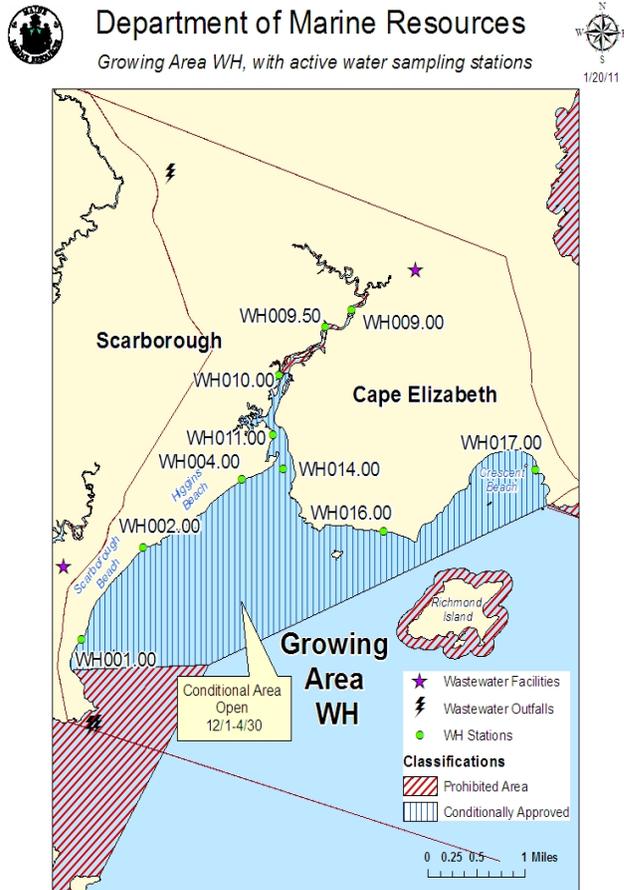
A portion of Growing Area WH is conditionally approved due to seasonal variability of water quality, possibly due to an increase in shore usage during the summer months. The Spurwink River, monitored by stations WH 10.0, 11.0, and 14.0, was classified conditionally approved based on seasonal variation in water quality in 1998. DMR evaluated the Spurwink River data in December 1998, and made the assessment that there is greater variation in water quality during the summer months. Many of the homes along this shore are occupied year round, as well as nearby seasonal rental cottages. There are designated parking areas for summer residents, and there is an increase in shore usage during June, July and August. The area has met approved standards during open status from December 1<sup>st</sup> to May 31<sup>st</sup>.

The size of the conditionally approved area increased substantially in August 2006. The area monitored by stations WH 1.0, 2.0, 4.0, 16.0 and 17.0, located along the beaches in Scarborough and Cape Elizabeth was classified approved prior to August 10, 2006. The area was reclassified to conditionally approved due to lack of fecal coliform data from May 1<sup>st</sup> to November 30<sup>th</sup>. The entire area was conditionally approved based on an open season of December 1 to April 30.

In 2009, a part of the seasonal conditional area was closed due to the presence of five malfunctioning septic systems (May 22, 2009). On November 30, 2009, the area was reopened following the repair of the malfunctioning septic systems. At this time water quality data was reviewed. Prior to May 22, 2009 the closed period extended from June 1 to November 30. As a result of the data review the open period was shortened from six months to five months; the area was placed in the closed status from May 1 through November 30.



Figure 4. Growing Area WH Seasonal Conditional Area



### Compliance with management plan

In 2009, the conditional area closed on May 1 and reopened on December 1. The conditional area data was reviewed in October 2009, prior to the reopening date and all of the conditional stations continued to meet approved standards during the open season

### Adequacy of reporting and cooperation of involved persons

An annual data review is required prior to the area’s seasonal reopening on December 1<sup>st</sup>. In 2009, the annual data review was completed on October 13<sup>th</sup>. As a result of the water quality review the open period was shortened from six months to five months time period. It is now open from December 1 through April 30.



### Compliance with approved growing area criteria

The annual review of the water quality for all active stations in this conditional area met approved standards in the open status (Table 1).

**Table 1. Geomean and P90 Calculations for Conditional Stations, Open status**

Station	Class	Count	MFCCount	GM	SDV	MAX	P90	Appd_Std	Min_Date
WH001.00	CA	30	16	2.3	0.1	3.6	3.1	38	1/27/2004
WH002.00	CA	30	16	3.1	0.26	36	6.9	38	1/27/2004
WH004.00	CA	30	16	3	0.24	12	6.2	38	1/27/2004
WH010.00	CA	30	16	4.3	0.51	240	20	38	1/27/2004
WH011.00	CA	30	16	3.3	0.33	23	8.9	38	1/27/2004
WH014.00	CA	30	16	2.7	0.23	21	5.5	38	1/27/2004
WH016.00	CA	30	13	2.7	0.2	23	5.1	40	3/5/2003
WH017.00	CA	30	16	3.1	0.36	93	9.4	38	1/27/2004

### Water sampling compliance history

All stations were collected 6 times when in the open status in 2009.

**Table 2. 2009 Growing Area WH Sampling Effort, Open Status**

Station	Class	Random		Total
		Closed	Open	
WH001.00	CA	4	6	10
WH002.00	CA	4	6	10
WH004.00	CA		6	6
	P	4		4
WH010.00	CA		6	6
	P	4		4
WH011.00	CA		6	6
	P	4		4
WH014.00	CA		6	6
	P	4		4
WH016.00	CA		4	4
	P	4		4
WH017.00	CA	4	6	10

### Analysis-Recommendations

No recommendations for changes to the current management plan or conditional area classification status are needed at this time.



## Appendix B. Key to Water Quality Table Headers.

Station = water quality monitoring station

Class = classification assigned to the station; prohibited (P), restricted (R), conditionally restricted (CR), conditionally approved (CA) and approved (A).

Count = the number of samples evaluated for classification, must be a minimum of 30.

MFCNT = the number of samples evaluated with the MTec method (included in the total Count column)

Geo\_Mean = means the antilog (base 10) of the arithmetic mean of the sample result logarithm (base 10).

SDV = standard deviation

Max = maximum score of the 30 data points in the count column

P90 = 90<sup>th</sup> percentile

APPD\_STD = the 90<sup>th</sup> percentile, at or below which the station would meet approved criteria in the absence of pollution sources or poisonous and deleterious substances.

RESTR\_STD = the 90<sup>th</sup> percentile, at or below which the station would meet restricted criteria.



**Appendix C. Growing Area WH 2009 Data**

Station	Date	Collector	Tide	Wind	Temp	Salin	Strat	Adv	Status	Class	MFCOL
WH001.00	1/12/2009	DAH	F	CL	6	32	R	W	O	CA	<2
	2/10/2009	MLP	HF	CL	0	31	R		O	CA	<2
	3/4/2009	EXT	F	NW	3	30	R		O	CA	<2
	4/21/2009	EXT	HE	E	7	30	R	P	O	CA	2
	5/11/2009	LSM	H	SW	10	30	R		O	CA	<2
	6/16/2009	AB	F	CL	18	26	R		C	CA	<2
	8/11/2009	EXT	F	NE	24	28	R		C	CA	<2
	9/28/2009	EXT	E	SW	15	31	R		C	CA	<2
	11/3/2009	LSM	E	CL	11	31	R		C	CA	<2
	12/7/2009	EXT	F	CL	8	30	R		O	CA	<2
WH002.00	1/12/2009	DAH	F	CL	6	32	R		O	CA	36
	2/10/2009	MLP	HF	CL	0	32	R		O	CA	6
	3/4/2009	EXT	F	NW	2	31	R		O	CA	<2
	4/21/2009	EXT	HE	CL	7	30	R	P	O	CA	<2
	5/11/2009	LSM	H	S	10	30	R		O	CA	<2
	6/16/2009	AB	F	S	16	26	R		C	CA	<2
	8/11/2009	EXT	F	NE	23	28	R		C	CA	<2
	9/28/2009	EXT	E	CL	15	30	R		C	CA	6
	11/3/2009	LSM	E	CL	11	30	R		C	CA	<2
	12/7/2009	EXT	HF	CL	9	30	R		O	CA	4
WH004.00	1/12/2009	DAH	F	CL	6	32	R		O	CA	<2
	2/10/2009	MLP	HF	CL	0	32	R		O	CA	2
	3/4/2009	EXT	F	CL	2	31	R		O	CA	<2
	4/21/2009	EXT	HE	NE		30	R	P	O	CA	2
	5/11/2009	LSM	H	S	9	30	R		O	CA	<2
	6/16/2009	AB	F	S	17	26	R		C	P	<2
	8/11/2009	EXT	F	E	23	29	R		C	P	<2
	9/28/2009	EXT	HE	SW	16	31	R		C	P	<2
	11/3/2009	LSM	HE	CL	11	30	R		C	P	11
	12/7/2009	EXT	HF	CL	8	30	R		O	CA	<2
WH009.00	3/4/2009	EXT	HF	NW	1	4	R		O	R	2
	4/21/2009	EXT	E	CL		28	R	P	O	R	<2
	6/16/2009	AB	HF	CL	20	15	R		C	P	102
	8/11/2009	EXT	HF	CL	21	28	R		C	P	4
	9/28/2009	EXT	HE	CL	15	30	R		C	P	7.3
	11/3/2009	LSM	HE	CL	11	30	R		C	P	<2
WH009.50	3/4/2009	EXT	HF	NW	2	14	R	W	O	R	<2
	4/21/2009	EXT	E	CL		28	R	P	O	R	7.3
	6/16/2009	AB	HF	CL	19	28	R		C	P	82
	8/11/2009	EXT	HF	SE	21	26	R		C	P	8



Station	Date	Collector	Tide	Wind	Temp	Salin	Strat	Adv	Status	Class	MFCOL
	9/28/2009	EXT	HE	SW	15	30	R		C	P	8
	11/3/2009	LSM	HE	CL	11	30	R		C	P	4
WH010.00	1/12/2009	DAH	HF	CL	4	32	R	W	O	CA	4
	2/10/2009	MLP	H	CL	2	32	R	W	O	CA	<2
	3/4/2009	EXT	F	CL	3	30	R		O	CA	<2
	4/21/2009	EXT	E	CL		26	R	P	O	CA	11
	5/11/2009	LSM	H	SW	10	30	R		O	CA	<2
	6/16/2009	AB	F	S	17	28	R		C	P	<2
	8/11/2009	EXT	HF	E	21	28	R		C	P	2
	9/28/2009	EXT	HE	CL	15	31	R		C	P	4
	11/3/2009	LSM	HE	CL	12	30	R		C	P	<2
	12/7/2009	EXT	HF	CL	9	30	R		O	CA	<2
WH011.00	1/12/2009	DAH	F	CL	3	32	R		O	CA	2
	2/10/2009	MLP	H	CL	3	32	R		O	CA	<2
	3/4/2009	EXT	F	SW	2	30	R		O	CA	<2
	4/21/2009	EXT	E	CL		30	R	P	O	CA	22
	5/11/2009	LSM	H	SW	9	30	R		O	CA	46
	6/16/2009	AB	F	S	16	27	R		C	P	<2
	8/11/2009	EXT	HF	E	21	28	R		C	P	<2
	9/28/2009	EXT	E	CL	15	31	R		C	P	<2
	11/3/2009	LSM	HE	CL	12	30	R		C	P	4
	12/7/2009	EXT	HF	CL	9	30	R		O	CA	<2
WH014.00	1/12/2009	DAH	F	NW	5	32	R		O	CA	2
	2/10/2009	MLP	H	SW	2	31	R		O	CA	<2
	3/4/2009	EXT	F	NW	3	30	R		O	CA	<2
	4/21/2009	EXT	HE	CL		30	R	PW	O	CA	2
	5/11/2009	LSM	HE	SW	10	30	R		O	CA	<2
	6/16/2009	AB	F	S	18	26	R		C	P	<2
	8/11/2009	EXT	F	CL	21	30	R		C	P	4
	9/28/2009	EXT	E	SW	15	30	R		C	P	6
	11/3/2009	LSM	HE	CL	11	30	R		C	P	2
	12/7/2009	EXT	HF	CL	8	30	R		O	CA	<2
WH016.00	3/4/2009	EXT	F	CL	3	31	R		O	CA	<2
	3/24/2009	EXT	E	NE	3	31	R		O	CA	<2
	5/11/2009	LSM	HE	S	11	30	R		O	CA	<2
	6/16/2009	AB	HF	S	17	28	R		C	P	<2
	8/11/2009	EXT	HF	CL	21	29	R		C	P	<2
	9/28/2009	EXT	E	SW	15	31	R		C	P	2
	11/3/2009	LSM	E	CL	11	30	R		C	P	4
	12/7/2009	EXT	H	SW	8	30	R		O	CA	<2
WH017.00	1/12/2009	DAH	HF		5	32	R	W	O	CA	<2
	2/10/2009	MLP	H	SW	2	31	R		O	CA	<2



Station	Date	Collector	Tide	Wind	Temp	Salin	Strat	Adv	Status	Class	MFCOL
	3/4/2009	EXT	F	NW	2	30	R		O	CA	<2
	4/21/2009	EXT	E	SE		30	R	P	O	CA	5.5
	5/11/2009	LSM	HE	S	11	30	R		O	CA	<2
	6/16/2009	AB	HF	S	18	29	R		C	CA	5.5
	8/11/2009	EXT	H	CL	18	29	R		C	CA	4
	9/28/2009	EXT	E	SW	15	31	R		C	CA	<2
	11/3/2009	LSM	E	CL	11	30	R		C	CA	10
	12/7/2009	EXT	H	SW	8	30	R		O	CA	<2