



**GROWING AREA WH – Spurwink River**  
**Towns of Scarborough and Cape Elizabeth**  
**ANNUAL REVIEW for 2006**  
**Final Report Date: June 29, 2007**

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**APPROVAL**

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## Table of Contents

Executive Summary .....	5
Boundary Description .....	5
Current Classification(s) .....	5
Legal Notices .....	5
Changes During Review Period.....	6
Current Management Plan .....	6
Current Annual Review of Management Plan.....	6
Review of Water Quality .....	7
Shoreline Survey Activity.....	11
Aquaculture/Wet Storage Activity.....	11
Classification Changes Required .....	11
Discussion & Summary .....	11
Attachment A. Key to water quality table headers. ....	12
Appendix 1. Annual Review of Management Plan-Spurwink River.....	13
Table 1 Geomean and P90 Year Round.....	8
Table 2 Conditional Area Geomean and P90 - Open Status.....	8
Table 3 Sample Collection Results for 2006 .....	9

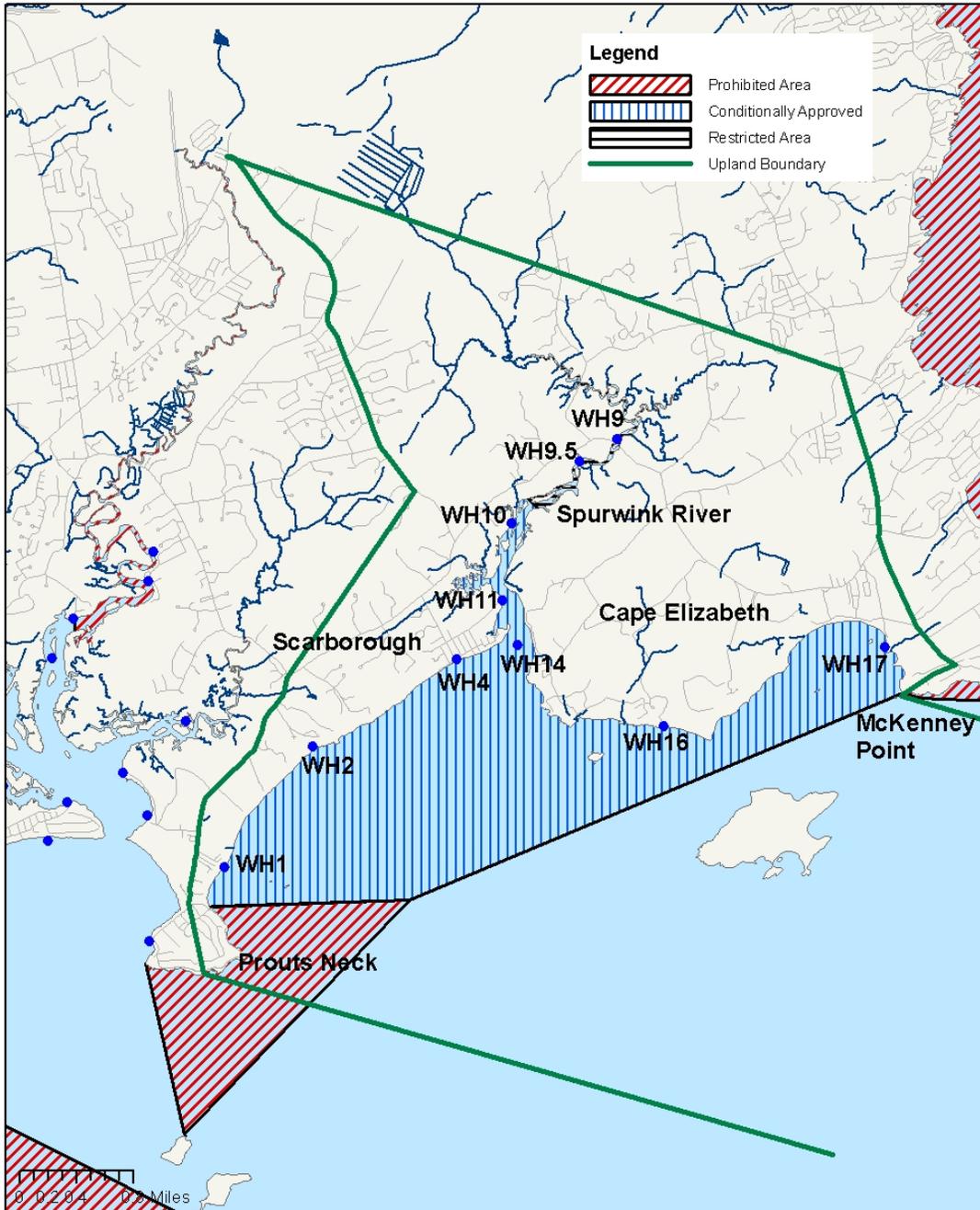


# Maine Department of Marine Resources

## Growing Area WH



1/23/07





## Executive Summary

Growing Area WH is the area between Prouts Neck, Scarborough and McKenney Point, Cape Elizabeth. A complete description can be found below. No stations were created or deactivated in 2006, and there are no overboard discharges in growing area WH. No changes in classifications are required at this time.

## Boundary Description

Growing Area WH lies inside a line from the middle of the south shore of Prouts Neck, Scarborough, extending southeast offshore following the shellfish management zone line, and also, extending north to the intersection of Black Point Road and Beach Road, 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 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, then south following the shellfish management zone line offshore. Area WH includes Scarborough Beach, Higgins Beach, and the west side of the Spurwink River in Scarborough, and it includes the east side of the Spurwink River, Richmond Island Harbor and Crescent Beach in Cape Elizabeth.

## Current Classification(s)

Shellfish growing area WH currently has areas classified as:

Conditionally Approved:

- Scarborough Beach and Spurwink River, Scarborough (6 stations)
- Crescent Beach, Cape Elizabeth (2 stations)

Restricted:

- Spurwink River, Scarborough (2 stations)

Prohibited:

- Prouts Neck, Scarborough

The prohibited area encompasses a portion WG as well as WH. It is prohibited due to an outfall from the Scarborough Wastewater Treatment Plant. The prohibited area was based on a dilution calculation and is discussed on page three in the sanitary survey report for growing area WH, which is located in the central files.

## Legal Notices

Visit the DMR website to view Legal Notice:



DMR Regulation 95.03H, Closed Area No. 12. Spurwink River, Prouts Neck, Cape Elizabeth (Saco, Scarborough and Cape Elizabeth)

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

## Changes During Review Period

During the 2006 FDA Peer Review it was noted that for the past five years WH had been sampled primarily during the months when the Spurwink River conditional area was in the open status, that is, December through May. Prior to August 10, 2006 the beaches in Scarborough and Cape Elizabeth (monitored by stations WH 1.0, 2.0, 4.0, 16.0 and 17.0) were classified approved. Insufficient data points were available for the time period of June through November to continue justifying an approved classification on a year round basis. On August 10, 2006 the seasonal conditional area was expanded to include the Scarborough and Cape Elizabeth beaches.

The prohibited area, monitored by stations WH 9 and 9.5, was reclassified to restricted June 5, 2006 because although classified prohibited it met restricted standards.

## Current Management Plan

There is a management plan for one conditional area in WH, the Spurwink River Seasonal Conditional Area. The Spurwink River is closed to harvesting on June 1 and reopened on December 1 per the management plan following satisfactory water quality samples. A copy can be found in the central files.

## Current Annual Review of Management Plan

As of October 24, 2006, before a seasonal area can reopen, water samples must be collected and the samples must meet Conditional Area Re-opening Criteria as defined in the DMR Shellfish Area Growing Area Classification SOP, Fecal Coliform Levels for Re-opening. The first set of samples collected in the Spurwink River conditional area, two weeks before the opening date, failed to meet the re-opening criteria. The area was re-sampled four days before the opening date; these samples met criteria and the area opened per the management plan. The complete Annual Review can be found in Appendix I.



## Review of Water Quality

### Transitioning to Membrane Filtration for Seawater and Pollution Source Samples

The Maine Department of Marine Resources has chosen to switch to a fecal coliform method that was approved for use in the National Shellfish Sanitation Program (NSSP) at the Interstate Shellfish Sanitation Conference in 2003. This method is the Membrane Filtration (MF) for Fecal Coliforms using mTEC agar with a two hour resuscitation step. The geometric mean and the 90<sup>th</sup> percentile are calculated on 30 data points extending over a five year period.

During the transition from MPN to MF, we will be accumulating MF data points. The statistical calculations will be a combination of MPN and MF data points. The FDA has determined that the best way to handle the data is to perform the calculations as always for the data set, but to compare the data set to a hybrid weighted 90<sup>th</sup> percentile. This hybrid standard is calculated by weighting the relative contributions of each method to the database. This will mean that as the number of MPN data points reduce and the number of MF data points increase the 90<sup>th</sup> percentile standard that the sample site is compared to will change over time.

Once all 30 data points are analyzed using MF, the 90<sup>th</sup> percentile for approved classification will be 31 and for restricted (for depuration) will be 163. The geomean approved standard of 14 fecal coliforms per 100 ml and geomean restricted standard of 88 fecal coliforms per 100 ml will remain the same for both methods.

Reports that display 90<sup>th</sup> percentiles will show the number of data points derived from MF analysis and will show the appropriate 90<sup>th</sup> percentile standard for that MPN/MF combination for approved and restricted classifications. It must be remembered that this weighted standard is only used for data sets encompassing data from the two different test methods, MF and MPN (3 tube/3 dilution). If decisions are to be made on a single test result analyzed by the MF method or a multiple number of test results all exclusively analyzed by the MF method, the 90<sup>th</sup> percentile standard is 31 fecal coliforms per 100 ml.

This was the first year the water quality program documented, in the database, the inability to collect a sample based on the following parameters: if the tide stage was too low to collect the sample, there was a safety issue with collecting the sample, the location was inaccessible or "other" which was accompanied by a comment on the data sheet. Stations that were unable to be sampled due to any of these parameters show 999 in the salinity column and have no data recorded in any of the columns except the time which is recorded so the actual tide stage can be computed. Stations that were missed due to the above parameters were required to be made up to assure that each station would receive the required six samples during the sampling season.

Table 1 displays the geomeans and P90s for all the active stations in growing area WH. The data represents the evaluation of the 30 most recent data points collected between 2001 and 2006 throughout the year. A key to the water quality table headers can be found in Attachment A of this document. WH 9 and WH 9.5 met restricted standards. It must be noted that no data



has been collected in June and July during the 2001 to 2006 time period and minimal data in August –October, so that, even though it appears that station WH 1, 2, 4, 11, 14, 16, 17 meet approved criteria year-round there isn't enough data available to support this.

**Table 1 Geomean and P90 Year Round**

MAINE DEPARTMENT OF MARINE RESOURCES									
Fecal Coliform Geometric Mean and Percent Variability									
For the Years 2001 Through 2006 – (01/01 – 12/31)*									
Status = Open and Closed Stations									
Strategy = Random Only									
Excludes Flood Data									
Samples Limited to Latest 30									
Salinity >= 0 ‰									
STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
**WH001.00	CA	30	3	4.8	0.48	240	19.8	47	282
**WH002.00	CA	30	3	4.2	0.39	240	13.2	47	282
**WH004.00	CA	30	3	4.1	0.43	460	14.6	47	282
WH009.00	R	30	3	13.6	0.61	240	83.3	47	282
WH009.50	R	30	3	14.2	0.65	460	95.4	47	282
**WH010.00	CA	30	4	8.5	0.59	240	47.7	46	277
**WH011.00	CA	30	4	5.4	0.48	112	22.1	46	277
**WH014.00	CA	30	4	5.5	0.47	93	22.4	46	277
**WH016.00	CA	30	3	4.2	0.43	460	14.7	47	282
**WH017.00	CA	30	3	5.2	0.46	149	19.8	47	282

\*\* see Table 2 below for conditional area data during the open season

Conditionally approved stations, WH 1, 2, 4, 10, 11, 14, 16, and 17, meet approved standards during the open season of 12/1 to 5/31, as documented below in Table 2.

**Table 2 Conditional Area Geomean and P90 - Open Status**

MAINE DEPARTMENT OF MARINE RESOURCES									
Fecal Coliform Geometric Mean and Percent Variability									
For the Years 2001 Through 2006 - (01/01 - 05/31) (12/01 - 12/31)									
Strategy = Random Only									
Samples Limited to Latest 30									
Salinity >= 0 ‰									
STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WH001.00	CA	30	1	3.6	0.23	23	7.1	48	294



WH002.00	CA	30	1	4	0.33	93	10.4	48	294
WH004.00	CA	30	1	3.9	0.27	43	8.6	48	294
WH010.00	CA	30	1	7	0.61	240	41.9	48	294
WH011.00	CA	30	1	5.1	0.44	93	18.5	48	294
WH014.00	CA	30	1	4.4	0.35	43	12.4	48	294
WH016.00	CA	30	1	3.4	0.19	23	5.9	48	294
WH017.00	CA	30	1	4.5	0.36	93	13.2	48	294

Table 3 displays the data for all the stations in WH collected in 2006. Stations that were classified conditionally approved at the beginning of the year were sampled 10 times, 6 times during their open status. Approved stations (WH 1, 2, 4, 16 and 17) that were reclassified conditionally approved on 8/10/06, were sampled 8 times, 6 times in the open status. WH9 and 9.5 were classified from prohibited to restricted on June 5, 2006. They were collected 8 times, 4 times in prohibited classification and 4 times in the restricted classification.

Table 3 Sample Collection Results for 2006

Station	Date	Collector	Tide	Temp	Weather	Sal	Strat	ADV	Stat	CL	A1COL	MFCOL	WIND
WH001.00	1/9/2006	LL	E	1	O	30	R	-	O	A	<3.0	-	SW
	2/15/2006	LL	F	2	C	30	R	-	O	A	<3.0	-	SW
	3/22/2006	DEC	LE	4	-	32	R	-	O	A	<3.0	-	-
	4/25/2006	DEC	H	6	C	30	R	-	O	A	<3.0	-	SW
	8/8/2006	DEC	F	20	-	30	R	-	O	A	43	-	-
	9/12/2006	DEC	L	11	C	31	R	-	C	CA	-	78	W
	11/15/2006	JB	F	10	P	30	R	P	C	CA	-	4	S
12/11/2006	DAH	LF	6	R	32	R	W	O	CA	-	<2.0	-	
WH002.00	1/9/2006	LL	E	1	O	30	R	-	O	A	9.1	-	SW
	2/15/2006	LL	F	2	C	32	R	-	O	A	3.6	-	SW
	3/22/2006	DEC	LE	4	-	32	R	-	O	A	<3.0	-	-
	4/25/2006	DEC	H	6	C	30	R	-	O	A	<3.0	-	SW
	8/8/2006	DEC	HF	18	-	31	R	-	O	A	9.1	-	-
	9/12/2006	DEC	L	11	C	32	R	-	C	CA	-	<2.0	W
	11/15/2006	JB	F	8	P	30	R	P	C	CA	-	6	SW
12/11/2006	DAH	LF	6	R	32	R	W	O	CA	-	4	-	
WH004.00	1/9/2006	LL	E	1	O	30	R	-	O	A	3.6	-	SW
	2/15/2006	LL	F	2	C	30	R	-	O	A	9.1	-	SW
	3/22/2006	DEC	LE	4	-	32	R	-	O	A	<3.0	-	-
	4/25/2006	DEC	H	6	C	32	R	-	O	A	<3.0	-	SW
	5/18/2006	DEC	F		C	22	R	P	O	A	9.1	-	-
	8/8/2006	DEC	HF	18	-	31	R	-	O	A	3	-	-
	9/12/2006	DEC	L	11	C	32	R	-	C	CA	-	2	W
	11/15/2006	JB	F	8	P	29	R	P	C	CA	-	8	SW
12/11/2006	DAH	LF	6	R	32	R	W	O	CA	-	<2.0	-	
WH009.00	1/9/2006	LL	E	1	O	14	R	-	C	P	3.6	-	SW
	2/15/2006	LL	HF	1	C	10	R	-	C	P	3.6	-	SW
	3/22/2006	DEC	L	5	-	6	R	-	C	P	<3.0	-	-
	4/25/2006	DEC	E	7	C	30	R	-	C	P	3.6	-	SW



	8/8/2006	DEC	H	19	-	30	R	-	O	R	43	-	-
	9/12/2006	DEC	F	13	C	21	R	-	O	R	-	50	W
	11/15/2006	JB	F	9	P	0	R	PN	O	R	-	64	CL
	12/11/2006	DAH	F	2	R	2	R	W	O	R	-	14	-
WH009.50	1/9/2006	LL	E	1	O	24	R	-	C	P	3.6	-	SW
	2/15/2006	LL	HF	2	C	26	R	-	C	P	<3.0	-	SW
	3/22/2006	DEC	L	5	-	15	R	-	C	P	<3.0	-	-
	4/25/2006	DEC	E	7	C	30	R	-	C	P	<3.0	-	SW
	8/8/2006	DEC	H	20	-	30	R	-	O	R	23	-	-
	9/12/2006	DEC	LF	13	C	25	R	-	O	R	-	26	W
	11/15/2006	JB	F	8	P	0	R	PWN	O	R	-	42	CL
	12/11/2006	DAH	F	3	R	4	R	W	O	R	-	10	-
	WH010.00	1/9/2006	LL	E	1	O	27	R	-	O	CA	3.6	-
2/15/2006		LL	HF	2	C	30	R	-	O	CA	<3.0	-	SW
3/22/2006		DEC	L	5	-	20	R	-	O	CA	<3.0	-	-
4/25/2006		DEC	HE	6	C	30	R	-	O	CA	<3.0	-	SW
5/21/2006		LL	LF	10	C	2	R	-	O	CA	63	-	S
8/8/2006		DEC	H	20	-	31	R	-	O	CA	9.1	-	-
9/12/2006		DEC	LF	11	C	28	R	-	C	CA	-	20	W
11/15/2006		JB	F	9	P	1	R	PN	C	CA	-	44	CL
11/27/2006		DEC	F	8	C	25	R	-	C	CA	-	2	-
12/11/2006	DAH	F	4	R	8	R	-	O	CA	-	10	-	
WH011.00	1/9/2006	LL	E	1	O	30	R	-	O	CA	<3.0	-	SW
	2/15/2006	LL	HF	2	C	30	R	-	O	CA	<3.0	-	SW
	3/22/2006	DEC	L	5	-	25	R	-	O	CA	<3.0	-	-
	4/25/2006	DEC	HE	6	C	30	R	-	O	CA	<3.0	-	SW
	5/21/2006	LL	LF	10	C	5	R	-	O	CA	3.6	-	S
	8/8/2006	DEC	HF	18	-	32	R	-	O	CA	3.6	-	-
	9/12/2006	DEC	LF	11	C	29	R	-	C	CA	-	15	W
	11/15/2006	JB	F	8	P	3	R	P	C	CA	-	112	SW
	11/27/2006	DEC	F	8	C	25	R	-	C	CA	-	4	-
12/11/2006	DAH	F	4	R	14	R	-	O	CA	-	2	-	
WH014.00	1/9/2006	LL	E	1	O	30	R	-	O	CA	9.1	-	SW
	2/15/2006	LL	F	2	C	30	R	-	O	CA	<3.0	-	SW
	3/22/2006	DEC	LE	4	-	18	R	-	O	CA	<3.0	-	-
	4/25/2006	DEC	HE	6	C	30	R	-	O	CA	<3.0	-	SW
	5/21/2006	LL	LF	10	C	12	R	-	O	CA	<3.0	-	S
	8/8/2006	DEC	HF	19	-	30	R	-	O	CA	93	-	-
	9/12/2006	DEC	LF	11	C	31	R	-	C	CA	-	12	W
	11/15/2006	JB	F	8	P	20	R	P	C	CA	-	42	SW
	11/27/2006	DEC	F	8	C	28	R	-	C	CA	-	<2.0	-
12/11/2006	DAH	LF	6	R	28	R	W	O	CA	-	2	-	
WH016.00	1/9/2006	LL	E	1	O	30	R	-	O	A	<3.0	-	SW
	2/15/2006	LL	HF	2	C	30	R	-	O	A	<3.0	-	SW
	3/22/2006	DEC	L	5	-	32	R	-	O	A	<3.0	-	-
	4/25/2006	DEC	HE	6	C	30	R	-	O	A	<3.0	-	SW
	8/8/2006	DEC	H	18	-	31	R	-	O	A	3.6	-	-
	9/12/2006	DEC	F	11	C	31	R	-	C	CA	-	4	W
	11/15/2006	JB	F	9	P	29	R	P	C	CA	-	4	SW
	12/11/2006	DAH	F	6	R	30	R	-	O	CA	-	<2.0	-
	WH017.00	1/9/2006	LL	LE	1	O	30	R	-	O	A	23	-
2/15/2006		LL	HF	2	C	31	R	-	O	A	9.4	-	SW
3/22/2006		DEC	L	5	-	32	R	-	O	A	<3.0	-	-
4/25/2006		DEC	H	6	C	30	R	-	O	A	<3.0	-	SW
8/8/2006		DEC	H	18	-	31	R	-	O	A	3.6	-	-



	9/12/2006	DEC	F	11	C	31	R	-	C	CA	-	9.1	W
	11/15/2006	JB	F	9	P	30	R	P	C	CA	-	<2.0	SW
	12/11/2006	DAH	F	6	R	30	R	W	O	CA	-	<2.0	-

### Shoreline Survey Activity

The Scarborough shoreline in growing area WH was surveyed in 2003 and the Cape Elizabeth shoreline in growing area WH was surveyed in 2002. A drive through survey was done on 2/15/06 during a random sampling run. No septic changes in the shoreline were observed, no new housing developments or businesses or drainage alterations. The town ramp, located at Station WH 9.0, was replaced with a wheelchair accessible dock, but this alteration has had no impact on water quality in this restricted area of the Spurwink River.

### Aquaculture/Wet Storage Activity

There currently are no active aquaculture lease sites in shellfish growing area WH.

### Classification Changes Required

No classification changes are required at this time.

### Discussion & Summary

Growing Area WH has had no changes in pollution sources during the review period. The 2006 random sampling schedule was set up to allow all sample stations to be sampled throughout the year and not just when the conditional area sample stations are required to be sampled. In 2006, during the closed status period, samples were collected in August, September and November (See Table 4). There remains insufficient summer data to evaluate.

Due to the fact that some of the conditionally approved stations failed to meet appropriate water quality when sampled prior to the scheduled reopening date and the appearance of an upward trend in the water quality at one of the sample stations, the area will be monitored closely in 2007. The area is scheduled for a triennial review in 2007 which will require a review of all known pollution sources and the collection of stream samples. This work may provide new information to help further assess the classification of the area.



## Attachment A. 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 1. Annual Review of Management Plan-Spurwink River**

### **2006 Annual Review Spurwink River Conditional Area C12 Growing Area WH**

#### **Scope**

A portion of Growing Area WH is conditionally approved due to seasonal variability of water quality, possibly due to an increase in shore usage. The Spurwink River monitored by stations, WH 10.0-14.0, 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. Most of the homes along this shore are occupied year round, but many others nearby are 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 met approved standards from December 1<sup>st</sup> to May 31<sup>st</sup>.

The size of the area increased substantially in 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 were classified approved prior to August 10, 2006. This area was reclassified due to a lack of data for analysis from June 1<sup>st</sup> to November 30<sup>th</sup>. The lack of data was the result of scheduling sample collection of the entire area based on the open period of the conditionally approved area. This has led to insufficient year round data at the approved stations within growing area WH. The entire area is now conditionally approved based on an open season of December 1 to May 31.

#### **Compliance with management plan**

In 2006 the conditional area closed on June 1 and reopened on December 1. This area must be sampled prior to reopening each year; samples were collected on 11/15/06. Stations WH 10, 11 and 14 did not meet approved standards and were resampled on 11/27/06. See Table 5 for results. The conditional area opened on 12/1/06 according to the management plan. The seasonal closure is enforced by the MDMR Marine Patrol and the local Shellfish Warden. Cooperation between the involved parties has been excellent.

#### **Adequacy of reporting and cooperation of involved persons**

This management plan does not require reporting.

#### **Compliance with approved growing area criteria**

The annual review of the water quality for all active stations meets approved standards during the open status time period as displayed in Table 1



**Table 1 Geomean and P90 During Open Status**

MAINE DEPARTMENT OF MARINE RESOURCES									
Fecal Coliform Geometric Mean and Percent Variability									
For the Years 2001 Through 2006 - (01/01 - 05/31) (12/01 - 12/31)									
Strategy = Random Only									
Samples Limited to Latest 30									
Salinity >= 0 ‰									
STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WH001.00	CA	30	1	3.6	0.23	23	7.1	48	294
WH002.00	CA	30	1	4	0.33	93	10.4	48	294
WH004.00	CA	30	1	3.9	0.27	43	8.6	48	294
WH010.00	CA	30	1	7	0.61	240	41.9	48	294
WH011.00	CA	30	1	5.1	0.44	93	18.5	48	294
WH014.00	CA	30	1	4.4	0.35	43	12.4	48	294
WH016.00	CA	30	1	3.4	0.19	23	5.9	48	294
WH017.00	CA	30	1	4.5	0.36	93	13.2	48	294

**Field inspection of critical pollution sources**

The potential for pollution in growing area WH comes from increased shore usage (swimming, walking pets, etc.) and the influx of summer residents to their seasonal homes. Visual observations are made throughout the year during the course of random sampling and shoreline surveying.

**Water sampling compliance history**

All stations were collected 6 times when in the open status. The results of all sampling can be found in the 2006 Annual Review for Growing Area WH.

**Analysis-Recommendations**

It is DMR policy to sample two weeks before opening a seasonal area to ensure compliance with approved standards. Three stations, WH 10.0, 11 and 14, collected on 11/15/07 did not meet reopening criteria; these stations are in the area originally identified as a conditional area. The three stations were resampled on 11/27/07 and met criteria. The data is shown in Table 2.

**Table 2 Conditional Area Reopening Sample Results**

Station	Date	Tide	Temp	Weather	Sal	ADV	CL	MFCOL
WH001.00	11/15/06	F	10	P	30	P	A	4
WH002.00	11/15/06	F	8	P	30	P	A	6
WH004.00	11/15/06	F	8	P	29	P	A	8
WH010.00	11/15/06	F	9	P	1	PN	CA	44



WH011.00	11/15/06	F	8	P	3	P	CA	112
WH014.00	11/15/06	F	8	P	20	P	CA	42
WH016.00	11/15/06	F	9	P	29	P	A	4
WH017.00	11/15/06	F	9	P	30	P	A	<2.0
WH010.00	11/27/06	F	8	C	25	-	CA	2
WH011.00	11/27/06	F	8	C	25	-	CA	4
WH014.00	11/27/06	F	8	C	28	-	CA	<2.0

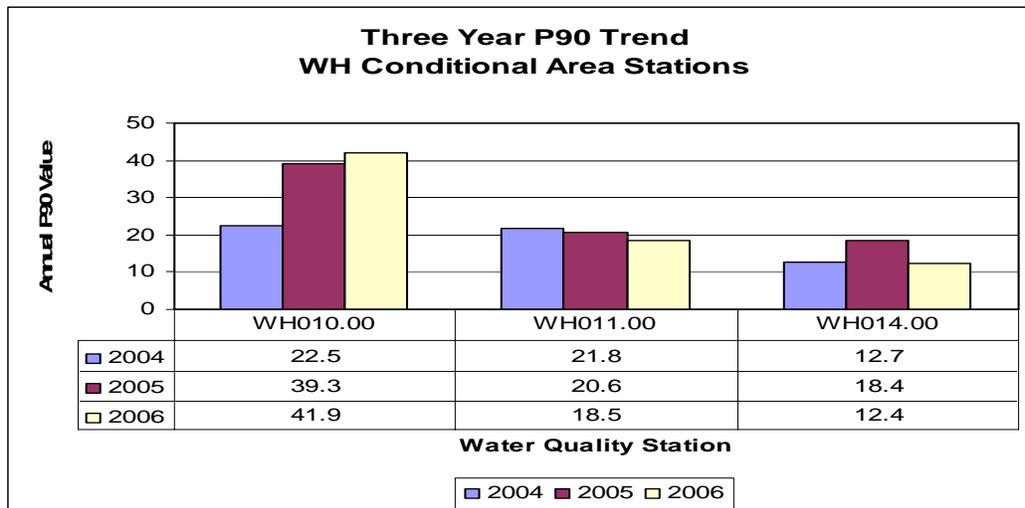
A review of the Portland Jetport rain station indicated that substantial rain had fallen in the week prior to the 11/15/06 sample date with 0.75 inches of rain falling within 24 hours of sample collection. The rain amounts are displayed in Table 3.

Table 3. Portland Jetport Rain Station

Date	Rain inches
11/08/06	1.59
11/09/06	0.98
11/12/06	0.41
11/13/06	0.51
11/14/06	0.75

A review of the P90 score for the three stations in the original conditional area are displayed in Table 4. Station WH11 and WH 14 have remained fairly constant over the three year period. Station WH 10 has almost doubled.

Table 4 Trend of Annual P90 Scores



Water quality scores met approved criteria during this annual review. However, the conditional management identifies seasonal habitation primarily occurring in June, July and August as the



condition contributing to the poor water quality. The failing reopening samples occurred in mid November well past the tourist season. This conditional area will be reviewed in 2007 with regard to the high scores two weeks before the opening date and the increasing P90 at station WH 10.