



GROWING AREA WB
Towns of Kittery and York
TRIENNIAL REVIEW for 2007

Final Report Date: 6/13/08

LAURA LIVINGSTON

APPROVAL

Division Director:

_____ Date: _____
Print name signature

DISTRIBUTION:

- () Commercial Monitoring and Assessment Division..... By: _____ Date: _____
- () Habitat/Aquaculture Division..... By: _____ Date: _____
- () Bureau of Resource Management Director.....By: _____ Date: _____
- () Office of the Commissioner.....By: _____ Date: _____



DRAFT APPROVAL ROUTING FORM

Date in Process:

Operation Title:

Revision No.:

Originator's Name: Laura Livingston _____
Print name Signature

The attached draft is for your evaluation and comment. Suggested changes should be concise and reasons specific. Return to sender.

PEER reviewer:

_____ Date: _____
print name signature

Supervisor:

Anna Bourakovsky _____ Date: _____
print name signature

Division Director:

Amy Fitzpatrick _____ Date: _____
print name signature



Table of Contents

Executive Summary	5
Current Classification(s).....	5
Activity During Review Period (2005-2007)	5
Current Management Plan(s).....	6
Current Review of Management Plan	6
Water Quality Review and Discussion	6
Documentation of Pollution Sources	8
Tide and Rainfall	10
Shoreline Survey Activity	10
Aquaculture Leases and Wet Storage Activity	10
Classification Changes Required	12
Summary	12
Appendix A. Annual Review of Management Plan-York Harbor	13
Appendix B. Transitioning to Membrane Filtration for Seawater and Pollution Source Samples	15
Appendix C. Key to Water Quality Table Headers	16
Appendix D. Sample Collection Results for 2007	16

List of Tables

Table 1. Geomean and P90 Scores, Growing Area WB	6
Table 2. Geomean and P90-Open Season, November 15-April 30, for York Harbor Conditional Stations	7
Table 3. Sample Counts for Active Stations in Growing Area WB Stations	7

List of Figures

Figure 1. Growing Area WB with Active Water Quality Stations	4
Figure 2. P90 Scores, expressed as percent of approved standard, WB, 2003-2007	8
Figure 3. Growing Area WB Stream Sample Locations, 2007	11



Figure 1. Growing Area WB with Active Water Quality Stations

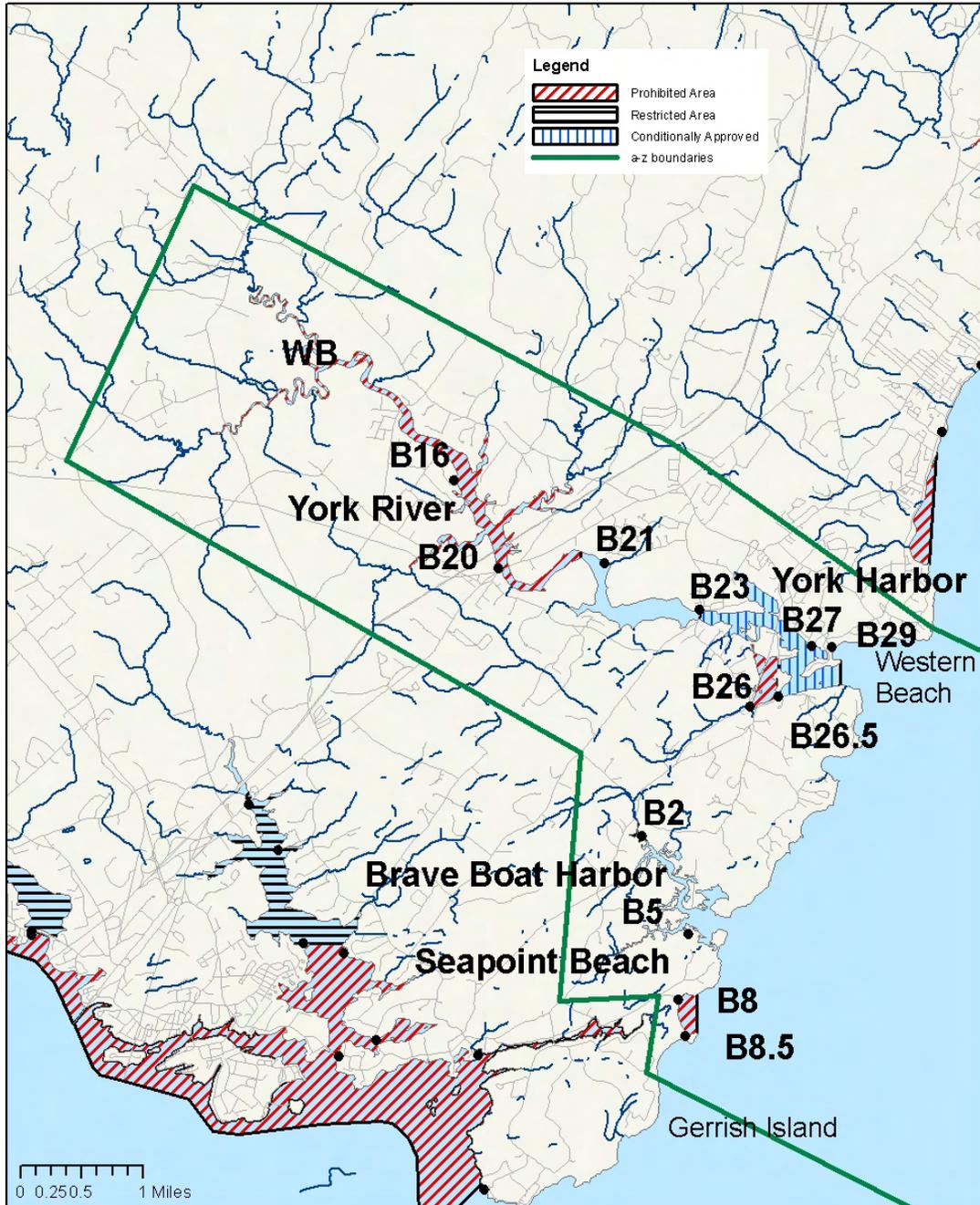


Maine Department of Marine Resources

Growing Area WB



3/1/07





Executive Summary

Growing Area WB is located between Gerrish Island, Kittery and the northeast end of Western Beach, just outside the York River. Only small portions of Kittery and York fall within the boundaries of this growing area. A comprehensive map (Figure 1) of the area can be found on Page 4; a detailed boundary description can be found in central files.

No sampling stations were created or deactivated in 2007 and there are no overboard discharges in growing area WB. Water quality at station WB 8 meets restricted standards and there are no known point sources of pollution; therefore, WB 8 at Seapoint Beach should be reclassified from prohibited to restricted. Station WB 20, in the upper York River, does not meet approved standards and is classified prohibited. The NSSP model ordinance requires that the prohibited boundary be located at the next approved station, which is WB 21; therefore the prohibited boundary line should be moved south to station WB 21.

Current Classification(s)

Shellfish growing area WB currently has areas classified as:

Approved

- Crescent Beach, Kittery (1 Station)
- Brave Boat Harbor, Kittery and York (1 Station)
- York River, York (2 Stations)
- Western Beach, York (1 Station)

Conditionally Approved

- York Harbor, York (3 Stations) (seasonal marina area)

Restricted

- Brave Boat Harbor, Kittery and York (1 Station) (non-point pollution)

Prohibited

- Seapoint Beach, Kittery (1 Station) (non-point pollution)
- York River, York (2 Stations) (has not been surveyed)

Visit the DMR website to view Legal Notices for area WB:

DMR Chapter 95.10(P), Area No. 3, Seapoint to York River (Kittery and York)
http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm

Activity During Review Period (2005-2007)

On 3/4/08, the southwest corner of York Harbor, Station WB 26, was reclassified from prohibited to conditionally approved following the replacement of a failing septic system and improved water quality. An addendum can be found in the central files.



Based on the 2006 review of water quality in area WB, station WB 32.0 was reclassified from approved to restricted on 4/12/07.

No other classification changes have occurred over the past three years.

Current Management Plan(s)

There is one management plan for the one seasonal marina conditionally approved area in growing area WB. Stations WB 23, 26, 26.5 and 27 are sampled to monitor the conditional area. Station WB 23 is an approved station on the conditional area boundary line. The York Harbor seasonal marina conditionally approved area is closed to harvesting May 1 through November 14, due to the presence of boats in the harbor, per the management plan. A copy of the management plan can be found in the central files.

Current Review of Management Plan

In 2007, the seasonal marina conditionally approved area in York Harbor closed on May 1 and reopened on November 15. The area was visited on 11/7/07 to confirm there were fewer than 10 boats with heads remaining in the water. It was also visited on 3/5/07 to confirm there were fewer than 10 boats with heads not yet in the water. Stations WB 26, 26.5 and 27 were sampled six times when in the open status. Water quality continues to meet approved standards at these conditional stations during the open period. A complete management plan review can be found in appendix A.

Water Quality Review and Discussion

Table 1 displays the geomean and P90 scores for all active approved, restricted and prohibited stations in growing area WB. The data represent the evaluation of the 30 most recent data, collected between 2001 and 2007 using the systematic random sampling technique. Table 2 shows the open season water quality scores for the conditionally approved stations in York Harbor; station WB 26, which is classified as prohibited, serves as a boundary station for the conditional area and was sampled as part of the conditional area. Both tables also include approved and restricted standards; these standards will fluctuate yearly as a result of the DMR transition from an MPN fecal coliform test method to a membrane filtration (MF) method and are dependent on the number of sample analyzed by MPN verses MF. A more detailed explanation of this transition can be found in appendix B. A key to the water quality table headers can be found in appendix C.

Table 1. Geomean and P90 Scores, Growing Area WB

STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WB002.00	R	30	8	9.0	0.60	240	53.2	43	255
WB005.00	A	30	8	3.5	0.26	23	7.4	43	255
WB008.00	P	30	8	8.7	0.57	460	46.3	43	255
WB008.50	A	30	8	4.6	0.38	41	14.2	43	255
WB016.00	P	30	8	8.5	0.52	150	38.8	43	255



STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WB020.00	P	30	8	12.6	0.63	1700	81.7	43	255
WB021.00	A	30	8	6.0	0.49	240	25.6	43	255
WB023.00	A	30	13	4.0	0.38	102	12.1	40	230
WB026.00	P	30	11	6.9	0.59	460	39.3	41	240
WB029.00	A	30	8	4.7	0.38	43	14.1	43	255

Table 2. Geomean and P90-Open Season, November 15-April 30, for York Harbor Conditional Stations

STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WB026.00	P	29	6	5.6	0.54	240	27.2	45	264
WB026.50	CA	16	9	5.1	0.57	93	27.5	38	213
WB027.00	CA	30	9	3.6	0.43	240	12.8	43	250

Water quality at all approved and restricted stations continues to meet its current classification. All conditionally approved stations continue to meet approved standards during the open status. All active approved, restricted and prohibited stations in Growing Area WB were sampled at least six times in 2007; stations that were classified conditionally approved at the beginning of the year were sampled at least six times in the open status in 2007 (Table 3). A complete table of tabulated data for 2007 can be found in appendix D.

Table 3. Sample Counts for Active Stations in Growing Area WB Stations

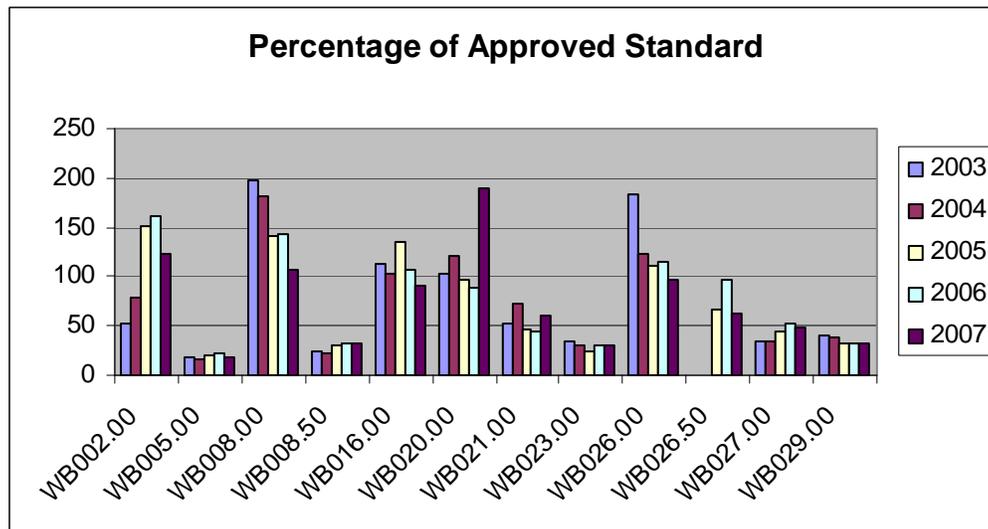
Location	Class	Closed Status	Open Status	Comments
WB002.00	R		6	
WB005.00	A		6	
WB008.00	P	6		
WB008.50	A		6	
WB016.00	P	6		
WB020.00	P	6		
WB021.00	A		6	
WB023.00	A		11	
WB026.00	P	9		
WB026.50	CA	4	7	Open Nov 15-Apr 30
WB027.00	CA	4	7	Open Nov 15-Apr 30
WB029.00	A		6	

In 2006, DMR has switched from MPN fecal coliform test method to a membrane filtration (MF) fecal coliform test method. The precision of the MF method far exceeds that of MPN with a resulting lower P90 approved standard (MPN P90 = 49 vs. MF P90 = 31). During the transition from MPN to MF data points, each year the approved standard will be lower than the previous year until all samples have been analyzed by the MF method. In order to show the trend of the P90 scores over the years, the calculated P90s are expressed as a percentage of the approved standard. Figure 2 shows P90 trends, expressed as a percentage of the approved standard, over the past five years. The trends show that water quality has declined at station WB 2 at the head of Brave Boat Harbor. This station has recently been reclassified from approved to restricted, due to increasing fecal scores. While no known pollution sources exist in the area



surrounding this station, it was last surveyed ten years ago, in 1998. New point and non-point sources pollution sources may be discovered when the area is re-surveyed in 2008. Additionally, Brave Boat Creek, which drains into the Brave Boat Harbor near station WB 2 was sampled once in 2007. The stream's fecal score was low, however the stream should be sampled multiple times, under a variety of meteorological conditions. In addition to declining water quality at station WB 2, there was a dramatic increase in the 2007 P90 score at station WB 20, located at Route 1 on the York River. This increase was due to a single high score of >1600 CFU/100ml, which occurred in October 2007. The reason for this high score is currently unknown. Further survey work and stream sample collection will be conducted in 2008 in order to investigate the potential sources of pollution at this station.

Figure 2. P90 Scores, expressed as percent of approved standard, WB, 2003-2007



Documentation of Pollution Sources

New Pollution Sources

No new development, changes in drainages, or changes in pollution sources were observed during the review period.

Re-evaluation of Existing Pollution Sources

Marinas

York Harbor has one marina, the York Harbor Marine Service, located on Harris Island. There are also several docks and moorings, including the Agamenticus Yacht Club dock at the end of Varrell Lane, and the town wharf, also on Harris Island. The town wharf has bait storage, but no fuel storage, and offers no permanent dockage. The harbormaster manages all of the slips and moorings in the harbor, which total 292 moorings and 165 slips. Most of the 50 slips at the York Harbor Marina are used by residents who have homes in the area and who take their boats out of the harbor for day trips. The marina has onshore bathrooms connected to their 2007 upgraded septic system and is in operation from mid-May through mid-October. Many of the



boats are fishing boats. The marina evaluation, dated 1/25/08, can be found in the central files. A follow-up telephone interview with the harbor master on 6/13/08, confirmed that there has been a decrease in moorings, from 300 to 292, and an increase in slips, from 50 to 165. Since 2001, the overall slip and mooring total has changed from 350 to 457 and this new total was used in evaluating the conditional area size, based on a dilution calculation for the area. Based on the new dilution calculation, 132 acres are needed to dilute the potential pollution from boats with heads to meet the approved standard; the current conditionally approved area around the York Harbor is 171 acres. The calculation confirmed that the conditional area is of appropriate size and does not need to be expanded.

Wildlife

The north shore of Brave Boat Harbor is part of the Rachel Carson Preserve, and is not developed. Consequently, the wooded and marsh shore attracts waterfowl and wildlife, such as deer, beaver, muskrats, woodchucks, and raccoons, which may be impacting Station WB 2 at the head of the harbor.

Agriculture and Industry

There are no agriculture waste discharges and no industrial waste discharges in growing area WB.

Streams

Stream samples were collected on 11/19/07, as part of the drive-through survey for the area. Table 4 shows the fecal coliform results of the stream samples. The flow rates for streams were estimated on the day of collection. Within four days of stream sample collection, there was a cumulative total of 0.52 inches of rain, leading to a moderate amount of runoff.

The year 2007 was the first year that streams in growing area WB were sampled as part of the annual survey review and the results obtained from stream samples in 2007 are a preliminary baseline assessment. Only streams that were easily accessible and flowing on the day of the survey were sampled (Figure 3). On the day of this baseline assessment, the sample collected at Southside Brook had an elevated fecal coliform score, indicating that this stream may have a negative impact on the immediate growing area. Station WB 26, located at the mouth of Southside Brook, currently meets the approved standard during the open winter season, and additional sampling of the brook will be conducted in 2008 to assess potential impact under a variety of meteorological conditions. In addition to the high score at Southside Brook, the sample collected at the drainage point from Lindsay Road pond had a slightly elevated score, and further monitoring and sample collection will be necessary in the future to assess this potential pollution source. The samples collected at the remaining two streams (unnamed gully and Brave Boat Creek) met the approved standard on the day of collection. Station WB 2, located near Brave Boat Creek, has had elevated scores in the recent years and may be impacted by Brave Boat Creek. Therefore, additional sampling of the creek will be done in 2008 to assess potential impact on Station WB 2.

In 2008, DMR plans to assess streams which drain near water quality sampling stations, WB 2 and 20. These two stations have shown declining water quality over the current review period, and sources of potential non-point source pollution need to be assessed. Specifically, DMR plans to sample Brave Boat Creek, Southside Brook, and two other streams that are north of



Station WB 20. These four streams will be sampled a minimum of four times, two during wet weather and two during normal weather conditions. Flow rates will also be assessed with each stream sample to calculate fecal coliform loading to the growing area.

Table 4. Baseline fecal coliform scores from streams located in area WB

DMR ID	Stream Name	Fecal Score	Flow Rate gal/min
WBA0064	Unnamed gully	4	100 (Intermittent)
WBA0067	Brave Boat Creek	20	Tidal
WBB0058	Southside Brook	132	Partially Tidal *
WBB0327	Lindsay Rd Pond	48	100 (Pond Overflow)

*Station WB 26 is located at the mouth of the WBB0058 stream and meets approved standards.

Tide and Rainfall

Tide and rainfall analyses will be conducted in 2008 as part of the Sanitary Survey Report.

Shoreline Survey Activity

Brave Boat Harbor, Seapoint Beach and Crescent Beach were surveyed in 1998 and the York River was surveyed in 1997. All of growing area WB will be resurveyed in 2008 and a sanitary survey report will be written.

Aquaculture Leases and Wet Storage Activity

Currently, there are no aquaculture leases or wet storage activity in growing area WB.



Figure 3. Growing Area WB Stream Sample Locations, 2007

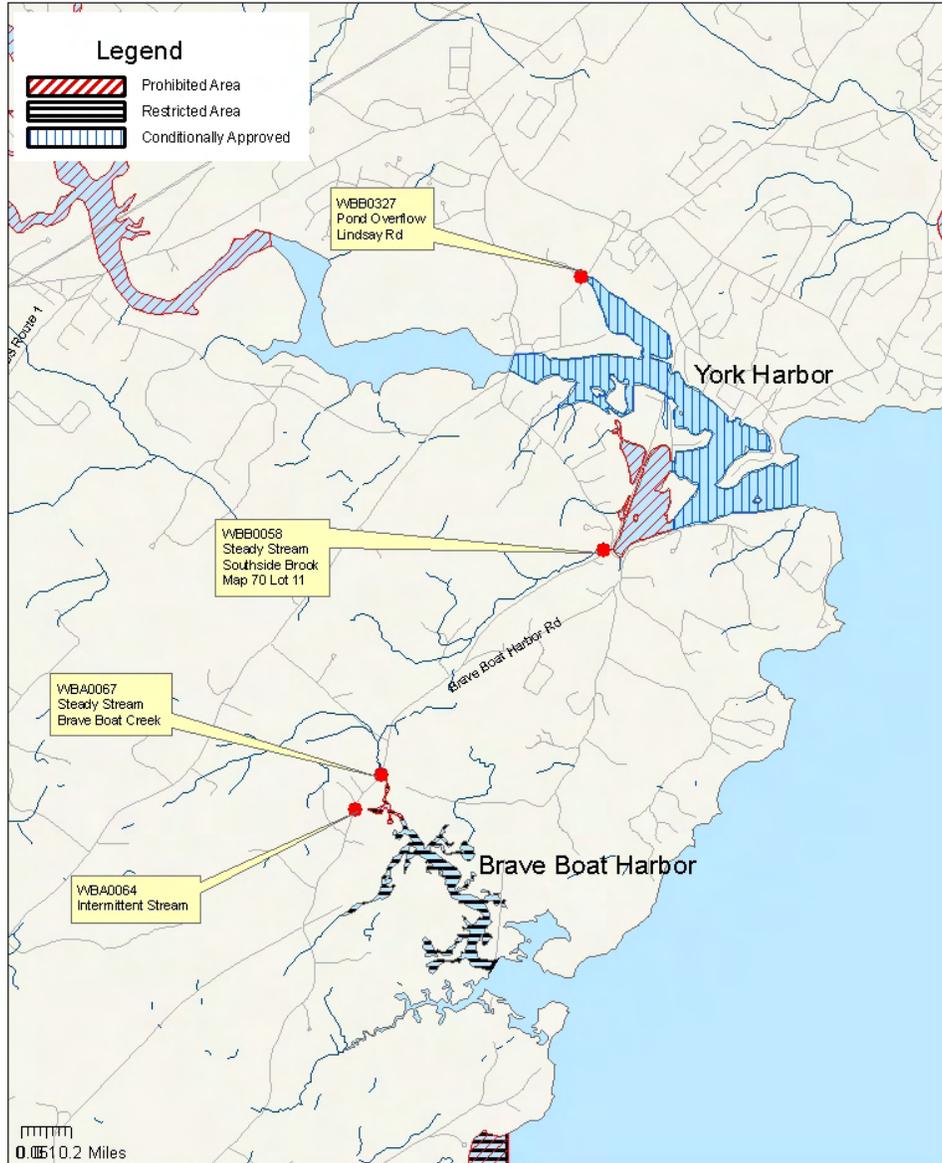


Maine Department of Marine Resources

Growing Area WB Stream Samples



3/13/08





Classification Changes Required

Station WB 20, in the upper York River, does not meet approved standards and is classified prohibited. The NSSP model ordinance requires that the prohibited boundary be located at the next station meeting approved standards. The prohibited boundary line does not currently extend to the next approved station and should be moved south to station WB 21. Station WB 8, located at Seapoint Beach should be reclassified as restricted, since water quality meets restricted standards and there are no point sources of pollution at the beach.

Summary

Water quality in Growing Area WB continues to support the current NSSP classifications. Station WB 8, located at Seapoint Beach has no point sources of pollution and water quality meets restricted standards. Therefore, this beach can be upgraded from prohibited to restricted status. Over the 2005-2007 review years, growing Area WB has had no major changes in pollution sources and water quality scores at most stations have remained steady over the past three years.

In 2008, four streams, located near key sampling stations, will be evaluated under wet and normal weather conditions. Flow rates will be calculated to assess impact area. Tide and rainfall analyses will be conducted and a complete sanitary survey report will be written for growing area WB.



Appendix A. Annual Review of Management Plan-York Harbor

2007 Annual Review York Harbor Conditional Area Growing Area WB

Scope

York Harbor is a conditionally approved area due to the seasonal presence of boats at the York Harbor docks. York Harbor, monitored by stations WB 26, 26.5 and WB 27, was classified conditionally approved based on information from observations of the harbor and an interview with the harbormaster regarding the presence or absence of 10 or more boats with heads. It was determined that there were fewer than 10 boats with heads being used in the conditional area from November 1 through April 30. This area is conditionally open for shellfish harvesting from November 15 through April 30.

Compliance with management plan

In 2007, the conditional area closed on May 1 and reopened on November 15. Per the management plan, the area was visited on 11/7/07 to confirm there were fewer than 10 boats with heads remaining in the water. It was also visited on 3/5/07 to confirm there were fewer than 10 boats with heads not yet in the water. In 2008, DMR will check boat activity closer to the May 1st date.

Adequacy of reporting and cooperation of involved persons

This management plan requires seasonal checks on boat activity at the marina. These checks are performed prior to the reopening of the area and at the time of closure to ensure the proper open shellfish season.

Compliance with approved growing area criteria

The annual review seasonal data analysis, as seen in Table 1 below, shows that the conditionally approved stations in York Harbor all meet approved standards during the open season. Station WB 26.5 was new in 2006 and has only been sampled 16 times.

Table 1 York Harbor Marina Conditional Area Geomean and P90 Data Analysis - Open Status, November 15-April 30

STATION	CLASS	CNT	MFCNT	GM	SDV	MAX	P90	APPD_STD	RESTR_STD
WB026.00	P	29	6	5.6	0.54	240	27.2	45	264
WB026.50	new	16	9	5.1	0.57	93	27.5	38	213
WB027.00	CA	30	9	3.6	0.43	240	12.8	43	250



Field inspection of critical pollution sources

The potential for pollution in York Harbor comes from ten or more boats with heads in the harbor that may discharge wastewater overboard. Visual observations are made throughout the year during the course of random sampling and shoreline surveying.

Water sampling compliance history

All conditional stations were collected 7 times when in the open status in 2007.

Analysis-Recommendations

It is MDMR policy to visit a marina conditional area and to reevaluate the seasonal data before the reopening to ensure compliance with approved standards. York Harbor will be visited at the end of October 2008.



Appendix B. 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 90th 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 90th 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 90th percentile standard that the sample site is compared to will change over time.

Once all 30 data points are analyzed using MF, the 90th 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 90th percentiles will show the number of data points derived from MF analysis and will show the appropriate 90th 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 90th percentile standard is 31 fecal coliforms per 100 ml.



Appendix C. 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 = 90th percentile

APPD_STD = the 90th 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 90th percentile, at or below which the station would meet restricted criteria.



Appendix D. Sample Collection Results for 2007

Station	Date	Collector	Tide	Temp	Sal	Strat	ADV	Stat	CL	MFCOL	WIND
WB002.00	01/02/07	EXT	E	4	28	R	P	O	A	<2.0	NW
WB002.00	03/05/07	LL	H	1	30	R	-	O	R	<2.0	CL
WB002.00	06/18/07	JMCA	HF	20	30	R	P	O	R	2	SW
WB002.00	07/24/07	JMCA	HE	18	30	R	P	O	R	10	S
WB002.00	08/13/07	JMCA	H	15	32	R	W	O	R	<2.0	CL
WB002.00	10/09/07	JMCA	HF	13	30	R	-	O	R	25	N
WB005.00	01/02/07	EXT	E	4	30	R	P	O	A	<2.0	NW
WB005.00	03/05/07	LL	HF	1	33	R	-	O	A	<2.0	CL
WB005.00	06/18/07	JMCA	F	15	30	R	P	O	A	2	SE
WB005.00	07/24/07	JMCA	HE	17	30	R	P	O	A	2	CL
WB005.00	08/13/07	JMCA	HF	15	30	R	-	O	A	<2.0	NW
WB005.00	10/09/07	JMCA	HF	14	31	R	-	O	A	2	NE
WB008.00	01/02/07	EXT	E	4	32	R	PW	C	P	4	NW
WB008.00	03/05/07	LL	H	1	33	R	-	C	P	4	CL
WB008.00	06/18/07	FGA	E	10	31	R	P	C	P	38	NW
WB008.00	07/24/07	FGA	HE	18.5	31	R	P	C	P	6	SW
WB008.00	08/13/07	FGA	LF	16.5	32	R	-	C	P	10	SW
WB008.00	10/09/07	JMCA	HE	14	30	R	-	C	P	7.3	NE
WB008.50	01/02/07	EXT	E	4	32	R	P	O	A	<2.0	NW
WB008.50	03/05/07	LL	H	1	33	R	-	O	A	2	CL
WB008.50	06/18/07	FGA	E	11	30	R	P	O	A	<2.0	NW
WB008.50	07/24/07	FGA	HE	18.5	32	R	P	O	A	16	SW
WB008.50	08/13/07	FGA	L	17.5	32	R	-	O	A	4	SW
WB008.50	10/09/07	JMCA	E	15	31	R	-	O	A	<2.0	NE
WB016.00	01/02/07	EXT	E	4	18	R	P	C	P	38	NW
WB016.00	03/05/07	LL	HE	1	28	R	-	C	P	4	CL
WB016.00	06/18/07	OROY	LF	20	16	R	P	C	P	30	NE
WB016.00	07/24/07	OROY	E	20	28	R	P	C	P	4	CL
WB016.00	08/13/07	OROY	F	19	30	R	-	C	P	13	SW
WB016.00	10/09/07	OROY	HF	15	30	R	-	C	P	3.6	NE
WB020.00	01/02/07	EXT	E	4	20	R	P	C	P	48	NW
WB020.00	03/05/07	LL	E	2	28	R	-	C	P	<2.0	CL
WB020.00	06/18/07	OROY	F	20	20	R	P	C	P	72	NE
WB020.00	07/24/07	OROY	E	21	29	R	P	C	P	14	CL
WB020.00	08/13/07	OROY	F	22	29	R	-	C	P	22	SW
WB020.00	10/09/07	OROY	H	15	30	R	-	C	P	>1600	NE
WB021.00	01/02/07	EXT	E	4	22	R	P	O	A	40	NW
WB021.00	03/05/07	LL	E	2	31	R	-	O	A	3	SW
WB021.00	06/18/07	MHE	F	16	26	R	-	O	A	42	CL
WB021.00	07/24/07	MHE	E	17	30	R	-	O	A	4	CL
WB021.00	08/13/07	MHE	F	15	29	R	-	O	A	7.3	W
WB021.00	10/09/07	MHE	HF	16	30	R	-	O	A	6	NE
WB023.00	01/02/07	EXT	E	4	26	R	P	O	A	10	NW
WB023.00	01/07/07	LL	F	2	30	R	-	O	A	<2.0	CL
WB023.00	02/12/07	EXT	E	1	32	R	-	O	A	<2.0	W



Station	Date	Collector	Tide	Temp	Sal	Strat	ADV	Stat	CL	MFCOL	WIND
WB023.00	03/05/07	LL	E	2	32	R	-	O	A	<2.0	SW
WB023.00	06/18/07	MHE	F	15	30	R	-	O	A	<2.0	CL
WB023.00	07/24/07	MHE	E	15	30	R	-	O	A	<2.0	CL
WB023.00	08/13/07	MHE	F	13	30	R	-	O	A	6	CL
WB023.00	10/09/07	MHE	HF	17	32	R	-	O	A	4	CL
WB023.00	11/19/07	LL	LF	5	26	R	-	O	A	<2.0	NE
WB023.00	12/05/07	LL	E	4	31	R	-	O	A	<2.0	CL
WB023.00	12/17/07	LL	L	-3	28	R	PT	O	A	6	NW
WB026.00	01/02/07	EXT	E	4	30	R	P	C	P	8	NW
WB026.00	02/12/07	EXT	E	0	16	R	N	C	P	12	W
WB026.00	03/05/07	LL	H	2	32	R	-	C	P	<2.0	CL
WB026.00	06/18/07	MHE	F	19	29	R	-	C	P	8	NE
WB026.00	07/24/07	MHE	E	16	30	R	-	C	P	3.6	CL
WB026.00	08/13/07	MHE	F	15	30	R	-	C	P	33	CL
WB026.00	10/09/07	MHE	H	16	32	R	-	C	P	9.1	NE
WB026.00	12/05/07	LL	E	3	30	R	-	C	P	<2.0	CL
WB026.00	12/17/07	LL	F	0	20	R	PT	C	P	16	NW
WB026.50	01/02/07	EXT	E	6	30	R	P	O	CA	12	NW
WB026.50	01/07/07	LL	HF	3	28	R	-	O	CA	<2.0	CL
WB026.50	02/12/07	EXT	E	1	32	R	-	O	CA	<2.0	W
WB026.50	03/05/07	LL	H	2	32	R	-	O	CA	<2.0	CL
WB026.50	06/18/07	MHE	F	13	30	R	-	C	CA	5.5	NE
WB026.50	07/24/07	MHE	E	16	30	R	-	C	CA	<2.0	CL
WB026.50	08/13/07	MHE	F	14	30	R	-	C	CA	2	NW
WB026.50	10/09/07	MHE	H	16	32	R	-	C	CA	4	NE
WB026.50	11/19/07	LL	F	5	30	R	-	O	CA	6	NE
WB026.50	12/05/07	LL	E	3	30	R	-	O	CA	2	CL
WB026.50	12/17/07	LL	F	1	32	R	PT	O	CA	<2.0	NW
WB027.00	01/02/07	EXT	E	6	32	R	P	O	CA	<2.0	NW
WB027.00	01/07/07	LL	HF	3	30	R	-	O	CA	<2.0	CL
WB027.00	02/12/07	EXT	E	0	32	R	-	O	CA	<2.0	W
WB027.00	03/05/07	LL	E	2	33	R	-	O	CA	2	SW
WB027.00	06/18/07	MHE	F	13	30	R	-	C	CA	<2.0	E
WB027.00	07/24/07	MHE	E	16	31	R	-	C	CA	6	CL
WB027.00	08/13/07	MHE	F	11	30	R	-	C	CA	<2.0	W
WB027.00	10/09/07	MHE	H	17	32	R	-	C	CA	<2.0	NE
WB027.00	11/19/07	LL	L	5	26	R	-	O	CA	<2.0	NE
WB027.00	12/05/07	LL	E	4	30	R	-	O	CA	<2.0	CL
WB027.00	12/17/07	LL	L	-2	30	R	PT	O	CA	<2.0	NW
WB029.00	01/02/07	EXT	E	6	32	R	P	O	A	<2.0	NW
WB029.00	03/05/07	LL	E	2	33	R	-	O	A	<2.0	CL
WB029.00	06/18/07	MHE	F	15	30	R	-	O	A	8	NE
WB029.00	07/24/07	MHE	E	17	30	R	-	O	A	<2.0	CL
WB029.00	08/13/07	MHE	F	11	31	R	-	O	A	14	W
WB029.00	10/09/07	MHE	H	15	32	R	-	O	A	6	NW