



GROWING AREA EC

**Little Deer Isle, the Island of Deer Isle including Stonington, and
various surrounding small uninhabited islands**

ANNUAL REVIEW for 2009

Report Date: December 21, 2010

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APPROVAL

Division Director:

_____ Date: _____
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Figure 1. Growing Area EC (north), with Active Water Stations

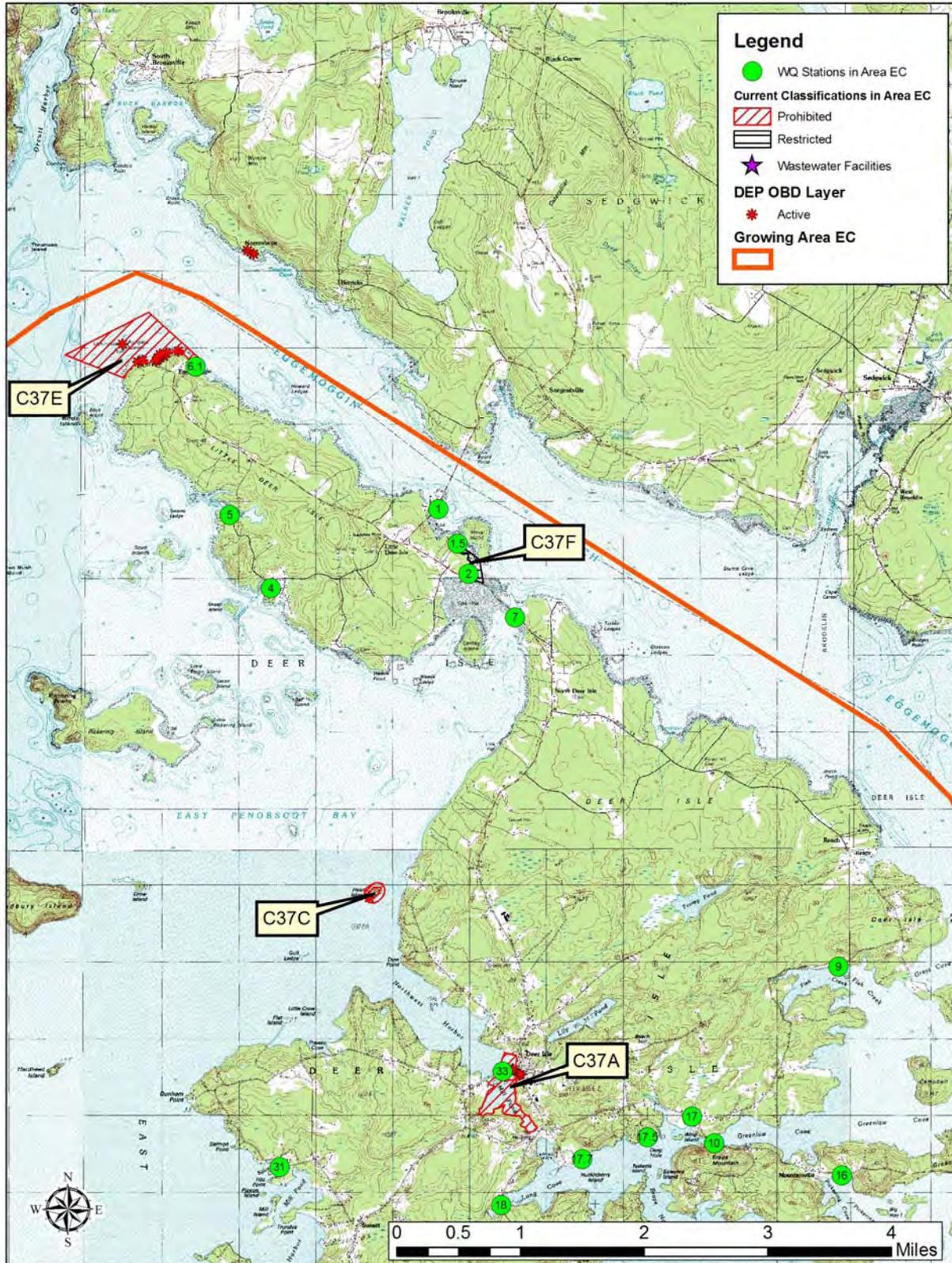
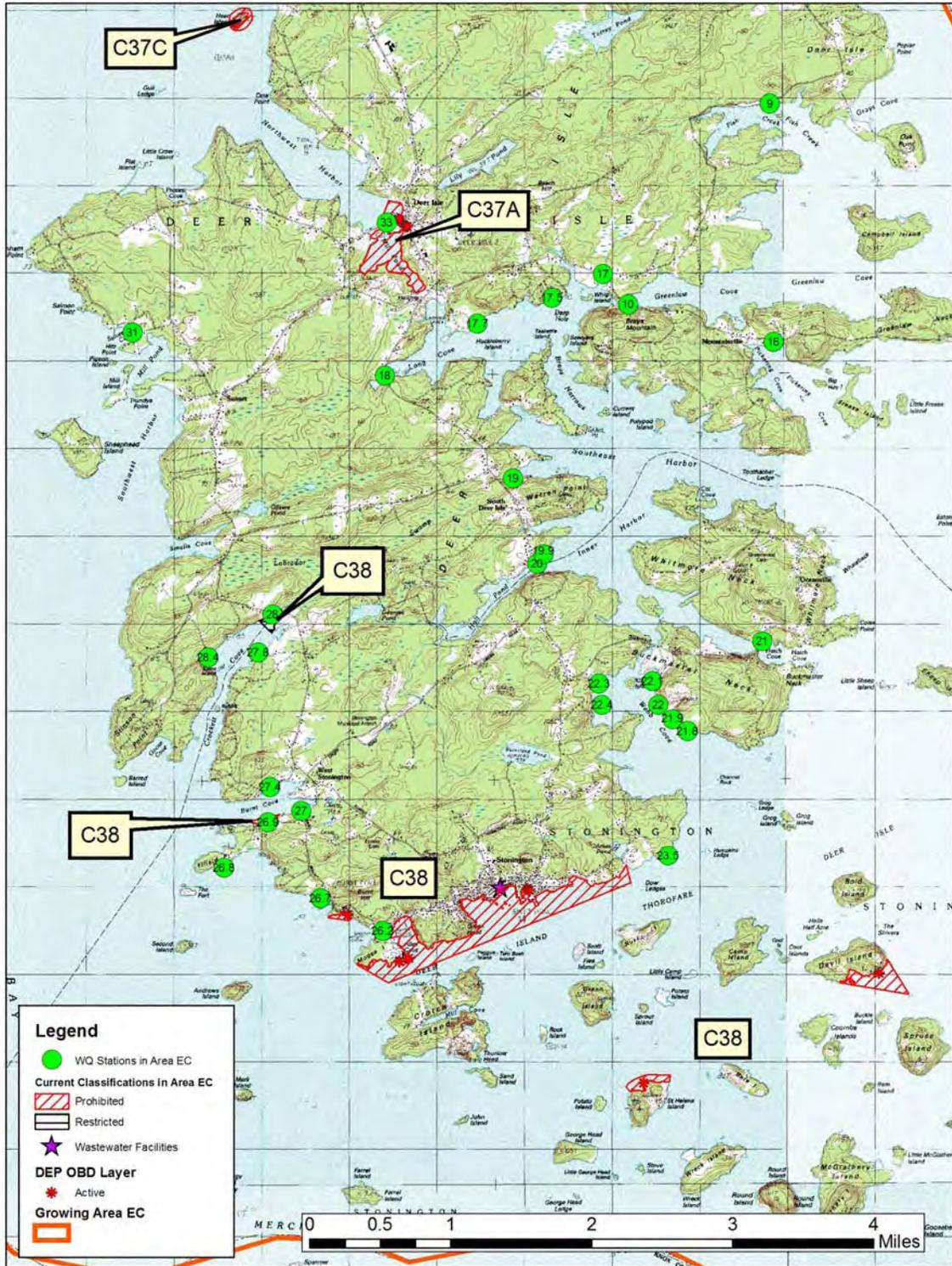




Figure 2. Growing Area EC (south), with Active Water Stations





Executive Summary

This is an annual report for growing area EC written in compliance with the requirements of the 2007 Model Ordinance and the National Shellfish Sanitation Program (NSSP). The next sanitary survey report is due in 2011.

Growing area EC falls in Hancock County and consists of numerous islands that are located in Penobscot Bay and Blue Hill Bay. The Islands of Deer Isle and Little Deer Isle make up the majority of this growing area, with several surrounding islands most of which are small and uninhabited.

Water quality at all stations support their current NSSP classifications with the exception of station EC 27, requiring the eastern portion of Burnt Cove to be reclassified from approved to restricted. Although station EC 2 meets approved classification standards, it will not be reclassified due to its variability, combined with its P90 calculation being above 90%. There are no recommendations for upward classification at this time.

All areas with known pollution sources remain properly classified within effective closures prohibiting the harvest of shellfish. There are approved, restricted, and prohibited classifications within this growing area. Prohibited and restricted areas have sample sites located on classification boundary lines or have dilution calculations to support the size of the closure.

Growing Area Description

Growing Area EC is primarily a rural area of Maine with low population density. It is an island community that is mostly residential with commercial fishing and tourism being the main industry. There are 23 licensed overboard discharges (OBDs), all encompassed by prohibited areas. There is one municipal waste water treatment plant (WWTP) that remains unchanged from its original design and continues to operate within its license limits.

Current Classification(s)

Shellfish growing area EC currently has areas classified as:

Approved

- Sample stations associated with approved classification; EC 1, 1.5, 4, 5, 6.1, 7, 9, 10, 12, 13, 14, 16, 17, 17.5, 17.7, 18, 19, 19.9, 20, 21, 21.8, 21.9, 22, 22.1, 22.3, 22.4, 23.5, 26.2, 26.7, 26.8, 27, 27.4, 27.8, 28.4, & 31.

Restricted

- Area No. 38 Part F, Northwest branch of Crockett Cove, Deer Isle and Stonington, restricted due to water quality not meeting approved standards. Sample station associated with approved classification; EC 28.
- Area No. 38 Part I, Little Deer Isle to Stave Island, Deer Isle, restricted due to water quality not meeting approved standards. Sample station associated with classification; EC 2.



Prohibited

- Area No. 38 Part A, Burnt Cove, Stonington, prohibited due to licensed OBD. Sample station associated with classification; EC 26.9.
- Area No. 38 Part B, Burnt Hill Cove, Stonington, prohibited due to licensed OBD. Sample stations associated with classification; EC 26.2 & 26.7.
- Area No. 38 Part C, Stonington Harbor, Stonington, prohibited due to licensed OBDs, and municipal WWTP. Sample stations associated with classification; EC 23.5 & 26.2.
- Area No. 38 Part D, St. Helena Island, Merchants Row, Stonington, prohibited due to licensed OBD. Classified by dilution calculation.
- Area No. 38 Part E, Devil Island, Merchants Row, Stonington, prohibited due to licensed OBD. Classified by dilution calculation.
- Area No. 38 Part G, Northwest Harbor and the Mill Pond, Deer Isle, prohibited due to licensed OBDs. Sample station associated with classification; EC 33.
- Area No. 38 Part H, Heart Island, Deer Isle, prohibited due to licensed OBD. Classified by dilution calculation.
- Area No. 38 Part J, Pumpkin Island to Eggmoggin, Little Deer Isle, prohibited due to licensed OBDs. Sample station associated with classification; EC 6.1.

Please visit the DMR website to view legal notices:

http://www.maine.gov/dmr/rm/public_health/closures/closedarea.htm#EC

Activity during Review Period

On June 19, 2009 Pollution Area No. 38 was amended. It was a summary of all closures of the Deer Isle/Stonington area classifications rolled into one large legal notice with modifications to some areas and a repeal of the Blastow Cove prohibited area. The summary is as follows:

37-A (Mill Pond, Deer Isle) was repealed and the description was amended into Area No. 38 part G with no changes.

37-B (Blastow Cove) was reclassified from prohibited to approved due to the removal of an OBD.

37-C (Heart Island) was repealed and the description was amended into Area No 38 part H with no changes.

37-E (Eggmoggin, Little Deer Isle) was repealed and the description was amended into Area No 38 part J with an expansion of the prohibited area to encompass an OBD on Pumpkin Island.

37-F (Stave Island) was repealed and the description was amended into Area No 38 part I with a reclassification from prohibited to restricted, to reclassify the area to the highest level possible.

An overboard discharge (OBD#2040) was removed from the head of Blastow Cove in the summer of 2008, with a visual confirmation by DMR personnel on May 6, 2009, warranting the above listed reclassification of Area 37-B.

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

There are no conditional areas in Growing Area EC.



Water Quality Review and Discussion

Table 1 lists all active approved, restricted, and prohibited stations in Growing Area EC, with their respective Geomean and P90 calculations for 2009. Please refer to Appendix A for a key to interpreting the headers on the columns of Table 1. The approved and restricted standards for each station are also displayed in Table 1. These standards will fluctuate yearly as a result of the DMR transition from a most probable number (MPN) fecal coliform test method to a membrane filtration (MF) method and are dependent on the number of sample analyzed by MPN versus MF. The total number of data points used in the calculations is displayed in the Count column and includes both MPN and MF values. The number of data points analyzed by MF is displayed in the MFCNT column. This fluctuating standard will cease when all 30 data points have been analyzed by the MF method. A more detailed explanation of this transition can be found in central files.

All approved and restricted stations met their Nssp classification standard in 2009, with the exception of station EC 27. This station now has a P90 score of 59.6 FC/100ml. Details of this station's downgrade to restricted classification are provided later in this report.

Station EC 2 meets approved classification standards, although it will not be reclassified due to its volatility combined with its P90 calculation being above 90%.

Station EC 27.5 was deactivated on November 17, 2009. This station was initially activated as a boundary station of a prohibited area that encompassed an OBD in Burnt Cove, Stonington (C38B). The legal notice was amended on December 7, 2005 as a smaller prohibited area. Since the size of this prohibited area is based on a dilution calculation, station EC 27.5 is no longer needed as a boundary station.

Station EC 26.9 meets approved standards, but will remain classified as prohibited because of its close proximity to OBD number 3840, within pollution Area No 38 part A. Station EC 33 also meets approved standards, but will remain classified as prohibited because of its close proximity to OBD numbers 2344, 2544, 5357, & 6770, within pollution Area No 38 part G.

Table 1. Geomean and P90 Scores, Growing Area EC, 2003-2009

Station	Class	Count	MFCOUNT	GeoMean	SDV	MAX	P90	Appd_Std	Restr_Std
EC001.00	A	30	20	3.3	0.39	80	10.8	36	199
EC001.50	A	30	20	4.3	0.62	460	26.9	36	199
EC002.00	R	30	20	5	0.64	460	33.7	36	199
EC004.00	A	30	20	4.1	0.46	43	16.2	36	199
EC005.00	A	30	20	2.7	0.26	15	6.1	36	199
EC006.10	A	30	20	2.4	0.18	9.1	4.2	36	199
EC007.00	A	30	20	2.8	0.3	23	6.8	36	199
EC009.00	A	30	20	3.6	0.48	93	14.9	36	199
EC010.00	A	30	20	4	0.54	460	20	36	199
EC012.00	A	30	20	2.9	0.36	43	8.7	36	199
EC013.00	A	30	20	2.6	0.24	23	5.3	36	199
EC014.00	A	30	20	4.9	0.64	1380	32.8	36	199
EC016.00	A	30	20	2.8	0.36	93	8.3	36	199
EC017.00	A	30	20	4.5	0.51	180	20.9	36	199
EC017.50	A	30	20	3	0.42	220	10.5	36	199
EC017.70	A	30	20	2.8	0.22	15	5.4	36	199
EC018.00	A	30	20	3.3	0.35	43	9.4	36	199



Station	Class	Count	MFCOUNT	GeoMean	SDV	MAX	P90	Appd_Std	Restr_Std
EC019.00	A	30	21	3.9	0.58	460	21.9	35	195
EC019.90	New	24	20	5.2	0.58	120	29.9	33	180
EC020.00	A	30	20	4.5	0.45	63	17.2	36	199
EC021.00	A	30	20	2.9	0.3	28	7.3	36	199
EC021.80	A	30	20	2.5	0.16	8	4.1	36	199
EC021.90	A	30	20	2.8	0.33	43	7.6	36	199
EC022.00	A	30	20	3.4	0.43	240	12.4	36	199
EC022.10	A	30	21	3.5	0.4	62	12	35	195
EC022.30	A	30	21	2.5	0.17	10	4.2	35	195
EC022.40	A	30	20	2.6	0.28	36	6.1	36	199
EC023.50	A	30	20	2.6	0.22	16	5.1	36	199
EC026.20	A	30	20	3.6	0.43	140	14.3	36	199
EC026.70	A	30	20	2.6	0.26	16	5.8	36	199
EC026.80	A	30	20	2.9	0.39	96	9.4	36	199
EC026.90	P	30	20	4.1	0.56	240	21.7	36	199
EC027.00	A	30	20	6	0.77	1260	59.6	36	199
EC027.40	A	30	20	3.6	0.43	70	13.3	36	199
EC027.80	A	30	20	3.1	0.34	43	8.5	36	199
EC028.00	R	30	20	9.8	0.78	460	99.5	36	199
EC028.40	A	30	20	5.3	0.61	460	33.4	36	199
EC031.00	A	30	20	3.1	0.35	68	8.9	36	199
EC033.00	P	30	20	3.3	0.35	43	9.5	36	199

All approved and prohibited stations that were active at the beginning of 2009 were sampled at least 6 times following the systematic random sampling (SRS) schedule (Table 2 and Appendix B), with the exception of station EC 27.5 which was discontinued mid year. Some stations had additional samples collected under adverse conditions as noted with an "A" in the Strategy column.

Table 2. EC Samples Collected in 2009

Station	Strategy	Status	Class	Sample Count	Total	Comments
EC001.00	R	O	A	6	6	
EC001.50	A	C	A	3	9	Flood station
	R	O	A	6		
EC002.00	R	C	P	6	6	Reclass P to R on 6/19/09
EC004.00	R	C	P	4	6	Reclass P to A on 6/19/09
	R	O	A	2		Reclass P to A on 6/19/09
EC005.00	R	O	A	6	6	
EC006.10	R	O	A	6	6	
EC007.00	R	O	A	6	6	
EC009.00	R	O	A	6	6	
EC010.00	R	O	A	6	6	
EC012.00	R	O	A	6	6	
EC013.00	R	O	A	6	6	
EC014.00	R	O	A	6	6	
EC016.00	R	O	A	6	6	
EC017.00	R	O	A	6	6	
EC017.50	R	O	A	6	6	
EC017.70	R	O	A	6	6	
EC018.00	R	O	A	6	6	
EC019.00	R	O	A	6	6	



Station	Strategy	Status	Class	Sample Count	Total	Comments
EC019.90	R	O	A	6	6	
EC020.00	R	O	A	6	6	
EC021.00	R	O	A	6	6	
EC021.80	R	O	A	6	6	
EC021.90	A	C	A	13	19	Flood station
	R	O	A	6		
EC022.00	R	O	A	6	6	
EC022.10	R	O	A	6	6	
EC022.30	R	O	A	6	6	
EC022.40	R	O	A	6	6	
EC023.50	R	O	A	6	6	
EC026.20	R	O	A	6	6	
EC026.70	R	O	A	6	6	
EC026.80	R	O	A	6	6	
EC026.90	R	C	P	6	6	
EC027.00	A	C	A	16	22	Flood station
	R	O	A	6		
EC027.40	R	O	A	6	6	
EC027.50	R	O	A	4	4	New Station 12-04; De-activated; no longer a margin of closure; 4/2/09
EC027.80	R	O	A	6	6	
EC028.00	R	O	R	6	6	
EC028.40	R	O	A	6	6	
EC031.00	R	O	A	6	6	
EC033.00	R	C	P	6	6	

Figures 3, 4, and 5 show the P90 trends over the past three years for all active stations in area EL. During the transition from MPN to MF analysis method, the approved and restricted standards will decrease every year, until all samples have been analyzed by the MF method. In order to show the trend of the P90 value over the years, the calculated P90 scores are expressed as a percentage of the standard; any station showing the 2009 column on or above the 100 percent line does not meet the standard for its NSSP classification. Of the approved stations, EC 14, 19.9, 27, and 28.4 now exceed 90% of the P90 standard. These stations still meet approved standards, but must be watched closely over the next review year for consistently elevated scores. If the increase in sample scores continues, the stations will be downgraded in classification. Station EC 1.5 has also shown a sharp increase in its P90 score during 2009 but remains below 80% of the approved standard. The remainder of approved stations in growing area EC have either shown little change in scores over the past 3 years, or inconclusive trends.



Figure 3. Area EC P90 Scores for Approved Stations EC 1 – 19.9 (expressed as the percent of the Approved standard), 2007-2009

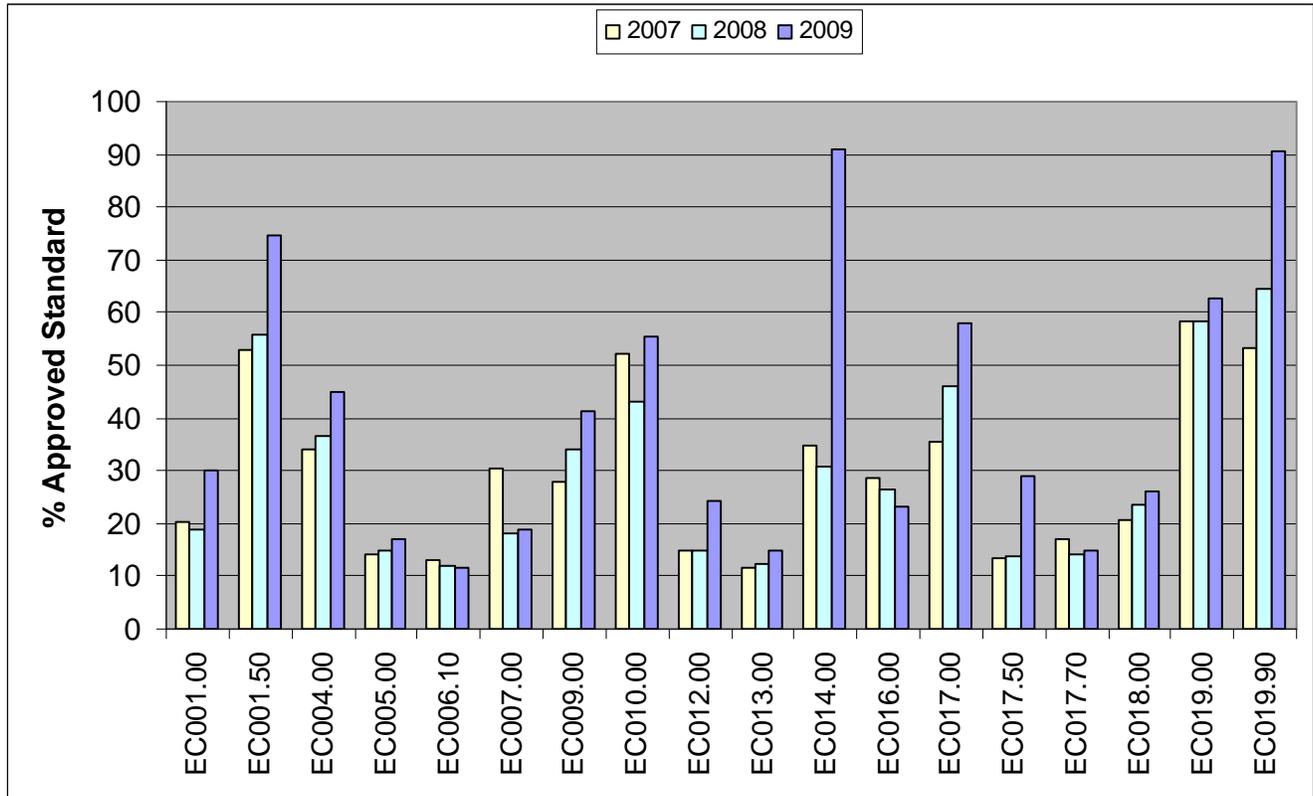




Figure 4. Area EC P90 Scores for Approved Stations EC 20 – 31 (expressed as the percent of the Approved standard), 2007-2009 (cont.)

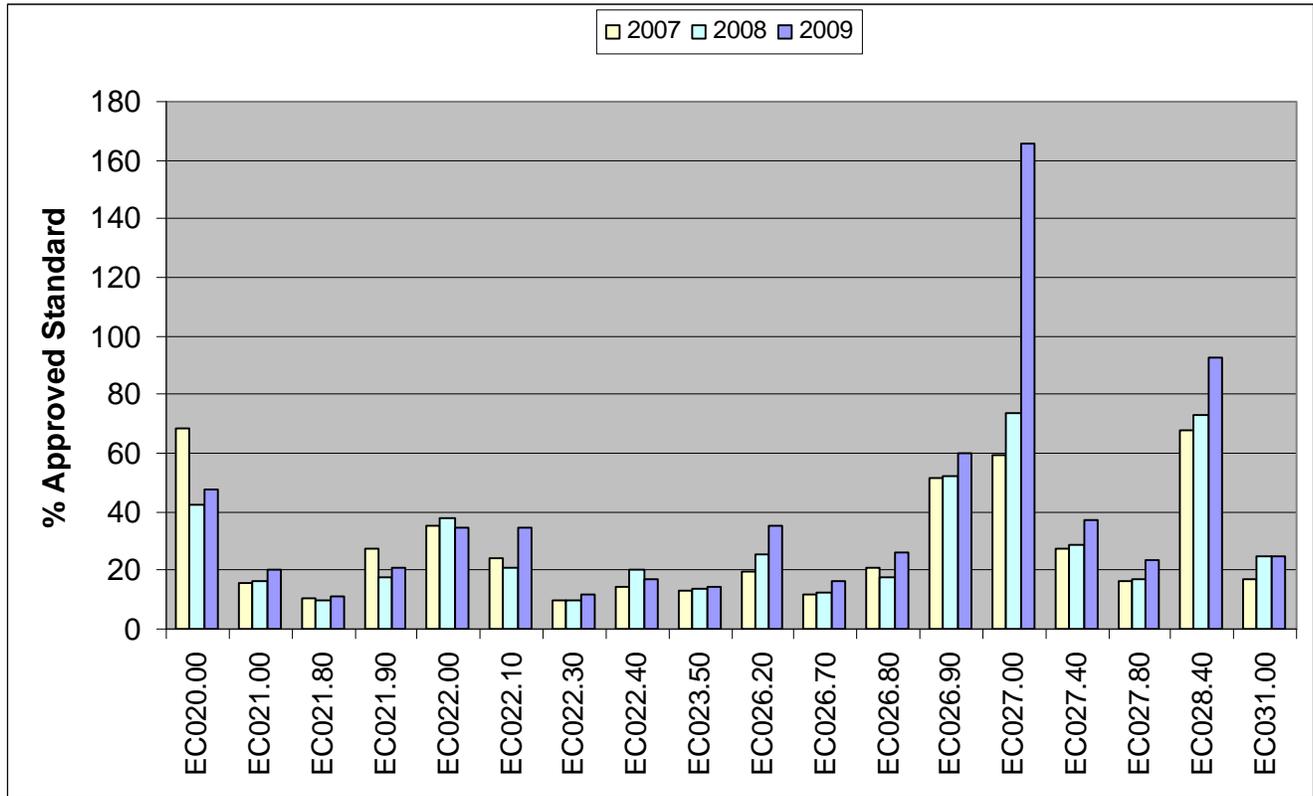
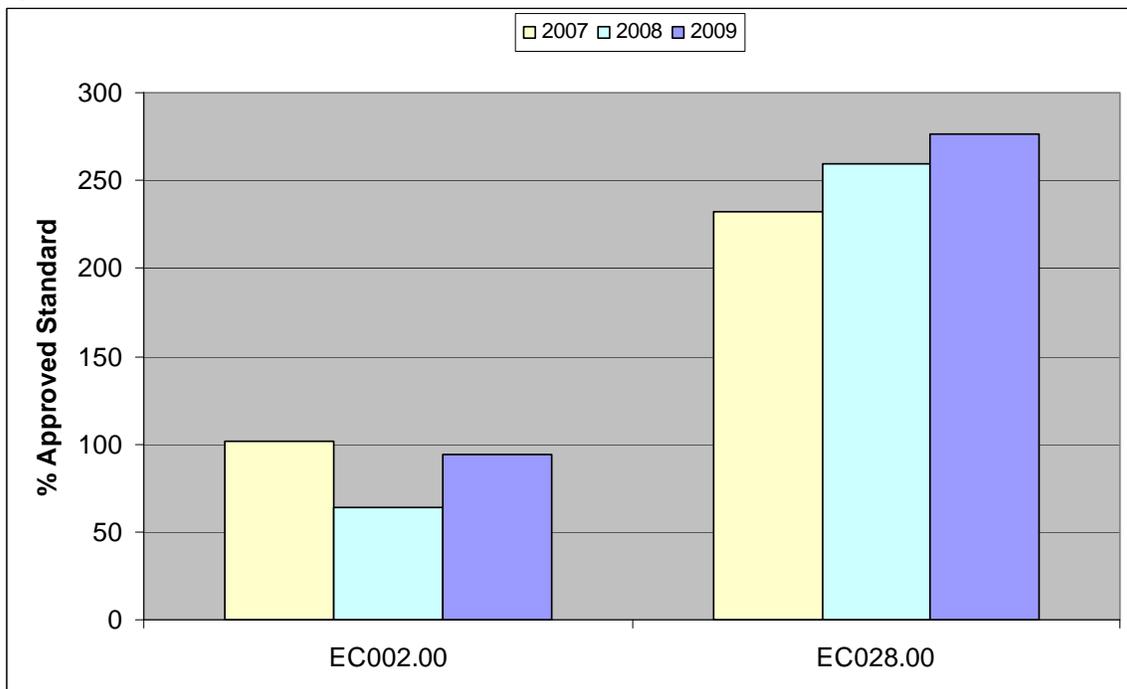


Figure 5. Area EC P90 Scores for Restricted Stations (expressed as the percent of the Approved standard), 2007-2009





Recommendations for Upward Classification

There are no recommendations for upward classification at this time.

Shoreline Survey Activity

Drive through surveys of growing area EC were completed on the same dates as random water sampling runs. In 2009, drive through surveys on the Little Deer Isle portion of growing area EC were completed on the following dates: March 24, May 12, July 8, August 11, September 22, and November 17; drive through surveys of the Deer Isle/Stonington portion of the growing area were completed on March 24, May 27, July 22, September 22, and November 23. No changes in pollution sources were noted at the time of drive through surveys.

Aquaculture/Wet Storage Activity

There are 9 aquaculture leases and 2 wet storage sites in growing area EC. All are located in Approved areas.

The only changes in aquaculture activity in this growing area have been updates in lease expiration dates. Table 3 and Figures 6 - 9 show the current aquaculture lease sites.

Table 3. Aquaculture Leases in the Growing Area

Site ID	Name	Primary Species	Expiration Date
ING 04	Scott Ingraham	Oysters	12/31/2009
LAR1 07	Joseph Larrabee	Blue Mussels	12/31/2009
LAR2 07	Joseph Larrabee	Blue Mussels	12/31/2009
LAR3 07	Joseph Larrabee	Blue Mussels	12/31/2009
LAR4 07	Joseph Larrabee	Blue Mussels	12/31/2009
PEN LD2	Danny Weed	American Oysters	2/20/2013
PEN SN1	Jack Hamblem Jr.	Blue Mussels	7/31/2015
PEN SN2	Jack Hamblem Jr.	Blue Mussels	5/29/2015
PEN STH	Downeast Aquaculture	Blue Mussels	3/15/2016

Table 4. Wet Storage Sites in the Growing Area

Cert. No.	Name	Area Classification
ME 201 SP	Carter's Seafood	Approved
ME 181 SS	Stewardship GEM LLC	Approved



Figure 6. Lease Site ING 04



Figure 8. Lease Sites PEN SN1 & PEN SN2



Figure 7. Lease Site PEN LD 2

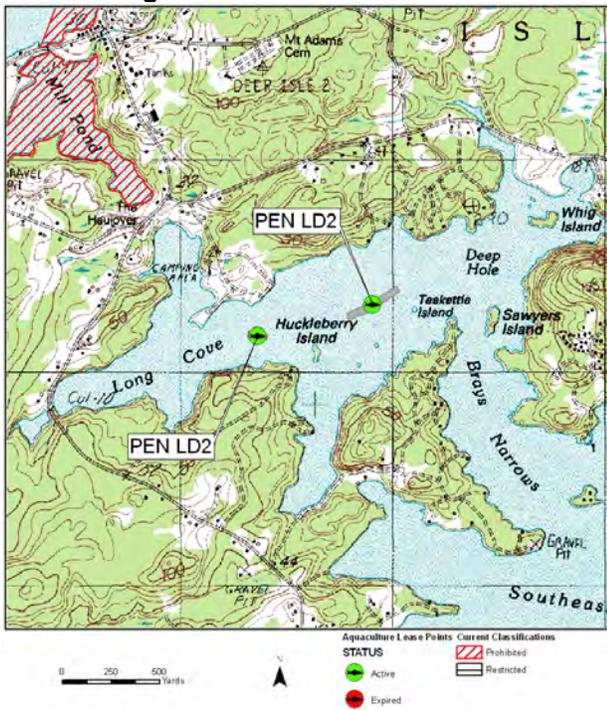
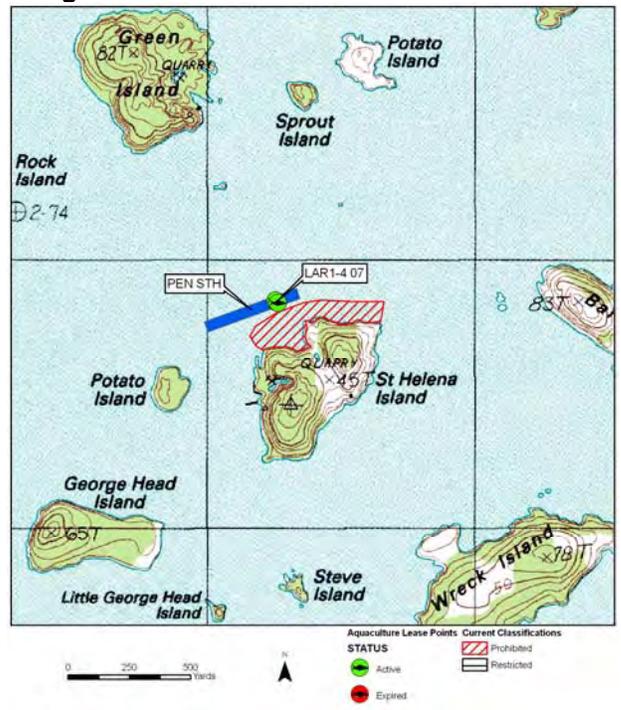


Figure 9. Lease Sites PEN STH & LAR1-4 07





Classification Changes

Station EC27 must be downgraded in its classification, since the 2009 year has brought it up from 74% to 166% of the approved standard. Since there are no known point sources in the vicinity of station EC27, this is considered a non-point runoff issue and may be classified as restricted. The current P90 calculation is above the approved standard, but below the restricted standard cutoff as shown in the Table 5.

Table 5. Station EC 27 Geometric mean and P90 score

Station	Class	Count	MFCCount	GeoMean	SDV	MAX	P90	Appd_Std	Restr_Std
EC027.00	A	30	20	6	0.77	1260	59.6	36	199

The P90 calculated numbers have been steadily rising since 2005.

Station#	%Appr. Std. '05	%Appr. Std. '06	%Appr. Std. '07	%Appr. Std. '08	%Appr. Std. '09
EC027.00	15	28	59	74	166

The reasons for the increase in P90 scores at EC27 are unknown at this time. The first figure below shows the current closure of 38 part A prohibited area encompassing OBD number 3840, which is located directly under the dot showing station EC26.9. The second figure shows the boundaries of the proposed restricted area encompassing WQ station EC27.

Figure 10. Pollution area 38, Burnt Cove Area before Reclassification

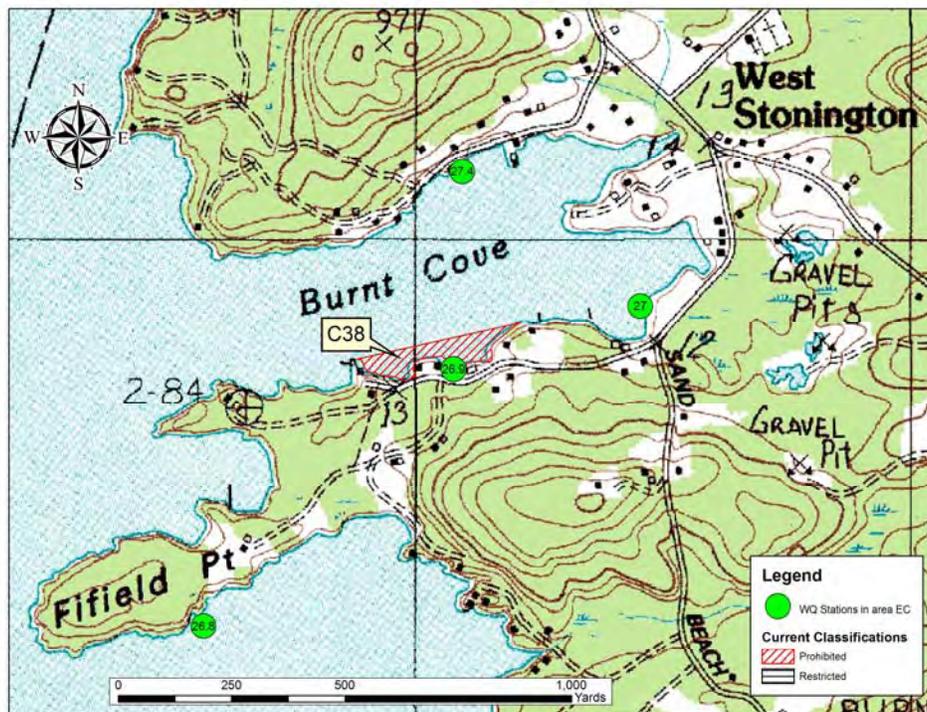
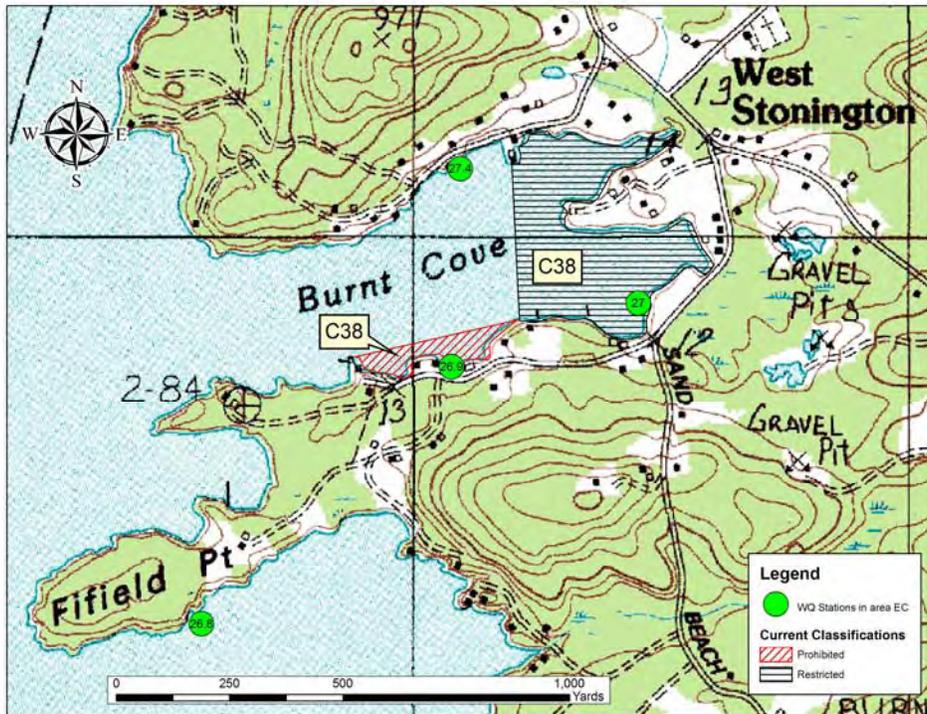




Figure 11. Pollution Area 38, Burnt Cove Area, after Reclassification



Summary

Water quality at all stations support their current NSSP classifications with the exception of station EC 27, requiring the eastern portion of Burnt Cove to be reclassified from approved to restricted. Although station EC 2 meets the approved classification standards, it will not be reclassified due to its volatility, combined with its P90 calculation being above 90%. There are no recommendations for upward classification at this time.

All known pollution sources remain properly classified within effective closures prohibiting the harvest of shellfish. There are approved, restricted, and prohibited classifications within this growing area. Prohibited and restricted areas have sample sites on margins or have dilution calculations to support the size of the closure.

Recommendations for future work

Begin shoreline survey for the 2011 Sanitary Survey.



Appendix 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 = 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 B. Growing Area EC 2009 Data

Station	Date	Strategy	Open Closed	Class	Adversity	Temp	Salinity	Tide	Wind	Col Score
EC001.00	3/24/2009	R	O	A		1	30	E	N	<2
	5/12/2009	R	O	A		10	28	F	S	<2
	7/8/2009	R	O	A	P	8	28	E	E	80
	8/11/2009	R	O	A	P	16	28	F	NW	<2
	9/22/2009	R	O	A	O	11	30	HF	S	<2
	11/17/2009	R	O	A	O	6	32	E	N	2
EC001.50	3/24/2009	R	O	A		1	30	HE	N	<2
	5/12/2009	R	O	A		11	28	F	S	<2
	7/8/2009	R	O	A	P	8	29	E	E	160
	8/11/2009	R	O	A	P	15	28	F	NW	8
	9/22/2009	R	O	A	O	11	30	H	S	2
	11/17/2009	R	O	A	O	5	30	E	NW	<2
EC002.00	3/24/2009	R	C	P		1	30	E	N	<2
	5/12/2009	R	C	P		11	28	F	S	<2
	7/8/2009	R	C	R	P	8	26	E	E	120
	8/11/2009	R	C	R	P	15	27	F	NW	4
	9/22/2009	R	C	R	O	11	30	H	S	<2
	11/17/2009	R	C	R	O	5	30	E	W	4
EC004.00	3/24/2009	R	C	P		2	30	HE	N	<2
	5/12/2009	R	C	P		11	28	F	S	<2
	7/8/2009	R	C	A	P	6	28	HE	CL	33
	8/11/2009	R	C	A	P	15	26	F	NW	<2
	9/22/2009	R	O	A	O	11	30	H	S	<2
	11/17/2009	R	O	A	O	6	31	E	CL	<2
EC005.00	3/24/2009	R	O	A		0	26	HE	N	<2
	5/12/2009	R	O	A		11	28	F	S	<2
	7/8/2009	R	O	A	P	7	28	HE	CL	8
	8/11/2009	R	O	A	P	15	26	F	NW	2
	9/22/2009	R	O	A	O	11	30	H	SW	<2
	11/17/2009	R	O	A	O	5	30	E	CL	<2
EC006.10	3/24/2009	R	O	A		1	30	HE	N	<2
	5/12/2009	R	O	A		11	28	F	S	<2
	7/8/2009	R	O	A	P	7	28	E	NE	4
	8/11/2009	R	O	A	P	14	26	F	NW	<2
	9/22/2009	R	O	A	O	11	30	H	E	<2
	11/17/2009	R	O	A	O	5	30	E	NW	<2
EC007.00	3/24/2009	R	O	A		1	30	E	N	<2
	5/12/2009	R	O	A		10	28	F	S	<2
	7/8/2009	R	O	A	P	6	29	E	CL	<2
	8/11/2009	R	O	A	P	16	28	F	NW	<2
	9/22/2009	R	O	A	O	11	30	H	S	<2
	11/17/2009	R	O	A	O	5	31	E	CL	<2
EC009.00	3/24/2009	R	O	A	T	0	30	H	CL	<2
	5/12/2009	R	O	A		8	28	HF	SE	<2



EC Annual Review
Effective Date 12/31/09
Revision No. 1

Station	Date	Strategy	Open Closed	Class	Adversity	Temp	Salinity	Tide	Wind	Col Score
	7/22/2009	R	O	A	P	14	28	H	CL	25
	8/11/2009	R	O	A	O	21	30	HF	E	2
	9/22/2009	R	O	A	O	14	30	F	SE	<2
	11/23/2009	R	O	A	O	3	31	F	SE	<2
EC010.00	3/24/2009	R	O	A	T	0	30	H	E	<2
	5/12/2009	R	O	A		10	28	HF	CL	<2
	7/22/2009	R	O	A	P	16	29	H	CL	70
	8/11/2009	R	O	A	O	18	30	HF	E	2
	9/22/2009	R	O	A	O	15	31	HF	SW	2
	11/23/2009	R	O	A	O	3	30	F	SE	<2
EC012.00	3/24/2009	R	O	A	T	0	30	E	N	<2
	5/12/2009	R	O	A		5	30	F	CL	<2
	7/22/2009	R	O	A	P	15	29	H	CL	42
	8/11/2009	R	O	A	O	19	30	HF	E	<2
	9/22/2009	R	O	A	O	15	32	LF	CL	10
	11/23/2009	R	O	A	O	3	31	F	E	4
EC013.00	3/24/2009	R	O	A	T	1	30	E	NE	<2
	5/12/2009	R	O	A		5	30	F	SE	<2
	7/22/2009	R	O	A	P	15	30	H	CL	11
	8/11/2009	R	O	A	O	19	31	H	E	<2
	9/22/2009	R	O	A	O	15	32	LF	CL	2
	11/23/2009	R	O	A	O	3	30	F	E	<2
EC014.00	3/24/2009	R	O	A	T	1	31	E	NW	<2
	5/12/2009	R	O	A		8	30	F	S	<2
	7/22/2009	R	O	A	P	15	29	H	CL	138
	8/11/2009	R	O	A	O	19	31	H	CL	1380
	9/22/2009	R	O	A	O	15	32	LF	CL	26
	11/23/2009	R	O	A	O	3	31	F	SE	<2
EC016.00	3/24/2009	R	O	A	T	0	30	E	NW	<2
	5/12/2009	R	O	A		11	30	F	SE	<2
	7/22/2009	R	O	A	P	16	30	H	CL	10
	8/11/2009	R	O	A	O	18	32	H	SE	<2
	9/22/2009	R	O	A	O	15	32	HF	CL	<2
	11/23/2009	R	O	A	O	3	30	F	SE	<2
EC017.00	3/24/2009	R	O	A	T	0	27	H	E	<2
	5/12/2009	R	O	A		10	28	F	SE	<2
	7/22/2009	R	O	A	P	16	29	H	CL	32
	8/11/2009	R	O	A	O	19	30	H	SE	2
	9/22/2009	R	O	A	O	15	30	HF	SW	2
	11/23/2009	R	O	A	O	3	29	F	SE	<2
EC017.50	3/24/2009	R	O	A	T	0	30	H	SE	<2
	5/12/2009	R	O	A		9	30	F	SE	<2
	7/22/2009	R	O	A	P	19	20	H	S	220
	8/11/2009	R	O	A	O	18	31	H	SE	<2
	9/22/2009	R	O	A	O	15	31	LF	CL	<2
	11/23/2009	R	O	A	O	3	30	F	SE	<2
EC017.70	3/24/2009	R	O	A	T	0	30	H	SE	<2



Station	Date	Strategy	Open Closed	Class	Adversity	Temp	Salinity	Tide	Wind	Col Score
	5/12/2009	R	O	A		9	30	F	SE	<2
	7/22/2009	R	O	A	P	16	30	H	S	4
	8/11/2009	R	O	A	O	20	31	H	S	<2
	9/22/2009	R	O	A	O	15	30	F	W	<2
	11/23/2009	R	O	A	O	2	29	F	E	2
EC018.00	3/24/2009	R	O	A	T	-1	26	H	NE	<2
	5/12/2009	R	O	A		12	30	H	CL	<2
	7/22/2009	R	O	A	P	16	30	HE	CL	11
	8/11/2009	R	O	A	O	22	30	HF	SE	<2
	9/22/2009	R	O	A	O	15	32	F	W	<2
	11/17/2009	R	O	A	O	7	30	H	N	<2
EC019.00	3/24/2009	R	O	A	T	-1	30	HE	E	<2
	5/12/2009	R	O	A		15	30	H	CL	<2
	7/22/2009	R	O	A	P	16	29	HE	CL	8
	8/11/2009	R	O	A	O	23	30	HF	E	2
	9/22/2009	R	O	A	O	15	32	F	SW	2
	11/17/2009	R	O	A	O	7	30	H	N	<2
EC019.90	3/24/2009	R	O	A	T	1	30	E	NE	120
	5/12/2009	R	O	A		11	30	HF	E	<2
	7/22/2009	R	O	A	P	17	28	HE	CL	48
	8/11/2009	R	O	A	O	20	31	HF	SE	2
	9/22/2009	R	O	A	O	15	32	F	SW	<2
	11/17/2009	R	O	A	O	8	31	H	E	<2
EC020.00	3/24/2009	R	O	A	T	1	30	E	NE	6
	5/12/2009	R	O	A		11	30	HF	CL	<2
	7/22/2009	R	O	A	P	17	28	HE	CL	42
	8/11/2009	R	O	A	O	20	31	HF	SE	<2
	9/22/2009	R	O	A	O	15	32	F	SW	<2
	11/17/2009	R	O	A	O	8	32	H	NE	<2
EC021.00	3/24/2009	R	O	A	T	0	30	HE	W	<2
	5/12/2009	R	O	A		8	30	HF	SE	<2
	7/22/2009	R	O	A	P	16	30	E	CL	28
	8/11/2009	R	O	A	O	21	32	HE	E	<2
	9/22/2009	R	O	A	O	15	32	HF	CL	<2
	11/23/2009	R	O	A	O	3	31	F	SE	<2
EC021.80	3/24/2009	R	O	A	T	1	30	E	NW	<2
	5/12/2009	R	O	A		6	30	HF	CL	<2
	7/22/2009	R	O	A	P	16	29	E	S	6
	8/11/2009	R	O	A	O	21	31	HE	SE	<2
	9/22/2009	R	O	A	O	15	32	H	SW	<2
	11/23/2009	R	O	A	O	3	31	HF	SE	5.4
EC021.90	3/24/2009	R	O	A	T	1	31	E	NW	<2
	5/12/2009	R	O	A		6	30	HF	CL	<2
	7/22/2009	R	O	A	P	16	30	E	S	36
	8/11/2009	R	O	A	O	22	31	HE	SE	<2
	9/22/2009	R	O	A	O	15	32	H	SW	<2
	11/23/2009	R	O	A	O	3	31	HF	SE	2



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EC022.00	3/24/2009	R	O	A	T	1	31	E	NW	<2
	5/12/2009	R	O	A		6	30	HF	CL	<2
	7/22/2009	R	O	A	P	16	30	E	S	4
	8/11/2009	R	O	A	O	21	31	HE	SE	<2
	9/22/2009	R	O	A	O	15	32	H	CL	<2
	11/23/2009	R	O	A	O	3	30	HF	SE	<2
EC022.10	3/24/2009	R	O	A	T	0	31	HE	NW	<2
	5/12/2009	R	O	A		9	30	HF	S	<2
	7/22/2009	R	O	A	P	16	27	E	S	27
	8/11/2009	R	O	A	O	21	31	HE	SE	<2
	9/22/2009	R	O	A	O	15	32	H	SW	36
	11/23/2009	R	O	A	O	4	31	HF	SE	2
EC022.30	3/24/2009	R	O	A	T	0	30	HE	NW	<2
	5/12/2009	R	O	A		10	30	HF	SE	<2
	7/22/2009	R	O	A	P	17	30	E	S	10
	8/11/2009	R	O	A	O	22	31	HE	SE	<2
	9/22/2009	R	O	A	O	15	32	H	CL	2
	11/23/2009	R	O	A	O	3	31	HF	SE	<2
EC022.40	3/24/2009	R	O	A	T	0	30	HE	NW	<2
	5/12/2009	R	O	A		9	30	H	SE	<2
	7/22/2009	R	O	A	P	16	30	E	S	2
	8/11/2009	R	O	A	O	22	31	HE	CL	<2
	9/22/2009	R	O	A	O	15	32	H	S	<2
	11/23/2009	R	O	A	O	3	31	HF	E	<2
EC023.50	3/24/2009	R	O	A	T	1	31	E	E	<2
	5/12/2009	R	O	A		10	30	HF	CL	<2
	7/22/2009	R	O	A	P	15	30	E	S	<2
	8/11/2009	R	O	A	O	20	31	H	SE	<2
	9/22/2009	R	O	A	O	11	32	HE	SW	2
	11/23/2009	R	O	A	O	3	31	HF	SE	<2
EC026.20	3/24/2009	R	O	A	T	1	31	E	E	<2
	5/12/2009	R	O	A		11	29	HF	SW	<2
	7/22/2009	R	O	A	P	15	30	E	S	7.3
	8/11/2009	R	O	A	O	20	30	H	SE	<2
	9/22/2009	R	O	A	O	11	32	HE	SW	4
	11/17/2009	R	O	A	O	9	32	H	NE	140
EC026.70	3/24/2009	R	O	A	T	1	31	E	E	<2
	5/12/2009	R	O	A		11	29	HF	CL	<2
	7/22/2009	R	O	A	P	15	30	E	CL	13
	8/11/2009	R	O	A	O	18	30	H	SE	<2
	9/22/2009	R	O	A	O	11	32	HE	SW	<2
	11/17/2009	R	O	A	O	9	32	H	NE	14
EC026.80	3/24/2009	R	O	A	T	1	31	LE	NE	<2
	5/12/2009	R	O	A		8	30	HF	CL	<2
	7/22/2009	R	O	A	P	15	30	E	CL	96
	8/11/2009	R	O	A	O	18	30	H	SE	<2
	9/22/2009	R	O	A	O	11	31	HE	S	<2



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	11/17/2009	R	O	A	O	9	32	H	NE	<2
EC026.90	3/24/2009	R	C	P	T	0	28	HE	NW	<2
	5/12/2009	R	C	P		10	28	F	CL	<2
	7/22/2009	R	C	P	P	17	28	E	CL	4
	8/11/2009	R	C	P	O	20	30	HF	SE	2
	9/22/2009	R	C	P	O	11	31	HE	SW	<2
	11/17/2009	R	C	P	O	5	28	H	NE	180
EC027.00	3/24/2009	R	O	A	T	0	29	HE	NW	<2
	5/12/2009	R	O	A		14	28	F	CL	<2
	7/22/2009	R	O	A	P	17	28	E	CL	130
	8/11/2009	R	O	A	O	20	30	HF	SE	<2
	9/22/2009	R	O	A	O	11	31	HE	SW	<2
	11/17/2009	R	O	A	O	5	26	HF	NE	1260
EC027.40	3/24/2009	R	O	A	T	0	30	HE	NW	<2
	5/12/2009	R	O	A		11	29	F	CL	<2
	7/22/2009	R	O	A	P	17	26	E	CL	54
	8/11/2009	R	O	A	O	20	30	HF	SE	<2
	9/22/2009	R	O	A	O	11	31	HE	SW	2
	11/17/2009	R	O	A	O	9	31	HF	NE	10
EC027.50	3/24/2009	R	O	A	T	0	30	E	NW	<2
	5/12/2009	R	O	A		8	30	F	CL	<2
	8/11/2009	R	O	A	O	18	30	HF	SE	<2
	11/17/2009	R	O	A	O	9	32	HF	NE	<2
EC027.80	5/12/2009	R	O	A		10	29	F	W	2
	5/27/2009	R	O	A	P	7	30	HF	E	2
	7/22/2009	R	O	A	P	18	28	HE	S	38
	8/11/2009	R	O	A	O	19	30	H	SE	<2
	9/22/2009	R	O	A	O	14	32	HF	W	3.6
	11/17/2009	R	O	A	O	8	28	HE	N	6
EC028.00	3/24/2009	R	O	R	T	0	30	E	NW	<2
	5/12/2009	R	O	R		12	28	F	CL	<2
	7/22/2009	R	O	R	P	20	11	HE	S	128
	8/11/2009	R	O	R	O	21	29	H	S	2
	9/22/2009	R	O	R	O	15	30	HF	W	4
	11/17/2009	R	O	R	O	9	30	HE	N	<2
EC028.40	5/12/2009	R	O	A		11	28	F	NW	<2
	5/27/2009	R	O	A	P	7	30	HF	E	4
	7/22/2009	R	O	A	P	16	28	HE	S	68
	8/11/2009	R	O	A	O	19	30	H	S	62
	9/22/2009	R	O	A	O	15	32	HF	W	<2
	11/17/2009	R	O	A	O	8	30	HE	N	<2
EC031.00	3/24/2009	R	O	A	T	1	30	E	NW	<2
	5/12/2009	R	O	A		11	28	F	NW	8
	7/22/2009	R	O	A	P	15	26	E	CL	<2
	8/11/2009	R	O	A	O	21	29	HF	S	<2
	9/22/2009	R	O	A	O	15	31	F	W	<2
	11/17/2009	R	O	A	O	8	30	H	N	2



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EC033.00	3/24/2009	R	C	P	T	0	28	E	NW	<2
	5/12/2009	R	C	P		13	26	H	CL	<2
	7/22/2009	R	C	P	P	16	28	E	CL	<2
	8/11/2009	R	C	P	O	21	28	F	S	2
	9/22/2009	R	C	P	O	16	30	F	SW	<2
	11/17/2009	R	C	P	O	7	29	H	N	4