



GROWING AREA ED - Isle au Haut, Knox County

**Triennial Report for
(2004-2006)**

Final Report Date: 9/12/07

**ORIGINATOR NAME
Erick Schaefer**

APPROVAL

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Figure 1 Area ED Overview

Executive Summary:

Isle au Haut is a large (6 miles x 3 miles; 5500 acres) offshore island south of the Hancock County fishing village of Stonington, Maine. Winter population is <80 people, while summer resident numbers average +/-300 individuals. Land use is limited to small farms, seasonal structures and near-shore fishing. Isle au Haut is reached by private ferry/barge service and most of the roads are town owned. Acadia National Park occupies the southern 1/2 of the island (2860 acres) and the use is limited to a small number of visitors per day with the largest use in the summer months. In 2003 a failed septic system was identified and a closure 30F was promulgated. The system was repaired in the spring of 2005 and a survey of the property on 5/11/05 confirmed this fact. The closure was then repealed. There are no licensed OBD's, sewage treatment plants, or other pollution sources located in this growing area and at this time the entire growing area is classified Approved. Two stations, ED 3.5 and 5, were deactivated because they were too close to other stations and no longer viewed as necessary. There were no new stations added during this review period.



Current Classifications:

Approved- All shores and waters of the growing area are Approved.

Classification Changes during this Review Period:

2004: no changes made during this review period.

2005: Survey of area around C30F was conducted on 5/11/05. This survey determined that the failing septic was repaired and a new system put in place. C30 F was repealed

2006: no changes made during this review period

Changes in Water Quality Stations for Review period:

Table 1 Changes in Water Quality Stations

Location ID	Comments	Category
ED003.50	Inactive 07-28-05; no longer needed	Deactivated
ED005.00	Inactive 07-28-05; no longer needed	Deactivated

Review of Water Quality:

Table 2 P90 for Review Years

Station#	2004	2005	2006
ED 1.50	8.4	8.4	3.3
ED 2.00	7	11.7	8.1
ED 2.50	5.6	5.1	3.4
ED 3.00	7.3	7.3	3.2
ED 3.50	8.5	discontinued	discontinued
ED 3.70	3.1	3.2	3.3
ED 3.80	4.2	4.1	3.3
ED 4.00	8.4	3.1	3.3
ED 4.40	17.5	4	4.1
ED 4.60	3.8	3.7	3.8
ED 5.00	3.1	discontinued	discontinued
ED 5.10	5.1	5.1	5
ED 5.50	7.5	7.5	3.4
ED 7.00	11.9	9.2	7.4

As can be seen from the table there has been no significant change in P90 over this three year review period. The following table shows the current geomean P90 for the most recent 30 samples.

Table 3 Most recent P90 Geomean Area ED

Area ED P90 Report most recent 30 samples year ending 2006

STATION	CLASS	COUNT	MFCNT	Geomean	SDV	MAX	P90	APPD_STD	RESTR_STD
ED001.50	A	30	2	2.8	0.05	3.6	3.3	48	288
ED002.00	A	30	2	3.5	0.29	93	8.1	48	288
ED002.50	A	30	2	2.9	0.05	3.6	3.4	48	288



ED003.00	A	30	2	2.8	0.05	2.9	3.2	48	288
ED003.50	A	28	0	3.4	0.32	150	8.8	49	300
ED003.70	A	30	2	2.8	0.05	3.6	3.3	48	288
ED003.80	A	30	2	2.9	0.05	3.6	3.3	48	288
ED004.00	A	30	2	2.8	0.05	3.6	3.3	48	288
ED004.40	A	30	2	3	0.11	9.1	4.1	48	288
ED004.60	A	30	2	2.9	0.09	7.3	3.8	48	288
ED005.00	A	29	0	2.9	0.02	3.6	3.1	49	300
ED005.10	A	30	2	3	0.17	23	5	48	288
ED005.50	A	30	2	2.9	0.05	3.6	3.4	48	288
ED007.00	A	30	2	3.4	0.26	43	7.4	48	288

The area was sampled 6 times each year during the three year review period as demonstrated in the table below.

Table 4 Sample Count for Area ED 2006, 2005 and 2004

Growing Area Sample Count 2006				
Station	Class	Status	Sample Count	COMMENTS
ED001.50	A	O	6	
ED002.00	A	O	6	
ED002.50	A	O	6	
ED003.00	A	O	6	
ED003.70	A	O	6	
ED003.80	A	O	6	
ED004.00	A	O	6	
ED004.40	A	O	6	
ED004.60	A	O	6	
ED005.10	A	O	6	
ED005.50	A	O	6	
ED007.00	A	O	6	

Growing Area Sample Count 2005				
Station	Class	Status	Sample Count	COMMENTS
ED001.50	A	O	7	
ED002.00	A	O	6	
ED002.50	A	O	6	
ED003.00	A	O	7	
ED003.70	A	O	7	
ED003.80	A	O	7	
ED004.00	A	O	7	
ED004.40	A	O	6	
ED004.60	A	O	7	



Growing Area Sample Count 2005				
Station	Class	Status	Sample Count	COMMENTS
ED005.10	A	O	6	
ED005.50	A	O	6	
ED007.00	A	O	6	

Growing Area Sample Count 2004				
Station	Class	Status	Sample Count	COMMENTS
ED001.50	A	O	6	
ED002.00	A	O	6	
ED002.50	A	O	6	
ED003.00	A	O	6	
ED003.70	A	O	6	
ED003.80	A	O	6	
ED004.00	A	O	7	
ED004.40	A	O	7	
ED004.60	A	O	6	
ED005.10	A	O	6	
ED005.50	A	O	6	
ED007.00	A	O	6	

Documentation of New Pollution Sources

There were no new pollution sources identified during this review period. The review was conducted during boat sampling runs. A review of the area and specifically the Streeter property was conducted on May 11, 2005 by Marine Specialists Erick Schaefer and John Fendl. From this review it was determined that the failing system at the Streeter residence was corrected and a new holding tank put in place.

Reevaluation of All Pollution Sources

The only previously identified pollution source for this growing area was the failing septic system identified in 2003. Based upon the recent survey review of this area conducted on 5/11/05, and random seawater sampling of water quality station ED 4, it has been determined that this area now meets the criteria for Approved Classification. The repeal of the current closure will open up an additional 18 acres of growing area in Point Lookout, Isle au Haut. It is the recommendation of the Public Health Division that Closure C30F be repealed. A review of this property was conducted on May 11, 2005 by Marine Specialists Erick Schaefer and John Fendl. From this review it was determined that the failing system at the Streeter residence was corrected and a new holding tank put in place.

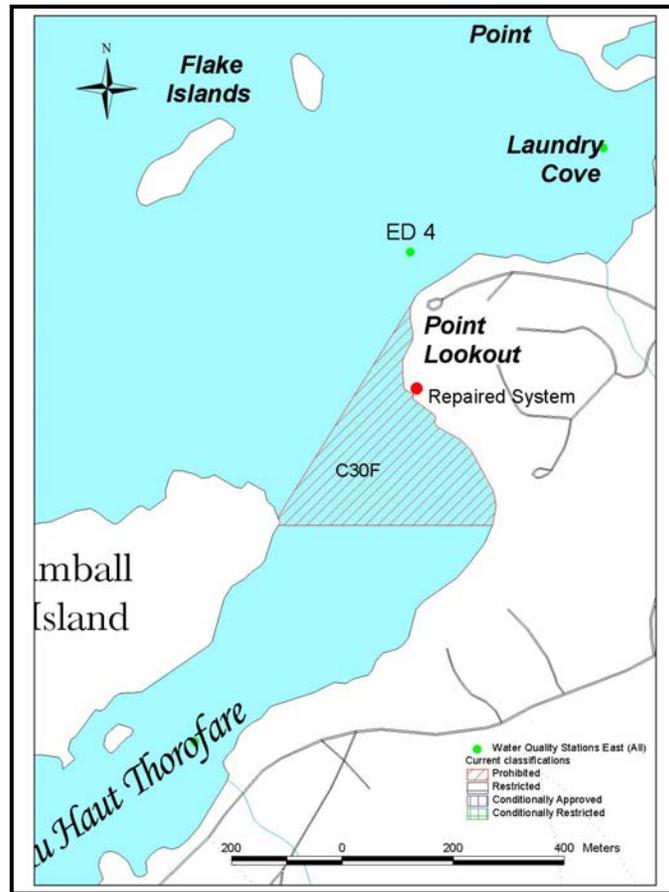


Figure 2 C30F

Extra Samples:

There were no extra samples or stream samples taken during this review period. All the streams of any significance in this growing area all have water quality stations located near their mouths. Random sampling of these stations has never indicated any problems. Figure 3 shows the major streams on the Island and the WQ stations located near them.



Figure 3 Streams and WQ Stations area ED



Data Analysis

This growing area is an island with deep water located close to shore and very little development along its shore. The water quality sampling data has remained consistently low in this growing area. The water quality sampling over the last few years supports this conclusion. This trend has remained consistent and supports that this growing area is classified correctly.

During the 2006 review period the water testing methodology converted from multiple tube fermentation to membrane filtration. Geomean and P90 calculations are now based on a mix of MPN and MF data. Comparing previous year's P90 values to present values may be misleading without knowing the "approved standard" is dropping with changes in the MPN/MF ratio. The following chart shows how the standard for approved status changes with the number of membrane filtration samples. A review of the current survey and water quality data for growing area ED has concluded that the current classification is correct.

Table 5 Approved Standard when transitioning from MPN (3 tube/3 dilution) to MF mTEC

# Tests by A1	# Tests by MF	Approved Standard	Restricted Standard
29	1	48	294
28	2	48	288
27	3	47	282
26	4	46	277
25	5	45	271
24	6	45	266
23	7	44	260
22	8	43	255
21	9	43	250
20	10	42	245
19	11	41	240
18	12	41	235
17	13	40	230
16	14	40	226
15	15	39	221
14	16	38	217
13	17	38	212
12	18	37	208
11	19	37	204
10	20	36	200
9	21	36	196
8	22	35	192
7	23	34	188
6	24	34	184
5	25	33	180
4	26	33	177
3	27	32	173
2	28	32	170
1	29	31	166
0	30	31	163



Conclusions and Recommendations

A review of the current data and shoreline survey information during this review period has concluded that this growing area meets the standard for the Approved classification. No changes are needed at this time.



BIBLIOGRAPHY

Maine Office of GIS
Maine DMR "Marvin" Water Quality and Shoreline Survey Database
Town of Isle au Haut