Volunteer Water Quality Monitoring Program
Report on 2009 Sampling Data

Township of The Archipelago
January 2010

Acknowledgements

This monitoring program represents a successful partnership between the Township of The Archipelago, cottager associations, and numerous volunteers in areas along the coast and inland lakes that has lasted since its inception in 1999. The volunteer-based program provides an important avenue for relaying information about our environment to ratepayers and for providing valuable information to the Township.

We owe continued thanks to all the volunteers who commit time and resources toward the ongoing success and long term vision that is water quality monitoring. Additionally, we are grateful to the ongoing support and interest of Dr. Karl Schiefer who continues to provide advice on various technical aspects of the program and is always passionate about environmental quality on the Georgian Bay coast and inland waters.

The Township wishes to thank all of its ratepayers, and in particular the volunteer monitors, for their keen interest and drive to ensure our high quality environment is maintained.

Report Compiled by Greg Mason, Georgian Bay GENERATIONS and the Township of The Archipelago

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1.0 Introduction

This report provides a summary of results from the 2009 Water Quality Monitoring Program for the Township of The Archipelago. The program purpose, rationale, and methods have been presented in previous year's reports and these were followed for the 2009 season. Similar to past reports, the purpose here is to present the data gathered in the 2009 sampling season in detail but also to indicate summaries of past year's results to enable comparison of ongoing trends. It should be noted that this report was created by Township of The Archipelago staff and by Greg Mason of Georgian Bay GENERATIONS and no analysis or review is provided internally. A Water Quality Review is also available from the Township which provides that analysis. For information on this report and/or the volunteer water quality monitoring program in The Archipelago, please contact Ted Thompson at the Township of The Archipelago.

A draft report of some recent studies, completed by Ngan Diep of the Ministry of Environment, are available at the Township of The Archipelago. This work focused on the eastern coast of Georgian Bay and provides a better understanding of the changing water quality from open Georgian Bay into inner bays. The following websites provide useful background information about Georgian Bay ecology and water quality:

www.thearchipelago.on.ca www.lakehuroncommunityaction.ca www.georgianbay.ca
www.georgianbayforever.ca/ www.gbbr.ca www.muskokawaterweb.ca www.helpourfisheries.com

The Township is very committed to addressing environmental issues and ensuring the maintenance of the high quality environment we all enjoy. This philosophy is integrated into the day to day functioning of the municipality from public works operations to detailed planning analysis.

2.0 Results

The following results were tabulated from data gathered in 2009. Different locations were sampled with different intensity and for varying lengths of time. It is not the purpose of this report to provide analysis or draw conclusions from the data. Rather, what is provided are:

- outlines of the standards against which data can be compared; and
- tables outlining the different data sets and averages for each location for each sample area; and where possible, the averages from the previous sampling years.

It should be noted that in order to assess the relevance of the data, comparisons should be made between averages and standard deviations (not individual data points per se), previous year averages and against established standards.

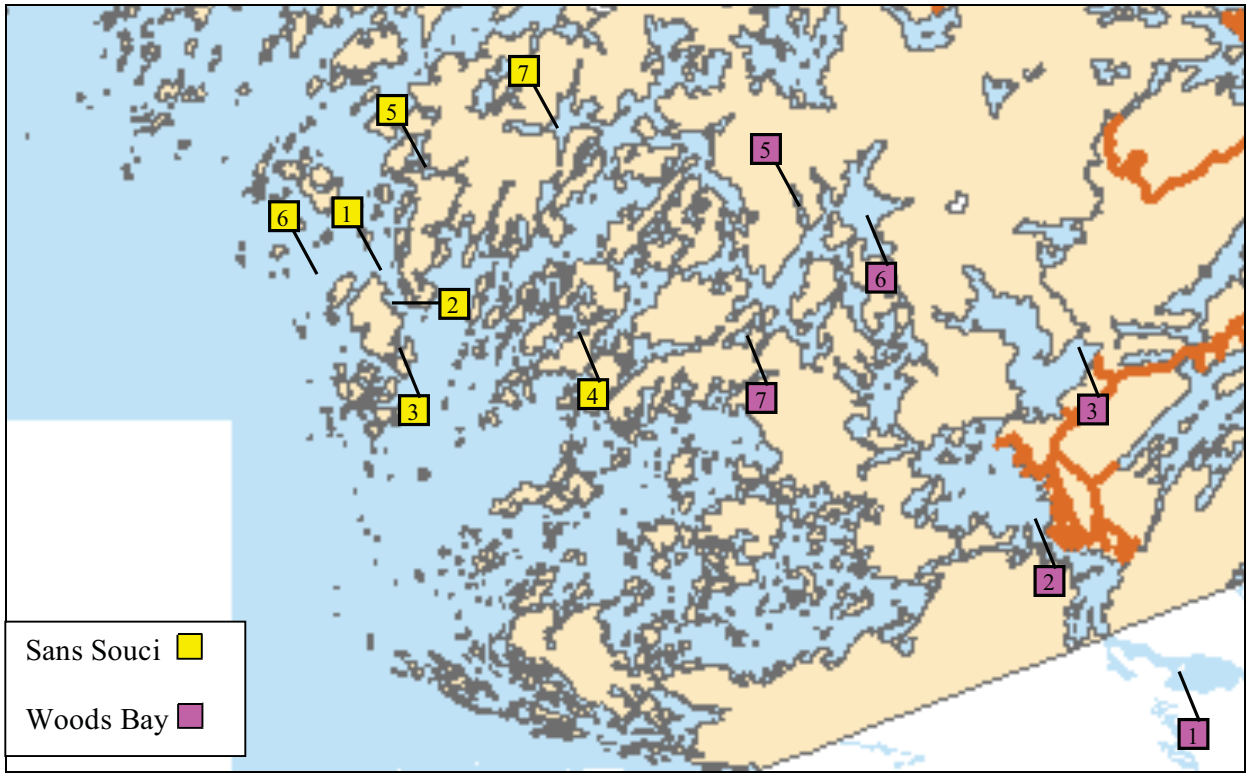
Charts are provided comparing water quality in the inland lakes, open bay sampling areas, and back bay sampling areas. When reviewing these data please keep in mind similarities and differences in the surrounding ecosystem and potential differences in sampling methodology (i.e. sampling times).

2.1 Sample Locations

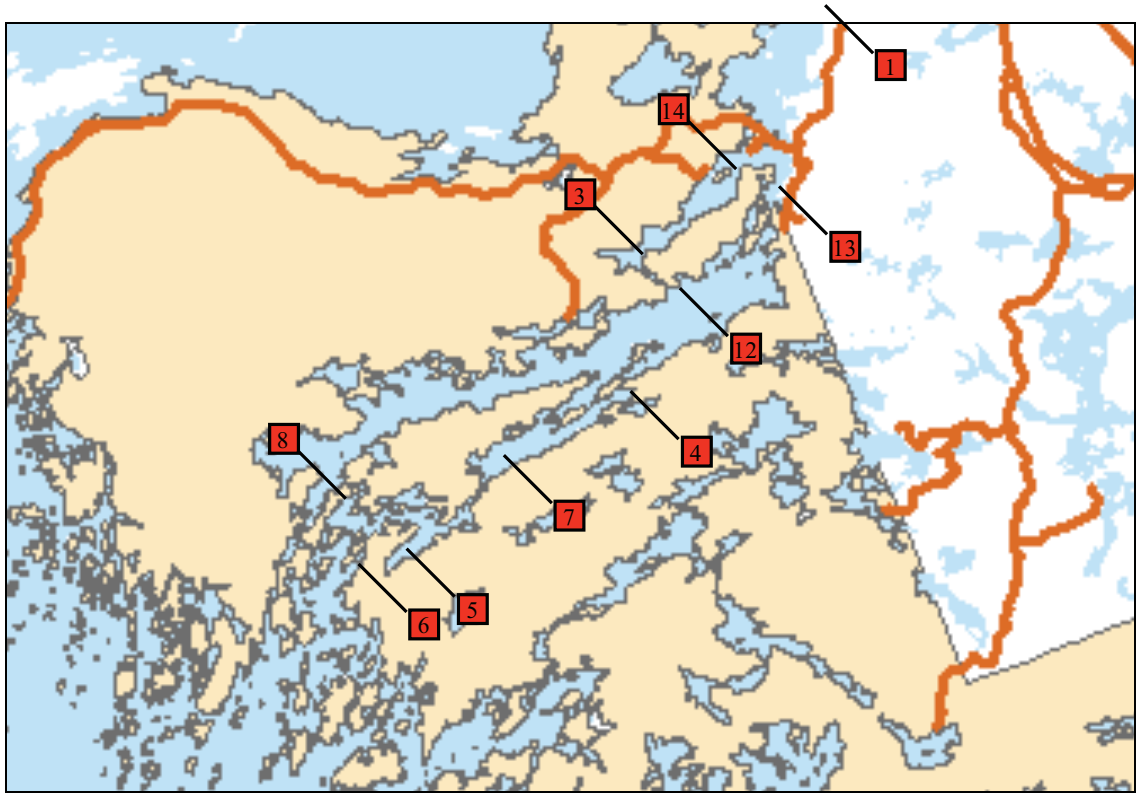
Sampling sites have typically been focused on known or expected “hot spots”; areas that may be more likely to suffer water quality impairment related to human activities. Some sample areas have also been selected as control stations; these allow comparison between the variety of ecosystem types that exist along the coast and within inland lakes. Maps of the sample areas indicate the sampling locations for the different areas throughout the township. The sample sites include many of the sampling stations used in

previous years and volunteers are encouraged to return to those sites in subsequent years. Unlike previous years, results for the different parameters are shown in table format, not on individual maps; refer to the maps when positioning the different samples.

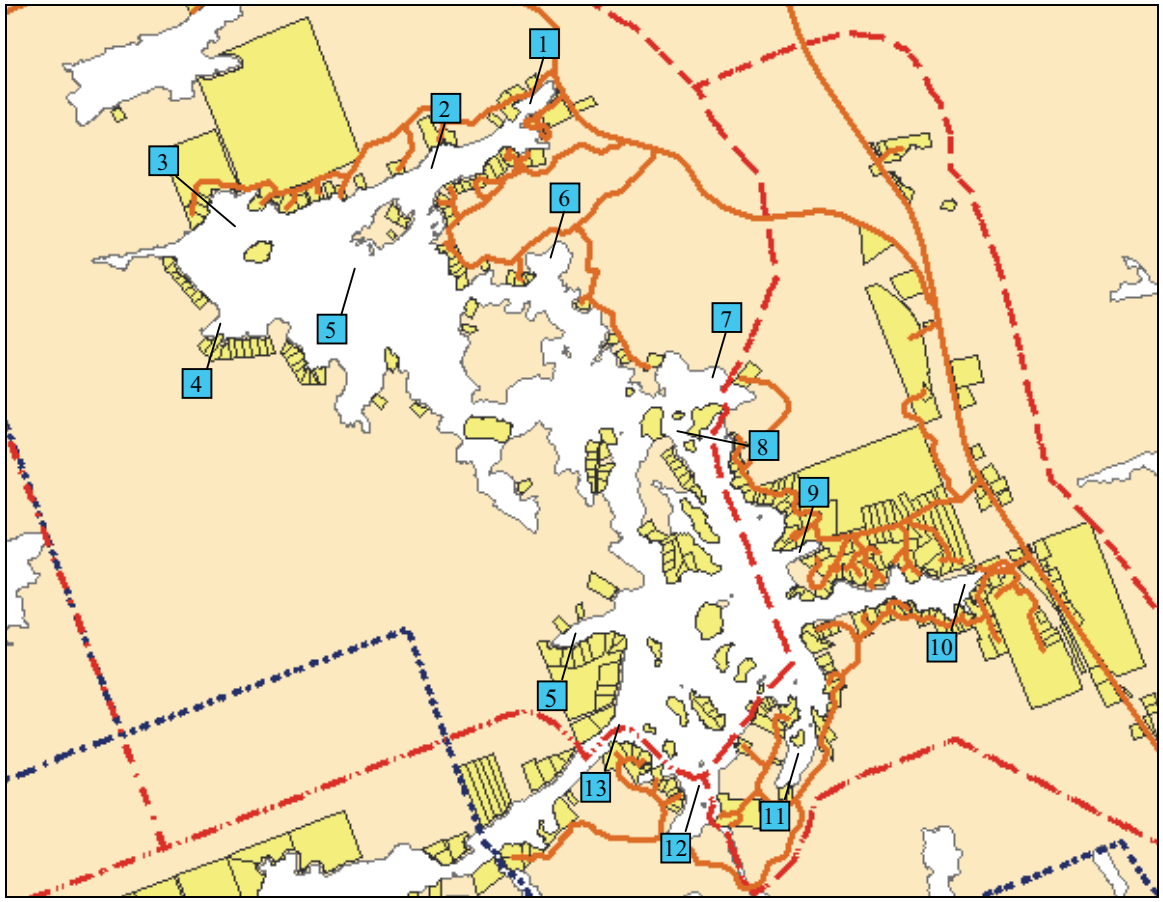
2.1.1 Sans Souci and Woods Bay Sampling Locations



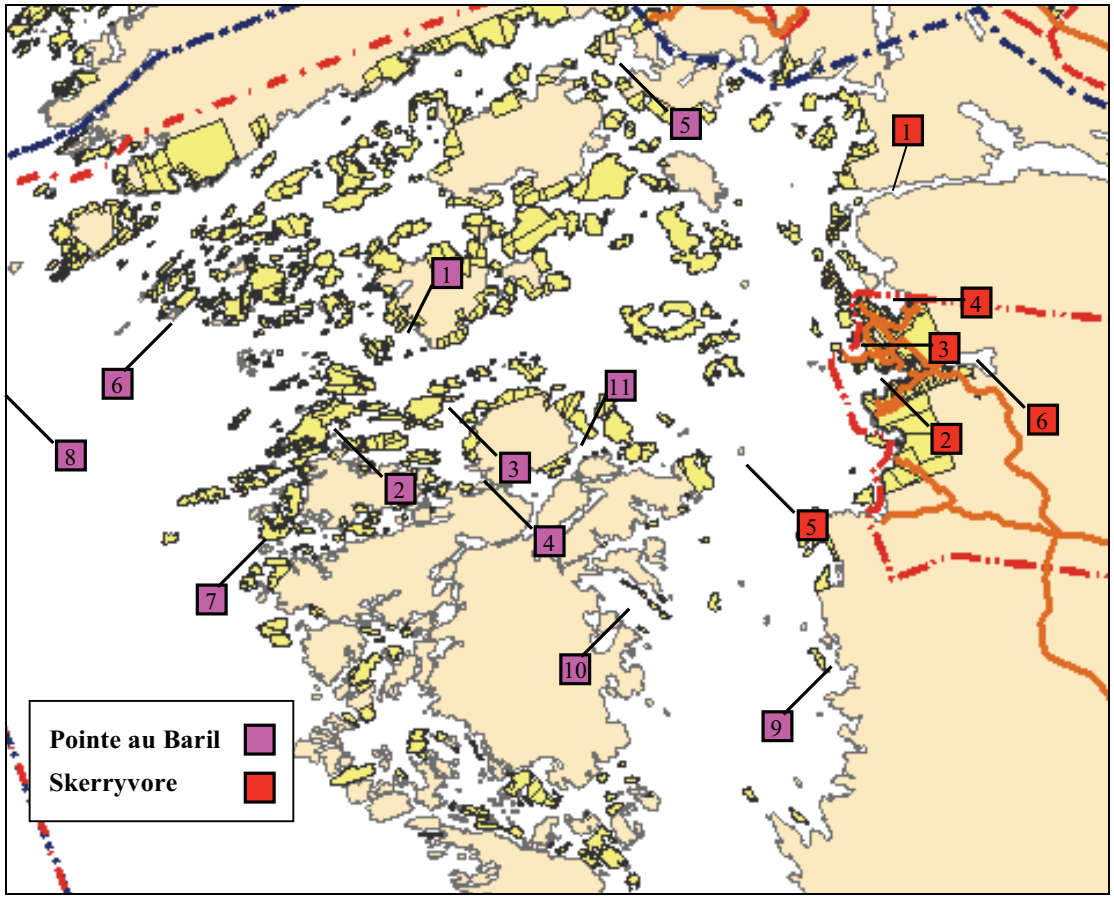
2.1.2 South Channel Sampling Locations



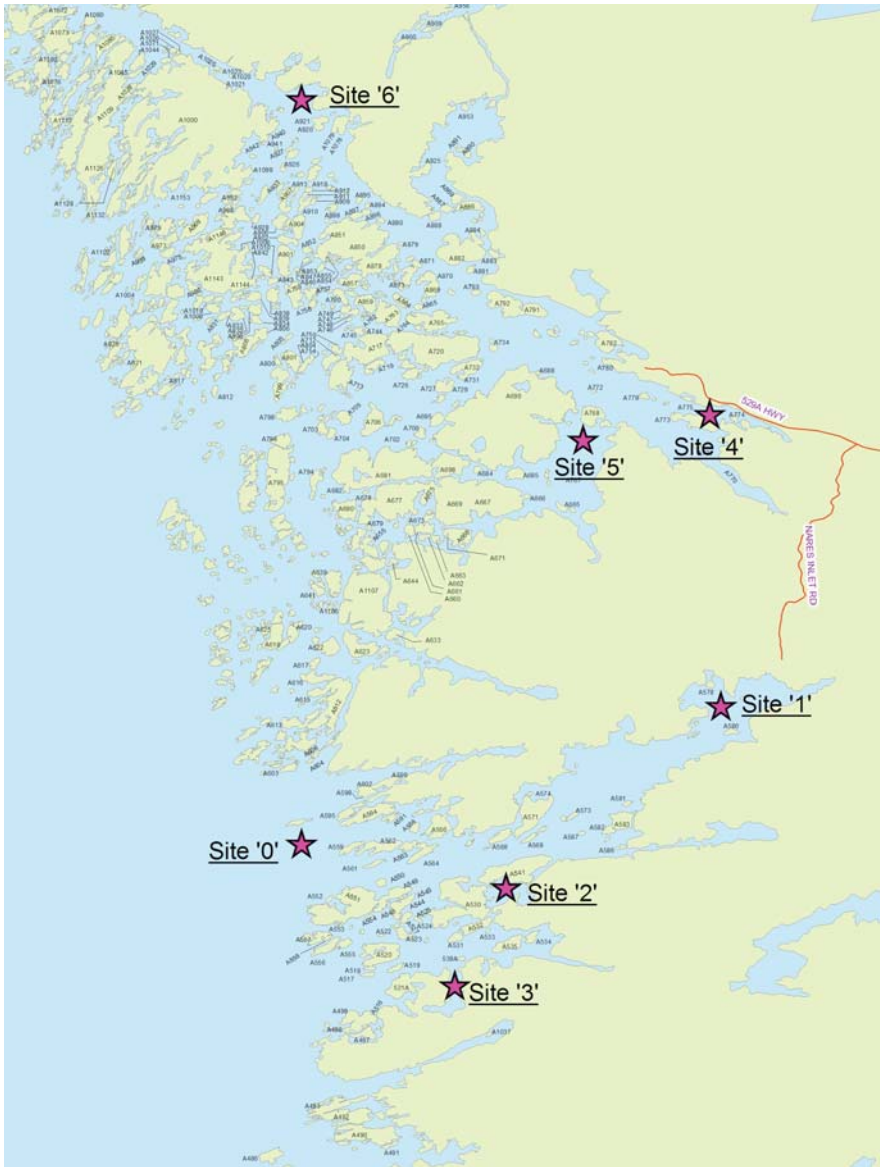
2.1.3 Sturgeon Bay Sampling Locations



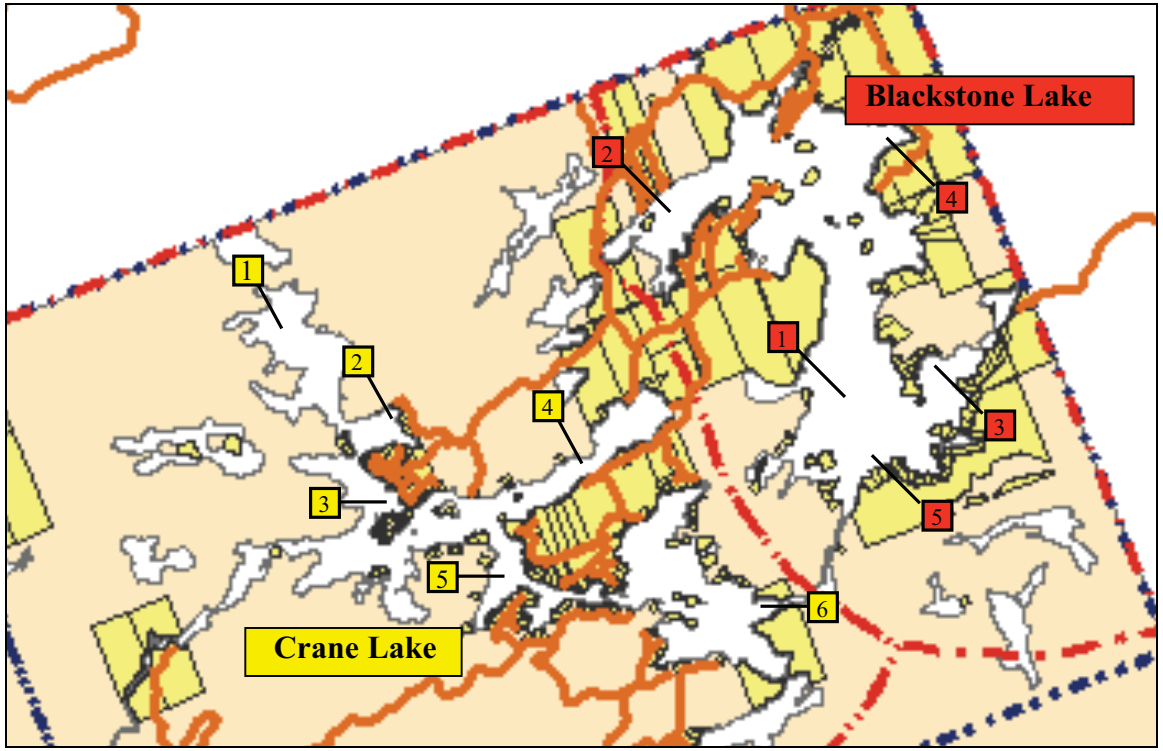
2.1.4 Skerryvore and Pointe au Baril Islands Sampling Locations



2.1.5 Bayfield Inlet and Nares Inlet Sampling Locations



2.1.6 Blackstone and Crane Lake Sampling Locations



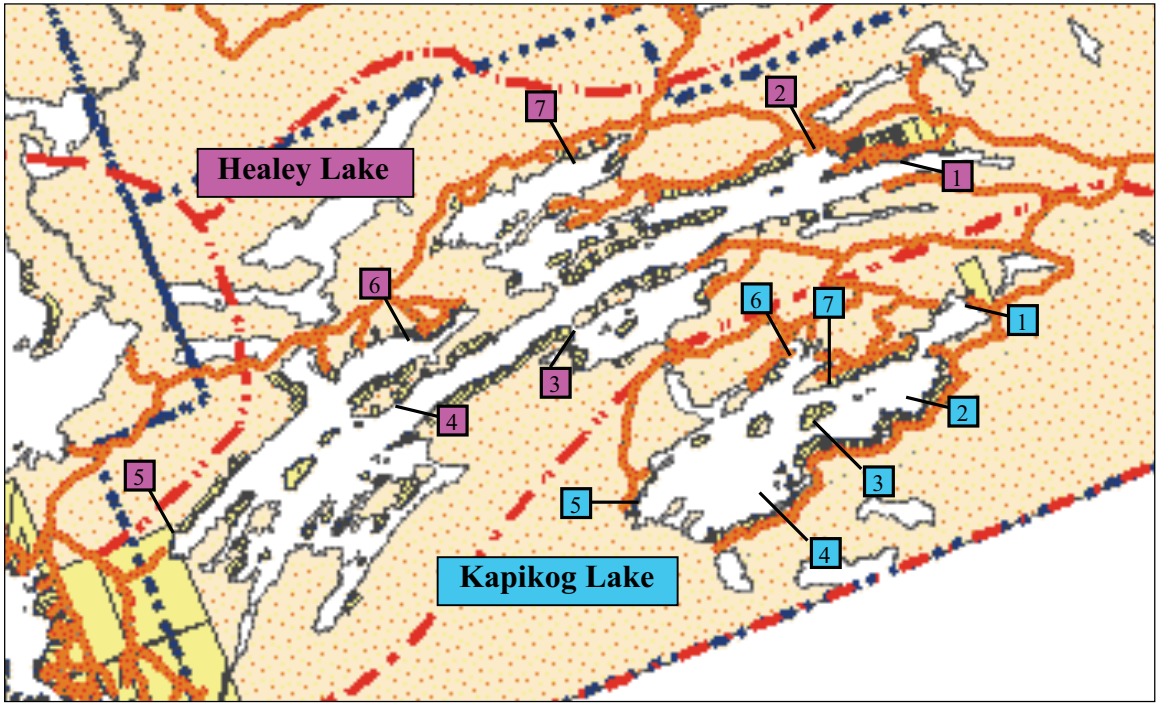
Blackstone Lake Sampling Sites:

1 Centre of Lake (Peanut Island) 2 McRoberts Bay 3 Lawson Bay(old)
4 Blackstone Landing 5 Mallet

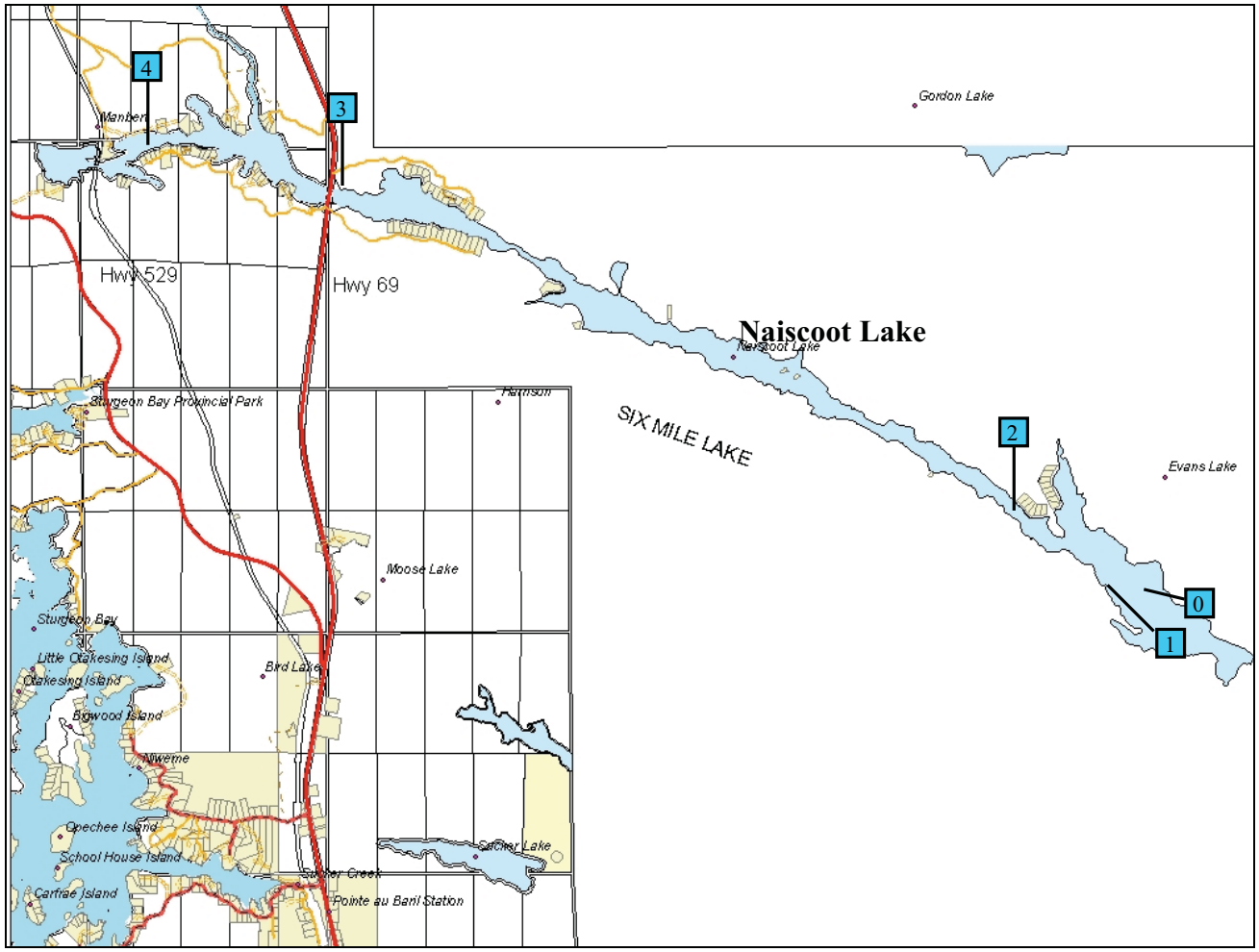
Crane Lake Sampling Sites:

1 North End 2 Goebel's Bay 3 Aga Ming Private Dock/Mead Bay
4 Crane Lake Resort 5 Overflow Bay (Narrows) 6 South End

2.1.7 Healey Lake and Kapikog Lake Sampling Locations



2.1.8 Naiscoot Lake Sampling Locations



2.2 Water Clarity

Water clarity is usually measured using a black-and-white Secchi disc which is lowered into the water until it is at the absolute limit of being visible. This depth is the Secchi depth of visibility, which is directly related to water clarity and can be used as a simple and effective monitoring tool for determining the effects of human activities on water clarity and, indirectly, on the nutrient content in the water. In general, water clarity, as measured by Secchi depth, tends to be higher in open areas of Georgian Bay and in bays with good water circulation. Water clarity tends to diminish (smaller Secchi depth values) in enclosed bays, near wetlands or sources of organic material, and in lakes or areas that have higher nutrient levels either for natural or unnatural causes. When examining the data, it is typical to see a small decline in Secchi depth throughout the year with lowest depths reading near the end of the summer and into September, however a major decline in the readings should be evaluated more carefully. A multi-year comparison of data is of particular value here to assess the water clarity trends for a particular area and where possible, data from previous years have been included with the tables.

2.2.1 Secchi Depths (Water Clarity) in the Sans Souci Area

Date	Station 1	2	3	4	5	6	7	Average for All Stations
6-Jun	9.1	9.1	t.b	4.5	4.9	10.7	3.7	7.0
28-Jun	7.6	6	t.b	5.5	6.4	9.8	4.3	6.6
11-Jul	9.1	9.1	t.b	6.4	6.4	9.4	5	7.6
26-Jul	10.7	9.1	t.b	7	5	11.6	6	8.2
9-Aug	11.9	6.7	t.b	6	6.4		6	7.4
23-Aug	8.2	8.2	t.b	6.4	6	9.1	5	7.2
6-Sep	6.4	6.7	t.b	7.6	6	9.4	6.4	7.1
Average	**9.0**	**7.8**	**t.b**	**6.2**	**5.9**	**10.0**	**5.2**	**7.3**
Std. Dev.	1.9	1.3	t.b	1.0	0.7	1.0	1.0	0.5
Previous Years Average								
2008	7.8	7.4		4.1	4.3	9.1	4.3	6.7
2007	8.8	4.7	3.3	5	6	10.9	4.3	6.2
2006	8.5	6.2	3.7	4.5	5.3	9.1	5.0	6.0
2005	7.8	5.2	3.5	4.3	5.4	8.9	3.8	5.5
2004	8.9	5.5	3.5	4.5	5.2	12.1	5.0	6.5
2003	8.3	3.4	2.5	4.1	5.6	9.8	5.1	5.5
2002								7.8
2001								8.5

Depths in metres (m)
t.b. – visible to bottom

2.2.2 Secchi Depths (Water Clarity) for Woods Bay Area

	Station						Average all stations
Date:	**1**	**2**	**3**	**5**	**6**	**7**	
23-Jun	3.5	3	3	3	4	4	3.4
7-Jul	3	3	3	3	4	3.5	3.3
26-Jul	3	3	3	3.5	3	3	3.1
7-Aug	4	3	3	3	4	4	3.5
22-Aug	3	4	3	3	4	4	3.5
11-Sep	4	4	4	4	4	4	4.0
25-Sep	3	3	3	3	3	4	3.2
Average	**3.4**	**3.3**	**3.1**	**3.2**	**3.7**	**3.8**	**3.4**
Std. Dev.	0.5	0.5	0.4	0.4	0.5	0.4	0.3
Previous Years Average							
2008	3.8	3.2	3.3	2.2	4	4.1	3.4
2007	3.3		2.8	4.2	4.2	4	3.7
2006	3.3			3.8	3.8	4	3.7
2005	2.8		3	3.6	3.3	3.3	3.2
2004	2.8	1.7	2.9	3.3	3.3	3.4	2.3
2003	3.1	1.9	3.2	3.9	3.6	3.6	3.2
2002		3.2			3.8	4.2	
2001		4.5			5.0		

Depths in metres (m)

2.2.3 Secchi Depths (Water Clarity) for the South Channel Area

	Station										Average all Stations
Date	**1**	**3**	**4**	**5**	**6**	**7**	**8**	**12**	**13**	**14**	
14-Jun	2.7	3.3	5.2	4.6	7.6	4.9	6.4	4	2.1	3.3	4.4
5-Jul	3	3.7	5.8	4.9	7	4.6	5.8	4	2.7	3.7	4.5
1-Aug	3.3	3	4	4.6	5.5	4.2	4.6	4.6	2.7	4.2	4.1
22-Aug	3	4.6	4.9	4.9	6.7	4	5.5	5.2	3.7	4.6	4.7
6-Sep	3.7	4.2	5.2	4.9	7.6	5.5	6.4	4.6	3.3	4.2	5.0
27-Sep	3.7	4.2	5.2	5.2	7.3	4.9	6.7	5.5	3.7	4.9	5.1
Average	**3.2**	**3.8**	**5.1**	**4.9**	**7.0**	**4.7**	**5.9**	**4.7**	**3.0**	**4.2**	**4.6**
Std. Dev.	0.4	0.6	0.6	0.2	0.8	0.5	0.8	0.6	0.6	0.6	0.4
Previous Years Average											
2008	2.8	3.6	5.0	4.8	7.0	4.9	5.5	4.6	2.9	3.5	4.4
2006	3.1	3.8	5.5	4.4	6	4.7	5.8	5.1	3	3.6	4.5
2005	3.3	3.7	5.0	4.5	6.5	4.7	5.1	4.6	2.8		4.5
2004	2.7	3.7	4.8	4.3	6.2	4.2	5.1	4.2	2.9		4.3
2003	2.7	3.3	4.5	4.5	6.1	4.2	4.9	3.8	2.9		4.0
2002	3.5				5.5	4.6		5.5			
2001	3.0				6.0						

2.2.4 Secchi Depths (Water Clarity) for the Sturgeon Bay Area

	Station														Average All Stations
Date	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	
27-Jul	1.2	1.3	1.5	1.5	1.5	1.4	1.3	1.6	1.3	1	1.5	1.6	1.7	1.5	**1.4**
14-Aug	1.4	1.5	1.7	1.5	1.6	1.6	1.6	1.8	1.7	1	1.5	1.7	1.8	1.8	**1.5**
29-Aug	1.2	1.3	1.4	1	1.3	1.4	1.6	1.5	1.6	0.9	1.6	2	1.7	1.7	**1.3**
11-Sep	1.5	1.6	1.7	1.7	1.8	1.7	1.6	1.7	1.9	1.1	1.9	2.1	2	2	**1.6**
Average	**1.3**	**1.4**	**1.6**	**1.4**	**1.6**	**1.5**	**1.5**	**1.7**	**1.6**	**1.0**	**1.6**	**1.9**	**1.8**	**1.8**	**1.5**
Std. Dev.	0.2	0.2	0.1	0.3	0.2	0.1	0.2	0.1	0.3	0.1	0.2	0.2	0.1	0.2	**0.1**
Previous Years Average															
2008	1.2	1.2	1.1	1.1	1.7	1.3	1.6	1.6	1.6	0.9	1.6	1.8	1.8	1.6	1.3
2007	1.6	1.5	1.7	1.7	1.7	tb	1.8	2	1.9	1.5	1.9	1.9	2.2	1.8	1.7
2006	1.7	1.8	1.7	1.7	1.8	2	2.4	2.2	2.2	1.3	2.5	2.5	2.6	1.7	1.9
2005	2.1	2.3	2.5	2.5	2.4	1.6	2.6	2.2	2.4	2.7	2.5	2.5	2.5	2.2	2.4
2004	1.9	2	1.9	1.9	2	1.6	2.2	2.2	2.6	2	2.6	2.3	2.7	2.4	2
2003	1.2	1.4	1.5	1.5	1.5	1.3	1.6	1.6	1.9	1.6	1.9	2.1	2.0	1.5	1.6
2002	0.6				0.7						2.1				
2001	1.2				1.6						2.8				

** Rain Depths in metres (m)

2.2.5 Secchi Depth (Water Clarity) in Skerryvore Area

	STATIONS				Average All Stations
DATE	1	2	3	5	
30-Jun	2.1	5.8		6.4	4.8
17-Jul	2.4	4.3		5.5	4.1
31-Jul	2.1	5.2		5.2	4.2
16-Aug	3	4.3		4.8	4.0
2-Sep	2.7	4.3		4.8	3.9
14-Sep		4.6			4.6
Average	**2.5**	**4.8**		**5.3**	**4.3**
Std. Dev.	0.4	0.6		0.7	0.4
Previous Years Average					
2008	2.2	4.0		4.6	3.6
2005	5.8	3.3	3.3	5.2	4.3
2004	3.6	4.5	3	4.5	3.9

Depths in metres (m)

2.2.6 Secchi Depth (Water Clarity) in Point au Baril Islands Area

	STATION											Average for All Stations
Date	1	2	3	4	5	6	7	8	9	10	11	
29-Jun	5.2		7.8	4.1		5.3	4.6		2.9	6.1		**5.1**
14-Jul	5.9		6.7	6.5		5.9	4.4		5.2	5.5		**5.7**
27-Jul	5.6		5.8	4.8		5.5		4.3		5.3		**5.2**
11-Aug	4.8		6.6	4.4		4.4		5		4.9		**5.0**
25-Aug	4.4			4.4		5.1		4.4		4.4		**4.5**
Average	**5.2**		**6.7**	**4.8**		**5.2**	**4.5**	**4.6**	**4.1**	**5.2**		**5.0**
Std. Dev.	0.6		0.8	1.0		0.6	0.1	0.4	1.6	0.6		0.4
Previous Years Average												
2008	4.4	2.9	8.1	4.2	3.5	2.9	2.4	1.8	2.3	3.3	1.6	3.4

Depths in metres (m)

2.2.7 Secchi Depth (Water Clarity) in Blackstone Lake

	Station
Date	**1**
15-Jul	3.7
31-Jul	4.7
27-Aug	5.3
24-Sep	5.6

Average	**4.8**
Std. Dev.	0.8

Previous Years Average

2008	5.1
2007	6
2005	5.4
2004	4.1
2003	4.7

Depths in metres (m)

2.2.8 Secchi Depth (Water Clarity) in Crane Lake

	Station						Average All Stations
Date	**1**	**2**	**3**	**4**	**5**	**6**	
14-Jun	5.5	4.5	4.8	4.3	4	4.5	4.6
4-Jul	4.3	4.3	4.5	4.3	4.5	4.3	4.4
19-Jul	4.2	4	3.7	4.5	4.5	5.5	4.4
3-Aug	4.6	5	4.5	4.6	4.5	5	4.7
23-Aug	4.5	4.5	4.6	4	4	5.4	4.5
7-Sep	5.6	5.4	5.8	5	4.5	5	5.2
Average	**4.8**	**4.6**	**4.7**	**4.5**	**4.3**	**5.0**	**4.6**
Std. Dev.	0.6	0.5	0.7	0.3	0.3	0.5	0.3
Previous Year's Average							
2008	4.2	4.3	4.4	4.2	4.0	4.9	4.4
2007	5.3	4.8	4.6	4.2	4.2	5.1	4.7
2006	4.2	4	4.2	4.1	4.3	5.1	4.3
2005	4.7	4.7	4.7	4.5	4.8	4.8	4.7
2004	4.3	4.4	4.1	4.4	4.1	4.4	4.3
2003	2.6	2.6	2.6	2.5	2.8	2.9	2.7

Depths in metres (m)

2.2.9 Secchi Depth (Water Clarity) in Healey Lake

	Station							Average for all stations
Date	**1**	**2**	**3**	**4**	**5**	**6**	**7**	
4-Jul	2.4	2.4	3	2.7	2.7	2.7	1.5	2.5
2-Aug	3.4	3.4	3.7	3.4	3.4	3.7	1.8	3.3
4-Sep	3.4	3.4	4	3.4	3.7	3.7	1.8	3.3
Average	**3.1**	**3.1**	**3.6**	**3.2**	**3.3**	**3.4**	**1.7**	**3.0**
Std. Dev.	0.6	0.6	0.5	0.4	0.5	0.6	0.2	0.5
Previous Years Average								
2008	2.7	2.6	3	3.2	3	2.8	1.7	2.7
2007	3.3	3	3.5	3.4	3.1	3.2	1.7	3
2006	3.1	2.8	3.7	3.4	3.5	3.5	1.7	3.1
2005	3	2.9	3.5	3.6	3.2	3.5	1.6	3.0
2004	2.9	3.2	3	3.3	3.2	3.2	1.1	2.9
2003	2.6	2.5	3	2.9	3.1	2.7	1.3	2.8

2.2.10 Secchi Depth (Water Clarity) in Kapikog Lake

	Station								Average all stations
Date:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	
7-Jul	3.7	4	4.3			4	4.3		4.1
21-Jul	4	4	3.7		3.7	4	3.7	3.7	3.8
5-Aug	4.6	4.6	4.3		4.6	4.6	4.6	4.6	4.6
17-Aug	4.9	4.4	4.6		4.6	4.9	4.6	4.4	4.6
Average	**4.3**	**4.3**	**4.2**		**4.3**	**4.4**	**4.3**	**4.2**	**4.3**
Std. Dev.	0.5	0.3	0.4		0.5	0.5	0.4	0.5	0.5
Previous Years Averages									
2008	4.0	4.1	4.0		4.1	4.3	4.1	4.0	4.1
2007	3.7	3.8	3.9		4.1	4	4	4	4
2006	4.0	4.0	3.9		4.3	4.2	4.2	4.2	4.1
2005	4.3	4.5	4.3		4.3	4.5	4.4	4.6	4.4
2004	3.8	3.7	4.2		3.8	4.3	4.3	4.2	4.1
2003	3.1	3.4	3.3	2.9	3.1	3.2	3.1	3.4	3.2

2.2.11 Secchi Depth (Water Clarity) in Naiscoot Lake

	Station						Average all stations
Date:	**0**	**1**	**2**	**3**	**4**	**2a**	
5-Jul	3.1	3.8	3.2	3.1	2.9	3.1	3.2
30-Jul	3.3	3.4	2.9	3.1	3.4		3.2
15-Aug	3.4	3.6	3.6	3.3	3.2	3.5	3.4
27-Aug	3.9	3.9	3.6	3.4	3.3	3.9	3.7
Average	**3.4**	**3.7**	**3.3**	**3.2**	**3.2**	**3.5**	**3.4**
Std. Dev.	0.3	0.2	0.3	0.2	0.2	0.4	0.2
Previous Years Averages							
2008	3.6	3.5	3.6	3.3	3.1		3.4
2007	4.1	3.9	3.9	3.9	3.6		3.9

Depths in metres (m)

2.3 Bacterial Monitoring

Results of bacterial monitoring in a number of locations of the Township of The Archipelago are provided by location in this section of the report

2.3.1 Bacterial Reference Guidelines and Objectives

The following bacterial guidelines and objectives are provided to assist in the interpretation of bacterial monitoring results presented in this report.

Provincial Regulatory Guideline levels for total coliforms (TC) are as follows:

- 1,000 – levels higher than this are considered unsuited for recreational water use;
- 200 – levels higher than this are considered to be indicative of deteriorating water quality; and
- 10 – levels higher than this are considered unsafe for human consumption

NOTE: total coliforms are no longer used as a regulatory guideline in Provincial Water Quality Objectives. Total coliform levels have been found to be too variable and are largely considered to be a natural component of ecosystems

The objectives for *E. coli* (EC) are as follows:

- 100 – levels higher than this are considered unsuited for recreational water use
- 0 – levels higher than this are considered unsafe for human consumption without prior treatment.

NOTE: provincial bacterial levels are to be based on a geometric mean of five samples taken in the same local area at the same time. Also, provincial bacteria standards are intended to provide suitable standards with respect to human health risks.

Based on a number of years of intensive bacterial monitoring throughout the Township of Georgian Bay and the Township of The Archipelago, the following has been recommended as a suggested bacterial objective for recreational waters of Georgian Bay and the associated inland lakes:

- **Total Coliforms (annual average): - 100 TC**
- ***E. Coli* (annual average): - 10 EC**

The following tables present the data by sample area for each sampling location and date within that area. A calculated standard deviation and average is presented for each sample locations and an average of all sampling locations for each general area is also provided.

Recent heavy rain events are indicated by (**) beside the sampling dates and medium to light recent rain events are indicated by (*) beside each sample date.

2.3.2 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Sans Souci Area

	Station														Average for All Stations	
	1		2		3		4		5		6		7			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
*06-Jun	3	3	5	5	0	0	5	5	177	0	0	0	11	0	28.7	1.9
*28-Jun	28	0	65	3	87	0	13	3	938	16	16	0	98	0	177.9	3.1
**11-Jul	22	0	16	3	136	62	13	0	938	8	8	8	8	0	163.0	11.6
**26-Jul	8	3	5	5	11	3	33	25	76	16	8	5	49	0	27.1	8.1
*09-Aug	39	3	3	3	30	0	5	0	166	0	0	0	28	3	38.7	1.3
23-Aug	22	0	28	0	19	0	19	0	127	0	8	0	46	3	38.4	0.4
6-Sep	3	0	3	3	19	5	25	0	5	0	0	0	33	0	12.6	1.1
Average	**17.9**	**1.3**	**17.9**	**3.1**	**43.1**	**10.0**	**16.1**	**4.7**	**346.7**	**5.7**	**5.7**	**1.9**	**39.0**	**0.9**	**69.5**	**3.9**
Std. Dev.	13.7	1.6	22.7	1.7	49.6	23.0	10.3	9.2	408.0	7.6	6.0	3.3	30.4	1.5	69.6	4.2
Previous Years Averages																
2008 avg	**347.9**	**14.6**	**36.0**	**1.0**	**41.8**	**3.0**	**30.4**	**3.5**	**124.1**	**23.5**	**8.0**	**0.4**	**100.5**	**1.4**	**98.4**	**6.8**
std	840.5	30.9	21.2	1.9	23.5	4.9	13.7	3.1	95.5	59.7	10.9	1.1	199.1	2.0	114.8	10.4
2007 avg	**12.6**	**1.0**	**29.8**	**2.2**	**37.0**	**2.2**	**51.4**	**1.2**	**106.4**	**3.2**	**9.4**	**0.0**	**131.6**	**0.6**	**54.0**	**1.5**
std	8.6	2.2	32.5	2.2	37.6	2.2	36.8	1.6	126.0	5.6	9.1	0.0	154.8	1.3	38.6	1.2
2006 avg	**86.7**	**1.4**	**33.6**	**1.6**	**47.9**	**2.3**	**40.4**	**0.9**	**132.1**	**3.0**	**18.9**	**0.9**	**453.6**	**23.3**	**116.2**	**4.8**
std	122.1	2.4	28.5	2.1	31.8	2.3	15.0	1.5	122.3	2.2	15.4	1.5	882.7	54.2	128.7	8.2
2005 avg	**39.3**	**0.9**	**27.1**	**2.0**	**40.7**	**1.6**	**77.0**	**5.0**	**61.9**	**3.6**	**15.2**	**0.0**	**56.1**	**2.4**	**46.4**	**2.4**
std	27.3	1.5	15.3	2.0	42.4	2.1	66.3	6.9	48.0	4.4	22.5	0.0	39.9	4.0	20.2	2.5
2004 avg	**24.7**	**0.4**	**40.1**	**1.6**	**42.6**	**2.7**	**72.3**	**2.4**	**67.7**	**4.6**	**9.0**	**0.0**	**48.0**	**1.3**	**43.5**	**1.9**
std	21.4	1.1	25.5	2.1	27.1	3.0	52.8	2.9	51.6	5.2	12.0	0.0	35.2	1.6	19.4	1.0
2003 avg	**415.0**	**19.3**	**37.6**	**0.6**	**35.6**	**2.8**	**366.6**	**45.6**	**109.7**	**12.3**	**8.6**	**3.6**	**8.6**	**3.6**	**140.9**	**10.3**
std	889.0	24.3	38.1	1.3	37.4	4.8	744.0	71.8	70.9	19.8	6.8	5.7	6.8	5.7	133.6	12.5
2002 avg	**32.7**	**0.3**	**28.0**	**1.6**	**15.6**	**2.4**	**16.5**	**1.1**	**300.0**	**4.4**	**4.4**	**0.0**	**41.3**	**1.4**	**70.9**	**1.7**
std	48.0	1.0	35.0	3.0	11.9	4.5	12.0	1.6	748.0	5.7	3.4	0.0	27.7	2.0	316.0	3.4
2001 avg	**14.9**	**0.0**	**240.0**	**1.3**	**49.5**	**3.7**	**42.1**	**5.1**	**139.0**	**1.3**	**11.7**	**0.0**	**81.2**	**1.4**	**82.6**	**1.8**
std	14.4	0.0	724.0	1.8	43.3	5.7	24.7	5.1	204.0	2.2	9.0	0.0	55.1	1.9	260.3	2.2

2.3.3 Bacterial Sampling of Surface Water for Total Coliforms(TC) and E. Coli (EC) in the Woods Bay Area

	Station												Average all Stations	
	1		2		3		5		6		7			
Date:	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
23-Jun	33	5	13	0			19	8					21.7	4.3
7-Jul	8	0	8	0	22	11			28	13	39	30	21.0	10.8
26-Jul**	123	52	39	11	90	49	114	28	59	30	559	59	164.0	38.2
7-Aug	49	3	46	5	39	30	22	13	13	5	339	11	84.7	11.2
22-Aug	49	5	33	5	39	11	39	11	43	11	69	3	45.3	7.7
11-Sep	52	3	13	3	25	0	52	25	25	5	46	3	35.5	6.5
25-Sep	25	11	28	5	62	33					36	16	37.8	16.3
Average	**48.4**	**11.3**	**25.7**	**4.1**	**46.2**	**22.3**	**49.2**	**17.0**	**33.6**	**12.8**	**181.3**	**20.3**	**58.6**	**13.6**
Std. Dev.	36.5	18.3	14.6	3.8	25.7	18.1	38.6	8.9	17.8	10.3	219.0	21.4	51.2	11.5
Previous Years Average														
2008 Avg	**136.0**	**29.0**	**105.0**	**7.3**	**171.0**	**23.5**	**112.3**	**15.8**	**42.3**	**10.3**	**74.0**	**5.5**	**106.8**	**15.2**
std	81.6	31.9	91.7	5.9	100.9	8.6	55.6	10.5	16.5	8.5	26.1	3.8	44.1	6.9
2007 avg	**53.8**	**9.6**	**108.3**	**18.3**	**77.0**	**30.4**	**48.5**	**12.8**	**171.0**	**5.5**	**43.3**	**9.3**	**85.2**	**16.3**
std	31.2	7.8	107.1	20.1	97.6	25.6	71.7	20.3	278.1	3.8	30.8	6.2	59.8	12.1
2006 avg	**91.0**	**28.3**	**85.3**	**5.8**	**43.8**	**14.3**	**43.5**	**5.8**	**35.0**	**2.0**	**19.3**	**7.3**	**53.0**	**10.5**
std	69.2	31.4	20.6	1.5	11.6	5.3	27.2	3.8	34.0	2.4	10.2	2.9	25.2	6.8
2005 avg	**77.8**	**15.3**	**68.6**	**5.4**	**62.8**	**8.5**	**104.2**	**22.2**	**35.8**	**3.5**	**88.6**	**12.4**	**73.6**	**12.6**
std	49.7	14.3	58.2	6.2	32.3	5.3	58.5	38.2	35.9	5.2	95.3	9.2	26.0	10.1
2004 avg	**155.8**	**9.4**	**95**	**6.2**	**46.4**	**11.6**	**73.6**	**9.6**	**189**	**13.4**	**66.6**	**10.8**	**66.6**	**10.8**
std	199.3	3.5	54.6	3.9	27.8	8.2	49.6	5.5	209.9	10.7	49.7	7.5	49.7	7.5
2003 avg	**198.4**	**28.6**	**174.8**	**13.4**	**182.6**	**17.0**	**237.4**	**13.8**	**170.4**	**12.0**	**132.2**	**7.0**	**182.6**	**15.3**
std	176.7	37.7	65.6	16.3	57.3	13.0	170.0	13.3	86.7	13.9	98.1	8.1	77.1	15.9
2002 avg	**75.0**	**4.8**	**108.0**	**6.0**	**46.6**	**8.0**	**107.2**	**11.4**	**73.4**	**1.2**	**66.6**	**8.2**	**79.3**	**6.6**
std	48.0	4.9	37.0	4.7	26.1	8.0	39.7	9.9	33.1	1.6	35.4	7.4	40.5	6.9
2001 avg	**158.0**	**5.8**	**113.0**	**5.6**	**21.4**	**3.4**	**70.5**	**6.0**	**39.1**	**2.1**	**60.4**	**3.6**	**77.1**	**4.4**
std	171.0	7.2	91.2	2.7	17.0	5.4	21.3	6.1	16.9	2.8	33.1	4.3	62.0	1.8

2.3.4 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E.Coli (EC) in the South Channel Area

	Station																				Average All Stations	
	1		3		4		5		6		7		8		12		13		14			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
14-Jun	59	19	52	8	52	0	3	0	5	0	16	0	39	0	25	5	119	52	33	0	40.3	8.4
5-Jul	280	28	59	5	43	3	13	0	8	0	33	5	28	0	62	3	114	46	69	0	70.9	9.0
1-Aug	127	22	25	3	11	0	8	0	30	0	49	3	25	0	36	0	94	16	62	3	46.7	4.7
22-Aug	171	39	27	3	94	0	36	5	49	0	72	0	123	8	110	5	226	28	206	11	111.4	9.9
6-Sep	255	13	98	5	110	3	11	0	25	0	46	5	79	11	127	19	200	16	83	3	122.3	12.3
27-Sep	233	19	59	5	19	0	13	0	11	0	16	0	65	3	22	3	79	25	43	3	57.9	6.6
Average	**187.5**	**23.3**	**53.3**	**4.8**	**54.8**	**1.0**	**14.0**	**0.8**	**21.3**	**0.0**	**38.7**	**2.2**	**59.8**	**3.7**	**63.7**	**5.8**	**138.7**	**30.5**	**82.7**	**3.3**	**74.9**	**8.5**
Std Dev	84.4	9.1	26.7	1.8	39.8	1.5	11.4	2.0	16.8	0.0	21.6	2.5	37.5	4.8	45.1	6.7	59.9	15.2	63.0	4.0	34.3	2.6
Previous Years Average																						
2008																						
Avg	**354.2**	**47.0**	**57.3**	**3.7**	**96.3**	**4.2**	**29.5**	**6.0**	**32.0**	**2.8**	**34.8**	**2.8**	**122.2**	**4.0**	**63.5**	**7.2**	**209.7**	**13.7**	**119.5**	**7.3**	**108.2**	**9.1**
Std	255.4	53.5	24.3	4.8	129.4	8.8	44.9	13.3	31.5	4.3	30.4	2.9	181.5	4.1	37.5	7.3	125.3	10.1	130.8	7.4	37.4	4.3
2007																						
Avg	**1495.9**	**73.8**	**74.0**	**2.4**	**84.1**	**3.6**	**38.7**	**2.4**	**34.7**	**2.3**	**62.9**	**3.1**	**107.6**	**4.0**	**87.4**	**10.6**	**178.2**	**19.0**	**64.3**	**2.6**	**222.8**	**12.4**
Std	1108.8	60.5	45.1	2.8	81.5	4.1	23.3	2.8	25.3	4.4	47.3	4.0	148.6	4.8	51.1	8.7	132.0	19.1	38.2	2.5	124.7	5.7
2006																						
Avg	**477.0**	**56.9**	**250.8**	**4.4**	**35.9**	**3.3**	**87.3**	**0.4**	**48.3**	**2.8**	**40.4**	**3.8**	**43.6**	**1.0**	**57.4**	**6.1**	**264.1**	**12.9**	**452.1**	**29.5**	**175.7**	**12.1**
Std	397.7	36.1	334.8	4.8	30.2	3.0	171.6	1.1	42.9	2.8	29.5	6.5	47.0	1.9	57.5	7.9	375.8	10.5	807.2	60.3	145.0	9.2
2005																						
Avg	**819.5**	**219.7**	**125.7**	**1.2**	**203.1**	**0.0**	**632.7**	**4.2**	**72.5**	**0.3**	**320.2**	**4.3**	**271.4**	**3.2**	**69.1**	**2.7**	**61.7**	**7.8**	**70.0**	**1.0**	**278.8**	**25.5**
Std	1110.4	305.1	263.6	1.5	423.5	0.0	1034.3	10.2	118.8	0.9	745.1	10.3	757.8	6.2	92.6	4.1	34.0	8.9	39.3	1.7	319.6	31.3
2004																						
Avg	**529.1**	**43.7**	**1114.3**	**8.2**	**1202.6**	**2.8**	**1115.9**	**2.7**	**833.3**	**4.2**	**901.9**	**1.1**	**564.3**	**3.3**	**1408.6**	**10.7**	**1058.2**	**27.1**			**969.8**	**11.5**
Std	777.4	23.8	1243.0	8.7	1186.8	4.1	1062.9	4.3	1193.3	7.7	1146.7	2.2	763.6	5.1	1205.3	13.1	1059.2	52.5			609.6	6.9
2003																						
Avg	**677.9**	**38.0**	**48.3**	**5.0**	**26.1**	**0.9**	**94.6**	**14.0**	**353.3**	**0.0**	**374.1**	**1.7**	**23.4**	**0.4**	**450.9**	**6.0**	**77.1**	**8.6**			**231.2**	**8.0**
Std	834.1	26.3	65.6	11.2	17.3	1.5	122.2	37.0	913.1	0.0	904.4	2.0	24.6	1.1	883.3	4.5	39.1	9.5			213.4	5.8
2002																						
Avg	**1789.0**	**91.0**	**794.0**	**3.4**	**489.0**	**0.9**	**136.0**	**0.9**	**726.0**	**1.6**	**748.0**	**0.9**	**631.4**	**2.4**	**462.0**	**14.6**	**1210.0**	**17.7**			**780.0**	**14.0**
Std	1085.0	59.0	784.0	2.9	862.0	1.5	89.0	1.5	1160.0	3.0	942.0	1.5	923.3	1.8	870.0	14.2	972.0	21.1			961.0	32.0
2001																						
Avg	**2148.0**	**113.0**	**860.0**	**11.9**	**1021.0**	**5.3**	**874.0**	**8.9**	**866.0**	**9.9**	**1139.0**	**3.0**	**375.0**	**3.0**	**998.0**	**11.0**	**1330.0**	**27.4**			**1067.9**	**21.5**
Std	731.0	87.1	887.0	16.2	1009.0	10.1	1066.0	9.2	1081.0	9.0	1209.0	1.7			999.0	11.1	1039.0	34.5			142.1	27.9

2.3.5 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Sturgeon Bay Area,

	Station																	
	1		2		3		4		5		6		7		8		9	
Date	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
27-Jul**	233	3	151	0	2424	11	2424	11	151	0	59	5	2424	0	43	0	59	0
14-Aug	2424	3	30	0	46	0	59	11	22	3	151	3	2424	5	102	13	62	0
29-Aug	1696	5	127	28	46	11	33	8	52	3	2424	79	938	11	938	94	318	25
11-Sep	69	8	28	8	16	3	87	0	46	0	2424	25	510	3	166	3	49	11
Average	**1105.5**	**4.8**	**84.0**	**9.0**	**633.0**	**6.3**	**650.8**	**7.5**	**67.8**	**1.5**	**1264.5**	**28.0**	**1574.0**	**4.8**	**312.3**	**27.5**	**122.0**	**9.0**
Std. Dev.	1143.5	2.4	64.3	13.2	1194.1	5.6	1182.4	5.2	57.0	1.7	1339.4	35.4	996.9	4.6	420.2	44.7	130.8	11.9
Previous Years Average																		
2008																		
Avg	**78.0**	**7.5**	**44.0**	**3.5**	**85.0**	**10.5**	**132.0**	**1.5**	**17.8**	**2.0**	**70.0**	**13.8**	**71.3**	**8.0**	**72.0**	**5.3**	**82.5**	**13.0**
Std	27.9	7.3	4.4	5.2	55.0	19.1	191.1	1.7	12.2	4.0	49.8	17.3	47.4	5.7	21.6	5.6	20.7	8.5
2007																		
Avg	**507.5**	**35.0**	**60.5**	**8.8**	**193.8**	**8.3**	**137.0**	**9.0**	**69.3**	**2.0**	**100.0**	**6.8**	**137.0**	**24.8**	**152.8**	**15.8**	**93.8**	**18.8**
Std	793.5	28.7	55.4	8.2	217.9	11.8	110.2	18.0	44.5	4.0	5.2	3.5	66.1	32.2	177.0	15.3	39.0	27.2
2006																		
Avg	**218.2**	**17.5**	**500.7**	**132.5**	**85.5**	**15.0**	**88.8**	**14.2**	**94.8**	**63.0**	**156.2**	**19.8**	**225.2**	**22.8**	**127.8**	**43.8**	**218.8**	**47.8**
Std	267.0	21.6	947.8	277.1	55.8	21.5	60.8	22.3	175.1	140.9	164.0	27.4	242.7	16.3	111.2	74.2	128.7	71.9
2005																		
Avg	**271.3**	**24.3**	**383.7**	**11.3**	**46.6**	**7.6**	**29.7**	**7.7**	**41.0**	**7.3**	**124.7**	**26.1**	**105.6**	**18.9**	**46.1**	**11.3**	**117.7**	**16.3**
Std	268.1	27.2	899.9	8.9	56.5	8.8	24.0	12.1	61.3	7.6	93.2	30.5	93.1	11.4	22.3	9.5	133.4	23.1
2004																		
Avg	**159.4**	**5.0**	**267.4**	**2.0**	**395.0**	**2.3**	**311.1**	**1.6**	**186.0**	**0.4**	**88.6**	**3.6**	**247.9**	**11.3**	**174.7**	**2.6**	**419.7**	**4.3**
Std	135.6	3.6	487.5	2.0	619.3	4.9	385.7	2.1	146.8	1.1	48.0	3.7	330.5	12.6	235.7	3.4	884.3	1.9
2003																		
Avg	**1107.5**	**4.6**	**466.5**	**2.6**	**744.3**	**0.4**	**991.8**	**1.4**	**963.4**	**0.4**	**570.6**	**6.8**	**332.8**	**2.6**	**688.0**	**1.6**	**664.3**	**11.5**
Std	1133.1	6.6	807.9	3.7	1046.0	1.1	1190.7	2.0	1210.4	1.1	799.9	11.5	419.7	5.0	1077.9	3.1	1086.9	26.4
2002																		
Avg	**1039.0**	**9.7**	**871.0**	**5.4**	**548.0**	**1.8**	**619.0**	**2.4**	**941.0**	**1.8**	**488.0**	**4.1**	**226.0**	**6.0**	**212.0**	**11.6**	**186.0**	**11.5**
Std	1066.0	10.4	1031.0	8.0	826.0	2.9	669.0	2.1	1229.0	3.9	569.0	6.1	332.0	6.0	193.0	16.8	242.0	14.8

Data continued on the following page

Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Sturgeon Bay Continued

	Station										Average All Stations	
	10		11		12		13		14			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
27-Jul**	76	25	33	5	13	0	59	5	72	3	587.2	4.9
14-Aug	127	5	194	3	177	8	36	5	39	3	420.9	4.4
29-Aug	2424	55	151	8	94	22	114	3	510	5	704.6	25.5
11-Sep	59	0	22	0	28	0	46	3	69	0	258.5	4.6
Average	**671.5**	**21.3**	**100.0**	**4.0**	**78.0**	**7.5**	**63.8**	**4.0**	**172.5**	**2.8**	**492.8**	**9.8**
Std. Dev.	1168.7	25.0	85.7	3.4	74.8	10.4	34.8	1.2	225.5	2.1	194.8	10.4
2008												
Avg	**82.8**	**6.8**	**83.8**	**2.0**	**49.3**	**4.0**	**40.8**	**3.3**	**100.5**	**5.3**	**72.1**	**6.2**
Std	57.2	7.0	97.0	2.4	44.5	4.6	14.6	2.4	58.8	7.5	25.7	5.4
2007												
Avg	**125.0**	**8.5**	**30.3**	**4.0**	**65.0**	**9.5**	**54.3**	**1.3**	**34.3**	**2.8**	**125.7**	**11.1**
Std	54.1	7.3	5.5	3.4	29.7	10.0	39.2	2.5	10.4	2.1	81.7	10.5
2006												
Avg	**783.2**	**98.0**	**346.2**	**8.2**	**139.8**	**10.5**	**72.0**	**3.8**	**507.3**	**26.7**	**254.6**	**37.4**
Std	1019.4	106.6	662.3	10.1	108.7	6.8	31.7	3.2	940.0	23.2	208.5	52.8
2005												
Avg	**277.4**	**17.6**	**48.0**	**9.0**	**56.0**	**18.4**	**74.6**	**12.9**	**34.7**	**7.3**	**118.6**	**14.2**
Std	486.3	20.0	28.9	9.4	32.4	16.4	93.0	12.4	11.7	7.6	92.8	11.3
2004												
Avg	**186.6**	**11.3**	**183.7**	**3.9**	**109.3**	**1.6**	**183.4**	**2.0**	**148.0**	**4.4**	**218.6**	**4.0**
Std	132.8	10.0	248.2	4.4	111.3	2.1	299.9	2.0	161.7	4.4	250.5	1.6
2003												
Avg	**914.6**	**6.8**	**508.4**	**4.3**	**742.4**	**5.1**	**519.8**	**3.0**	**1084.1**	**1.1**	**729.3**	**3.8**
Std	1036.3	11.5	888.3	8.1	1149.8	13.6	897.3	6.7	1254.5	3.0	836.4	5.5
2002												
Avg	**204.0**	**6.0**	**355.0**	**4.8**	**209.0**	**6.8**	**145**	**3**	**328**	**8.2**	**456**	**6**
Std	220.0	7.1	837.0	6.4	343.0	10.0	201	5	469	15.8	708	9.4

2.3.6 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Skerryvore Area

	STATIONS												Average All Stations	
	1		2		3		4		5		6			
DATE	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
30-Jun**	65	52	87	8	90	13	62	3	33	3	317	36	109.0	19.2
17-Jul	46	8	13	0	16	13	22	11	5	0	146	19	41.3	8.5
31-Jul	110	8	43	5	19	3	98	19	5	0	182	19	76.2	9.0
16-Aug	65	11	28	8	1174	16	79	49	5	0	469	43	303.3	21.2
2-Sep	83	0	25	0	46	5	36	28	22	0	182	25	65.7	9.7
14-Sep**	69	0	233	0	94	5	43	3	110	0	469	25	169.7	5.5
Average	**73.0**	**13.2**	**71.5**	**3.5**	**239.8**	**9.2**	**56.7**	**18.8**	**30.0**	**0.5**	**294.2**	**27.8**	**127.5**	**12.2**
Std. Dev.	21.6	19.6	83.2	4.0	458.9	5.5	28.5	17.6	40.9	1.2	147.5	9.7	96.9	6.4
Previous Years Average														
2008 avg	**224.5**	**3.8**	**90.5**	**11.7**	**134.0**	**25.7**	**55.3**	**14.7**	**14.5**	**1.0**	**417.3**	**10.8**	**156.0**	**11.3**
std	307.9	3.2	115.5	23.4	180.7	35.4	48.4	14.3	9.0	1.5	473.2	7.1	69.8	9.2
2007 Avg	**395.5**	**6.0**	**49.0**	**2.3**	**93.3**	**13.3**	**78.5**	**18.5**	**22.2**	**1.0**	**994.5**	**125.3**	**272.2**	**27.8**
Std	430.8	6.9	25.4	3.1	77.7	12.7	85.7	23.7	28.4	1.5	1109.7	119.4	153.7	22.6
2006 avg	**140.2**	**30.3**	**53.0**	**6.3**	**79.8**	**16.2**	**72.2**	**20.2**	**10.0**	**2.3**	**592.8**	**33.3**	**158.0**	**18.1**
std	112.9	52.5	66.6	7.9	64.3	23.4	106.8	32.9	7.1	2.0	899.9	29.1	140.1	20.2
2005 Avg	**1007.0**	**15.4**	**1051.6**	**60.0**	**1007.8**	**519.8**	**1010.6**	**51.0**	**1110.6**	**52.2**	**1501.2**	**61.0**	**1114.8**	**126.6**
std	1294.2	11.3	1253.7	68.6	1292.9	1065.5	1290.3	61.4	1215.3	38.1	985.2	80.1	1196.5	189.8
2004 avg	**158.8**	**6.7**	**174.3**	**8.8**	**484.3**	**22.2**	**68.7**	**6.7**	**225.3**	**1.0**	**1296.0**	**35.2**	**401.3**	**13.4**
std	70.4	6.6	224.4	12.4	951.9	34.1	71.7	6.6	465.4	1.5	1029.3	46.2	258.9	9.1
2003 avg	**670.7**	**4.0**	**963.5**	**11.5**	**1270.5**	**24.8**	**1308.0**	**20.5**	**630.8**	**2.7**	**1429.8**	**33.7**	**1045.6**	**16.2**
std	899.7	4.1	1140.7	12.6	1264.8	35.5	1236.6	28.9	925.9	5.2	1132.1	20.2	934.7	8.9
2002 avg	**1905.0**	**10.8**	**65.2**	**7.3**	**81.2**	**10.8**	**332.0**	**10.8**	**878.0**	**3.2**	**1392.0**	**40.3**	**775.0**	**13.9**
std	961.0	9.1	65.0	9.6	66.8	8.8	465.0	7.3	1003.0	4.4	1156.0	37.3	993.0	19.9
2001 avg	**52.2**	**4.4**	**78.4**	**8.2**	**55.4**	**1.6**	**42.4**	**7.6**	**523.0**	**0.6**	**2070.0**	**40.6**	**470.2**	**10.5**
	38.2	5.0	95.4	6.5	33.5	2.3	36.9	5.7	1064.0	1.3	792.0	49.9	461.5	18.8

2.3.7 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Pointe au Baril Islands Area

	Station											
	1		2		3		4		5		6	
Date	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
29-Jun**	106	8	132	13	8	3	43	3	76	13	233	39
14-Jul	36	3	19	0	13	3	43	3	59	3	43	0
27-Jul	30	3	83	13	43	3	219	3	127	5	106	13
11-Aug	16	0	79	8	22	0	127	5	69	0	43	5
25-Aug	19	0	25	0	3	0	151	0	11	0	72	0
Average	**41.4**	**2.8**	**67.6**	**6.8**	**17.8**	**1.8**	**116.6**	**2.8**	**68.4**	**4.2**	**99.4**	**11.4**
Std. Dev.	37.0	3.3	46.6	6.5	15.7	1.6	75.2	1.8	41.5	5.4	79.1	16.3
Previous Years Averages												
2008 Avg	**22.2**	**5.6**	**22.8**	**7.6**	**2.8**	**0.6**	**17.6**	**1.6**	**19.6**	**1.8**	**33.6**	**6.6**
std	20.7	7.6	15.6	2.9	3.3	1.3	11.5	2.3	10.1	1.6	27.5	4.1
2007 Avg	**16.4**	**5.4**	**39.0**	**3.4**	**23.4**	**6.2**	**21.4**	**5.4**	**37.6**	**6.0**	**53.0**	**17.0**
std	9.2	9.5	45.7	0.9	10.8	3.9	8.7	3.3	32.0	3.5	24.8	22.3
2006 Avg	**6.4**	**3.0**	**23.8**	**8.2**	**19.2**	**6.4**	**59.8**	**5.6**	**19.5**	**2.0**	**37.0**	**4.0**
std	4.2	0.0	11.4	8.0	12.3	4.2	33.7	1.3	9.4	2.4	20.1	1.2
2005 Avg	**176.4**	**17.4**	**54.8**	**19.6**	**494.8**	**2.2**	**45.5**	**9.0**	**34.5**	**2.0**	**376.6**	**8.2**
std	177.7	32.8	46.1	18.0	1079.1	2.2	61.3	11.2	40.0	2.4	739.0	12.3
2004 Avg	**564.1**	**9.6**	**441.0**	**6.4**	**526.7**	**7.4**	**417.1**	**24.3**	**468.0**	**14.0**	**455.4**	**96.7**
std	893.8	10.9	600.3	3.9	915.1	7.4	548.5	31.6	865.5	18.8	868.7	216.3
2003 Avg	**64.3**	**7.3**	**93.7**	**11.0**	**57.0**	**2.7**	**60.7**	**13.7**	**60.3**	**3.3**	**856.0**	**815.3**
std	29.2	12.7	46.1	12.2	23.1	2.5	30.0	14.4	33.4	2.9	1357.9	1393.1
2002 Avg	**56.3**	**3.0**	**135.0**	**2.7**	**47.7**	**3.7**	**52.0**	**1.7**	**58.3**	**3.3**	**60.0**	**3.7**
std	41.0	0.0	196.0	4.6	22.3	1.2	39.3	2.9	56.1	2.9	12.3	4.0
2001 Avg	**178.0**	**0.5**	**40.3**	**5.8**	**21.3**	**1.0**	**55.7**	**9.7**	**28.5**	**2.3**	**136.0**	**10.5**
std	335.6	1.2	28.1	9.5	17.5	1.5	29.8	7.0	13.8	2.0	237.0	20.4

Data continued on the following page.

Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Pointe au Baril Island Area of Georgian Bay Continued

	Station										Average for All Stations	
	7		8		9		10		11			
Date	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
29-Jun**	62	8	110	30	39	11	98	36	65	8	88	16
14-Jul	79	0	30	8	25	3	11	3	13	0	34	2
27-Jul	19	0	226	43	255	11	127	5	226	22	133	11
11-Aug	55	0	69	16	114	11	79	13	110	0	71	5
25-Aug	30	0	36	0	132	8	8	0			49	1
Average	**49.0**	**1.6**	**94.2**	**19.4**	**113.0**	**8.8**	**64.6**	**11.4**	**103.5**	**7.5**	**75.0**	**7.0**
Std. Dev.	24.3	3.6	80.3	17.2	91.9	3.5	53.1	14.6	90.8	10.4	38.5	6.2
Previous Years Averages												
2008 Avg	**24.2**	**2.6**	**18.0**	**5.0**	**58.0**	**12.6**	**9.0**	**1.6**	**16.6**	**3.2**	**22.2**	**4.4**
std	22.3	2.5	9.9	6.3	64.0	14.8	5.4	2.3	8.4	4.9	6.8	2.0
2007 Avg	21.8	2.2	5.0	0.0	20.6	1.8	28.0	1.0	62.2	1.8	**29.9**	**4.6**
std	12.6	3.5	8.0	0.0	18.3	1.6	11.0	2.2	78.4	1.6	12.2	2.3
2006 Avg			**0.8**	**0.0**	**41.8**	**3.4**					**25.8**	**4.2**
std			1.5	0.0	14.9	2.9					9.4	1.1
2005 Avg			**7.8**	**1.2**	**508.4**	**7.0**					**211.0**	**8.3**
std			10.0	1.6	1071.0	7.0					374.5	7.5
2004 Avg			**61.2**	**0.6**	**976.9**	**23.4**					**493.4**	**23.5**
std			54.4	1.3	1043.9	27.1					530.4	32.0
2003 Avg					**643.0**	**46.7**					**262.1**	**128.6**
std					913.0	74.0					333.3	215.6
2002 Avg					**187.0**	**41.7**					**85.2**	**8.5**
std					56.7	5.1					86.7	14.2
2001 Avg					**1624.0**	**812.0**					**297.7**	**120.3**
std					1239.0	1249.0					445.3	469.5

2.3.8 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Bayfield and Nares Inlets

	STATIONS												Average All Stations	
	1		2		3		4		5		6			
DATE	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
11-Jul	52	0	94	0	79	3	11	0	119	3	127	5	80.3	1.8
24-Jul**	5	3	8	0	0	0	39	0	87	13	55	13	32.3	4.8
12-Aug	33	0	43	3	16	0	13	0	13	0	171	5	48.2	1.3
1-Sep	0	0	5	0	11	0	8	0	19	0	19	3	10.3	0.5
Average	**22.5**	**0.8**	**37.5**	**0.8**	**26.5**	**0.8**	**17.8**	**0.0**	**59.5**	**4.0**	**93.0**	**6.5**	**30.3**	**2.2**
Std. Dev.	23.6	1.7	43.2	1.7	41.8	1.7	15.6	0.0	54.4	6.8	58.6	4.6	19.0	2.3
Previous Years Averages														
2008														
Average	**19.0**	**7.3**	**23.7**	**5.3**	**20.7**	**5.7**	**25.0**	**3.0**	**13.0**	**0.0**	**12.0**	**0.0**	**20.3**	**4.9**
Std. Dev.	12.2	7.5	9.3	5.5	8.1	4.6	4.2	0.0	0.0	0.0	1.4	0.0	6.8	4.5
2005														
Average	**22.8**	**0.0**	**18.8**	**0.0**	**18.5**	**2.0**	**34.3**	**0.8**	**36.0**	**0.0**	**39.0**	**0.0**	**28.2**	**0.5**
Std. Dev.	23.4	0.0	22.5	0.0	14.6	2.4	20.5	1.5	15.9	0.0	24.5	0.0	16.5	0.3

2.3.9 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Blackstone Lake

	Station										Average for All Stations	
	1		2		3		4		5			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
15-Jul	123	3	161	0	132	3	94	8	136	5	129.2	3.8
31-Jul	587	3	2424	0	188	8	2424	5	2424	0	1609.4	3.2
27-Aug	1370	0	388	0	858		2424	3	1038	5	1215.6	2.0
24-Sep	200	8	280	5	226	8	219	22	206	13	226.2	11.2
Average	**570.0**	**3.5**	**813.3**	**1.3**	**351.0**	**6.3**	**1290.3**	**9.5**	**951.0**	**5.8**	**795.1**	**5.1**
Std. Dev.	570.7	3.3	1077.8	2.5	340.2	2.9	1310.1	8.6	1064.0	5.4	731.9	4.2
Previous Seasons Averages												
2008												
avg	**65.0**	**0.0**	**54.8**	**5.3**	**56.3**	**0.0**	**169.0**	**9.5**	**375.3**	**4.0**	**144.1**	**3.8**
std	59.5	0.0	46.7	5.6	57.8	0.0	260.1	7.9	663.7	3.4	202.9	1.1
2007												
avg	**92.7**	**7.3**	**99.5**	**15.5**	**144.3**	**6.0**	**258.3**	**15.3**	**161.3**	**22.0**	**163.5**	**15.0**
std	115.5	7.5	70.0	12.6	84.2	7.7	226.8	20.6	176.0	38.0	137.0	19.1
2006												
avg	**24.5**	**0.0**	**33.5**	**0.0**	**86.5**	**6.5**	**94.5**	**12.0**	**53.0**	**1.5**	**58.4**	**4.0**
std	7.8	0.0	7.8	0.0	4.9	9.2	46.0	9.9	32.5	2.1	0.6	0.6
2005												
avg	**524.0**	**0.0**	**1034.8**	**2.0**	**852.5**	**1.5**	**725.8**	**0.8**	**324.5**	**0.8**	**692.3**	**1.0**
std	648.3	0.0	1220.6	2.4	1132.9	1.7	846.3	1.5	360.6	1.5	799.8	0.7
2004												
avg	**19.0**	**0.0**	**34.0**	**4.0**	**17.5**	**1.5**	**26.0**	**4.0**	**22.0**	**6.5**	**23.7**	**3.2**
std	19.8	0.0	12.7	1.4	2.1	2.1	9.9	5.7	15.6	9.2	1.0	2.3
2003												
avg	**23.7**	**2.7**	**43.0**	**0.0**	**18.3**	**0.0**	**52.0**	**2.7**	**21.7**	**0.0**	**31.7**	**1.1**
std	25.4	2.5	51.4	0.0	11.9	0.0	38.3	2.5	25.0	0.0	29.9	0.9
2002												
avg	**21.7**	**2.7**	**43.3**	**1.0**	**52.7**	**3.3**	**59.0**	**6.0**	**38.0**	**4.7**	**42.9**	**3.5**
std	23.9	4.6	26.8	1.7	51.6	2.9	41.4	6.6	35.8	2.9	34.2	3.9
2001												
avg	**18.3**	**2.3**	**13.3**	**3.3**	**6.8**	**1.5**	**42.3**	**5.3**			**20.2**	**3.1**
std	18.6	1.5	3.8	3.9	3.5	1.7	28.2	2.1			12.1	1.1

2.3.10 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Crane Lake

	Station												Average All Stations	
	1		2		3		4		5		6			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
14-Jun	16	0	13	3	3	0	13	0	11	0	28	3	14	1
4-Jul	43	0	25	5	49	5	30	5	36	13	25	0	35	5
19-Jul	36	3	25	6	36	3	43	13	49	25	52	16	40	11
3-Aug	59	0	69	13	83	8	52	5	94	25	102	16	77	11
23-Aug	87	16	280	30	49	8	114	5	156	8	156	4	140	12
7-Sep	28	0	106	5	59	5	83	22	98	11	136	5	85	8
Average	**45**	**3**	**86**	**10**	**47**	**5**	**56**	**8**	**74**	**14**	**83**	**7**	**65**	**8**
Std. Dev.	25	6	101	10	26	3	37	8	52	10	56	7	45	4
Previous Year's Averages														
2008	50	6	64	10	48	11	51	11	64	22	54	14	**55**	**12**
2007	135	16	101	19	70	19	112	25	64	25	60	13	**90**	**20**
2006	62	8	78	18	187	16	199	16	240	13	407	9	**196**	**13**
2005	795	8	913	10	502	9	555	9	585	8	844	7	**699**	**8**
2004	1105	4	1175	13	1081	7	1142	8	1077	7	1393	8	**1162**	**8**
2003	631	6	726	9	499	7	506	5	512	6	696	6	**595**	**6**

2.3.11 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Healey Lake

	Station														Average for All Stations	
	1		2		3		4		5		6		7			
Date	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
4-Jul			69	8	49	5	11	11	30	13	65	5	76	3	50.0	7.5
2-Aug	59	0	55	5	102	3	132	8	72	8	87	3	194	0	100.1	3.9
4-Sep	72	11	123	19	166	5	106	3	151	8	87	3	263	0	138.3	7.0
Average	**65.5**	**5.5**	**82.3**	**10.7**	**105.7**	**4.3**	**83.0**	**7.3**	**84.3**	**9.7**	**79.7**	**3.7**	**177.7**	**1.0**	**96.1**	**6.1**
Std. Dev.	9.2	7.8	35.9	7.4	58.6	1.2	63.7	4.0	61.4	2.9	12.7	1.2	94.6	1.7	44.3	2.0
Previous Years Averages																
2008 Avg	**11.0**	**4.0**	**15.7**	**2.3**	**17.0**	**2.3**	**13.0**	**1.7**	**16.3**	**3.0**	**46.3**	**1.0**	**14.7**	**3.3**	**19.1**	**2.5**
std	1.0	1.7	11.5	2.1	17.3	0.6	7.9	1.5	8.4	1.0	16.0	1.0	6.5	2.9	6.7	0.2
2007 Avg	**101.5**	**6.3**	**361.8**	**8.0**	**322.8**	**8.5**	**323.7**	**3.7**	**639.5**	**2.8**	**109.3**	**6.5**	**660.3**	**2.0**	**349.5**	**5.5**
std	99.5	10.6	389.1	5.8	225.1	4.1	169.0	4.0	1190.2	3.8	44.5	4.4	1176.8	4.0	400.7	3.2
2006 Avg	**77.3**	**6.5**	**241.3**	**3.0**	**130.0**	**3.8**	**44.0**	**1.3**	**667.0**	**15.0**	**61.3**	**14.8**	**664.0**	**5.5**	**269.3**	**7.1**
std	52.4	4.4	370.2	0.0	214.2	2.5	53.6	2.5	1172.2	8.9	41.5	15.3	1174.9	4.9	434.7	3.4
2005 Avg	**31.8**	**3.6**	**25.0**	**4.0**	**13.2**	**3.2**	**11.0**	**7.0**	**4.0**	**1.5**	**8.3**	**4.0**	**51.4**	**6.8**	**31.3**	**4.5**
std	42.8	3.5	23.5	1.2	12.5	2.0	17.1	12.1	3.4	1.7	7.5	5.2	74.4	1.6	42.8	3.3
2004 Avg	**402.7**	**8.6**	**89.7**	**3.1**	**31.4**	**2.0**	**737.3**	**3.9**	**47.0**	**1.1**	**38.7**	**2.6**	**85.3**	**4.0**	**204.6**	**3.6**
std	896.1	9.7	115.3	4.6	38.3	3.0	1156.9	4.9	55.1	2.0	46.5	2.5	129.9	4.1	298.6	3.3
2003 Avg	**79.3**	**20.0**	**74.7**	**2.0**	**36.3**	**3.7**	**62.3**	**5.3**	**55.7**	**2.0**	**62.0**	**1.0**	**79.3**	**4.7**	**64.2**	**5.5**
std	30.0	22.9	41.2	1.7	5.8	4.0	43.4	6.8	41.9	1.7	30.6	1.7	59.9	5.7	19.1	5.3
2002 Avg	**158.0**	**6.3**	**94.3**	**4.3**	**230.0**	**5.0**	**39.3**	**6.3**	**17.0**	**2.0**	**55.7**	**1.0**	**42.7**	**1.0**	**91.1**	**3.7**
std	66.4	2.9	11.5	4.0	38.7	0.0	13.7	4.2	6.2	1.7	31.8	1.7	14.8	1.7	19.0	1.5
2001 Avg	**56.5**	**3.5**	**41.5**	**0.0**	**113.0**	**1.3**	**40.8**	**0.8**	**57.8**	**0.8**	**33.8**	**0.8**	**25.3**	**0.0**	**46.1**	**0.9**
std	15.2	3.3	15.9	0.0	107.0	2.5	26.0	1.5	31.7	1.5	33.7	1.5	5.6	0.0	33.5	1.2

2.3.12 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E.Coli (EC) in Kapikog Lake

	Station																Average all Stations	
	1		2		3		4		5		6		7		8			
Date:	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
20-Jul*	13	3	3	0	65	5	5	3			62	0	33	11			30.2	3.7
30-Jul*	75	3	72	5	83	8	200	28	146	76	62	22			59	30	99.6	24.6
19-Aug*	62	3	52	11	25	22	150	3	534	19	110	59	83	65	161	16	147.1	24.8
9-Sep	110	94					28	0	46	28	188	13	16	5	65	46	75.5	31.0
Average	**65.0**	**25.8**	**42.3**	**5.3**	**57.7**	**11.7**	**95.8**	**8.5**	**242.0**	**41.0**	**105.5**	**23.5**	**44.0**	**27.0**	**95.0**	**30.7**	**88.1**	**21.0**
Std. Dev.	40.2	45.5	35.5	5.5	29.7	9.1	94.2	13.1	257.8	30.6	59.5	25.3	34.8	33.0	57.2	15.0	48.8	11.9
Previous Years Averages																		
2008 Avg	**1825.5**	**2.8**	**991.4**	**11.4**	**790.6**	**2.8**	**59.8**	**2.2**	**623.8**	**1.3**	**1520.3**	**6.3**	**1234.0**	**9.5**	**1015.0**	**1.6**	**879.2**	**5.4**
std	1197.0	2.1	1308.2	19.4	1077.0	1.8	68.5	2.2	1200.3	2.5	1138.5	5.6	1047.6	5.4	1289.0	2.3	790.3	4.4
2007 Avg	**214.2**	**19.0**	**69.8**	**9.5**	**597.6**	**11.6**	**167.0**	**1.0**	**548.4**	**3.2**	**93.8**	**3.8**	**708.5**	**8.8**	**506.0**	**13.8**	**345.2**	**10.2**
std	335.5	29.7	47.6	10.0	1025.6	10.5	350.6	2.2	1051.0	3.4	66.7	2.9	1152.6	6.7	1072.5	14.8	438.0	5.0
2006 Avg	**39.6**	**5.8**	**31.4**	**9.2**	**76.0**	**6.2**	**38.8**	**0.0**	**44.8**	**1.2**	**98.4**	**8.2**	**66.2**	**9.0**	**69.0**	**2.2**	**58.0**	**5.2**
std	36.4	2.2	30.6	6.8	54.9	4.8	32.2	0.0	37.6	1.6	89.1	7.4	65.3	5.8	83.4	2.2	44.4	0.4
2005 Avg	**354.3**	**8.5**	**53.3**	**4.5**	**629.0**	**2.0**	**56.3**	**7.5**	**58.5**	**4.0**	**32.0**	**3.5**	**20.5**	**2.0**	**55.8**	**6.0**	**157.4**	**4.8**
std	320.7	11.0	48.4	3.3	1196.9	2.4	36.0	5.2	47.3	3.4	22.2	5.2	21.0	2.4	73.5	7.7	209.6	4.4
2004 Avg	**67.5**	**1.5**	**38.0**	**4.0**	**60.5**	**1.5**	**37.0**	**4.8**	**20.0**	**0.8**	**44.0**	**6.3**	**96.3**	**2.0**	**297.8**	**1.5**	**82.6**	**2.8**
std	29.0	1.7	41.6	3.4	54.1	1.7	28.9	7.6	26.4	1.5	50.8	3.9	83.6	2.4	382.0	1.7	36.5	1.6
2003 Avg	**38.5**	**3.2**	**59.7**	**4.5**	**12.8**	**1.3**	**43.3**	**4.0**	**23.5**	**1.5**	**15.8**	**1.3**	**55.7**	**1.5**	**16.7**	**2.3**	**35.6**	**2.5**
std	29.1	1.8	44.8	5.1	13.2	2.2	32.4	6.2	32.7	1.6	6.6	2.2	29.8	1.6	19.0	2.0	9.1	1.6
2002 Avg	**449**	**737**	**764**	**7**	**55**	**3**	**471**	**13**	**410**	**5**	**616**	**9**	**727**	**2**	**446**	**4**	**492**	**6**
std	878.0	5.5	1136.0	7.0	54.0	3.6	865.0	16.3	892.0	6.0	1008.0	9.7	1160.0	3.3	878.0	4.4	883.0	8.2

2.3.13 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Naiscoot Lake

	Station												Average all Stations	
	0		1		2		3		4		2a			
Date:	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**	**TC**	**EC**
5-Jul	28	3	30	0	52	0	62	5	127	0	106	3	67.5	1.8
30-Jul	65	0	90	3	69	3	79	5	87	5	62	0	75.3	2.7
15-Aug	33	0	127	0	28	3	87	5	177	3	19	0	78.5	1.8
27-Aug	8	0	102	0	30	0	182	0	362	11	55	0	123.2	1.8
Average	**33.5**	**0.8**	**87.3**	**0.8**	**44.8**	**1.5**	**102.5**	**3.8**	**188.3**	**4.8**	**60.5**	**0.8**	**86.1**	**2.0**
Std. Dev.	23.6	1.5	41.2	1.5	19.5	1.7	54.0	2.5	121.5	4.6	35.7	1.5	25.1	0.4
Previous Years Averages														
2008														
Average	**48.3**	**7.5**	**42.8**	**5.5**	**50.5**	**8.0**	**83.5**	**2.3**	**196.0**	**4.8**			**79.8**	**4.8**
Std Dev	36.8	3.3	17.6	6.4	11.8	4.1	46.1	1.5	188.0	4.6			41.5	2.3
2007														
Average	**32.7**	**2.7**	**69.8**	**2.7**	**46.8**	**10.7**	**54.3**	**8.0**	**100.5**	**57.0**	**22.0**	**0.0**	**62.7**	**16.0**
Std Dev	12.2	4.6	35.8	2.5	25.5	2.5	20.7	9.8	57.5	98.7			26.3	23.3

Figure 2.4.11 Area Comparison of Bacteria Data

Sans Souci			Pointe au Baril Island Area			South Channel Area			Bayfield and Nares Inlets		
	Average for All Stations			Average for All Stations			Average for All Stations			Average for All Stations	
Date	TC	EC	Date	TC	EC	Date	TC	EC	Date	TC	EC
*06-Jun	28.7	1.9	29-Jun**	88	16	14-Jun	40.3	8.4	11-Jul	80.3	1.8
*28-Jun	177.9	3.1	14-Jul	34	2	5-Jul	70.9	9.0	24-Jul**	32.3	4.8
**11-Jul	163.0	11.6	27-Jul	133	11	1-Aug	46.7	4.7	12-Aug	48.2	1.3
**26-Jul	27.1	8.1	11-Aug	71	5	22-Aug	111.4	9.9	1-Sep	10.3	0.5
*09-Aug	38.7	1.3	25-Aug	49	1	6-Sep	122.3	12.3			
23-Aug	38.4	0.4				27-Sep	57.9	6.6			
6-Sep	12.6	1.1									
Average	69.5	3.9		75.0	7.0		74.9	8.5		30.3	2.2
Std. Dev.	69.6	4.2		38.5	6.2		34.3	2.6		19.0	2.3

Blackstone Lake			Crane Lake			Healey Lake			Kapikog Lake			Naiscoot Lake		
	Average for All Stations			Average for All Stations			Average for All Stations			Average for All Stations			Average for All Stations	
Date	TC	EC	Date	TC	EC	Date	TC	EC	Date	TC	EC	Date	TC	EC
15-Jul	129.2	3.8	14-Jun	14	1	4-Jul	50.0	7.5	20-Jul*	30.2	3.7	5-Jul	67.5	1.8
31-Jul	1609.4	3.2	4-Jul	35	5	2-Aug	100.1	3.9	30-Jul*	99.6	24.6	30-Jul	75.3	2.7
27-Aug	1215.6	2.0	19-Jul	40	11	4-Sep	138.3	7.0	19-Aug*	147.1	24.8	15-Aug	78.5	1.8
24-Sep	226.2	11.2	3-Aug	77	11				9-Sep	75.5	31.0	27-Aug	123.2	1.8
			23-Aug	140	12									
			7-Sep	85	8									
Average	795.1	5.1		65	8		96.1	6.1		88.1	21.0		86.1	2.0
Std. Dev.	731.9	4.2		45	4		44.3	2.0		48.8	11.9		25.1	0.4

Skerryvore Area			Sturgeon Bay			Woods Bay		
	Average for All Stations			Average for All Stations			Average for All Stations	
Date	TC	EC	Date	TC	EC	Date	TC	EC
30-Jun**	109.0	19.2	27-Jul**	587.2	4.9	23-Jun	21.7	4.3
17-Jul	41.3	8.5	14-Aug	420.9	4.4	7-Jul	21.0	10.8
31-Jul	76.2	9.0	29-Aug	704.6	25.5	26-Jul**	164.0	38.2
16-Aug	303.3	21.2	11-Sep	258.5	4.6	7-Aug	84.7	11.2
2-Sep	65.7	9.7				22-Aug	45.3	7.7
14-Sep**	169.7	5.5				11-Sep	35.5	6.5
						25-Sep	37.8	16.3
Average	127.5	12.2		492.8	9.8		58.6	13.6
Std. Dev.	96.9	6.4		194.8	10.4		51.2	11.5