Volunteer Water Quality Monitoring Program
Report on 2015 Sampling Data

Township of the Archipelago - March 2016

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 Georgian Bay Biosphere Reserve

For information on its content please contact:

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Contents

Area Data

1.0 Introduction

This report provides a summary of results from the 2015 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 2015 season. Similar to past reports, the purpose here is to present the data gathered in the 2015 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 Georgian Bay Biosphere Reserve staff 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 Elke Dyck at the Township of The Archipelago.

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 2015. 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.

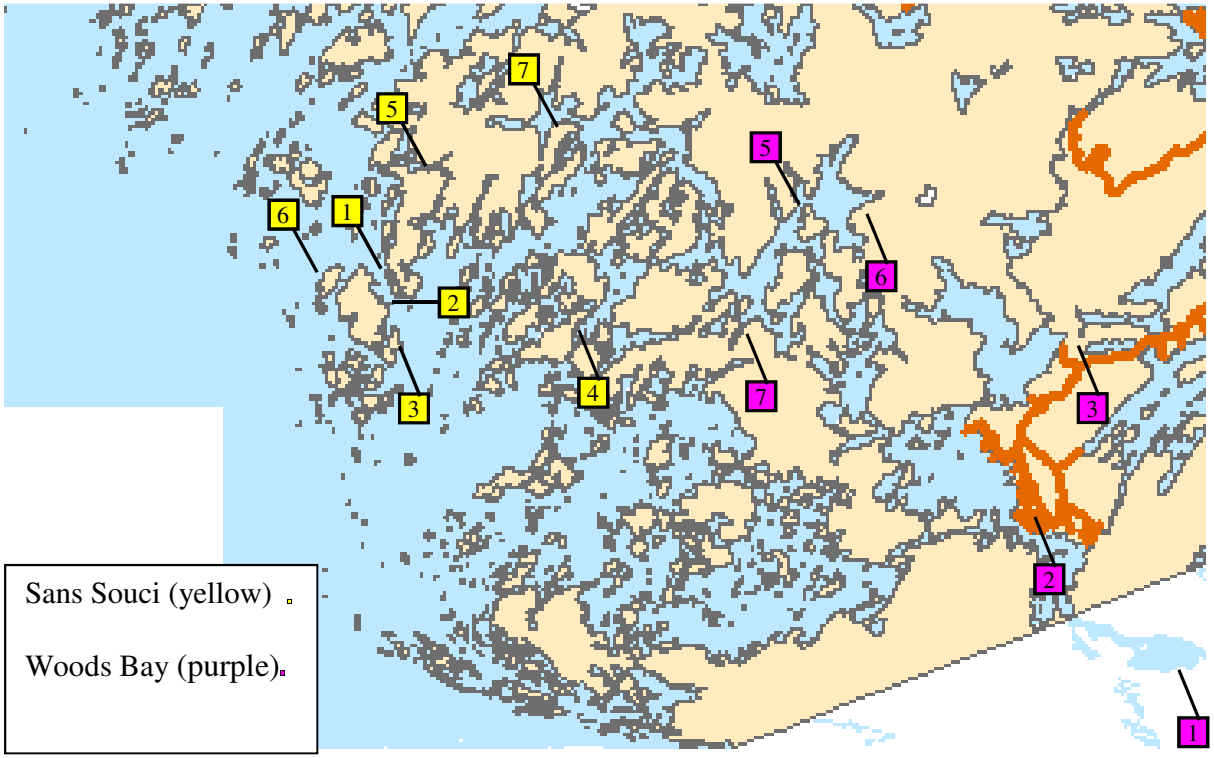
It should be noted that in order to assess the relevance of the data, comparisons should be made between averages and standard deviations (not individual data points per se), previous year averages and against established standards.

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).

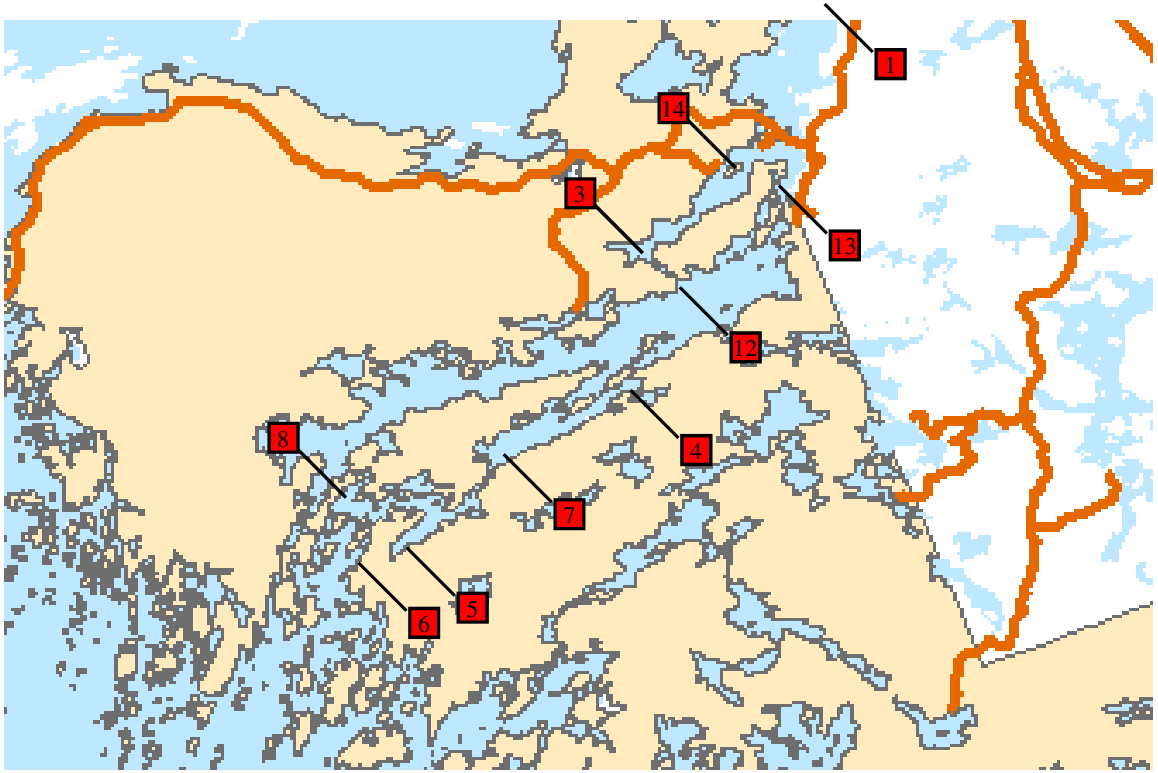
2.1 Sample Locations

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.

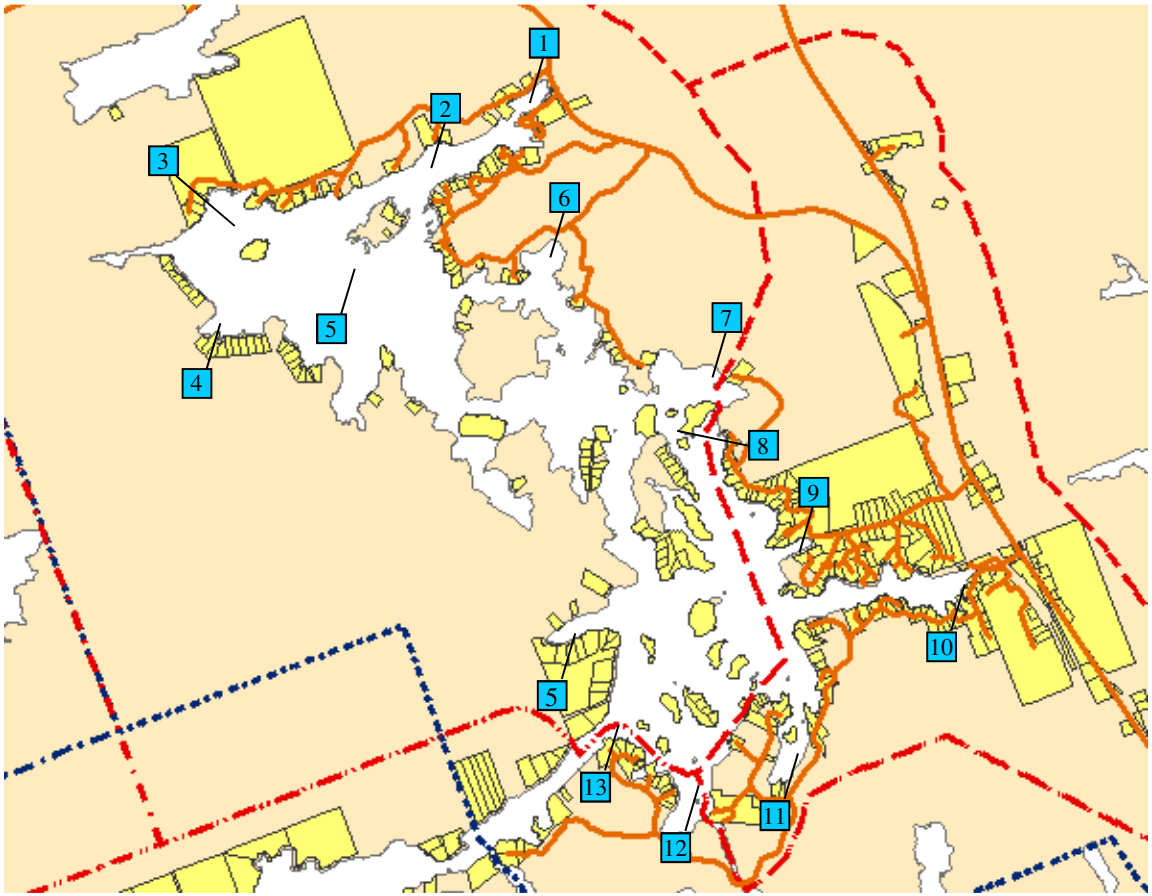
2.1.1 Sans Souci and Woods Bay Sampling Locations



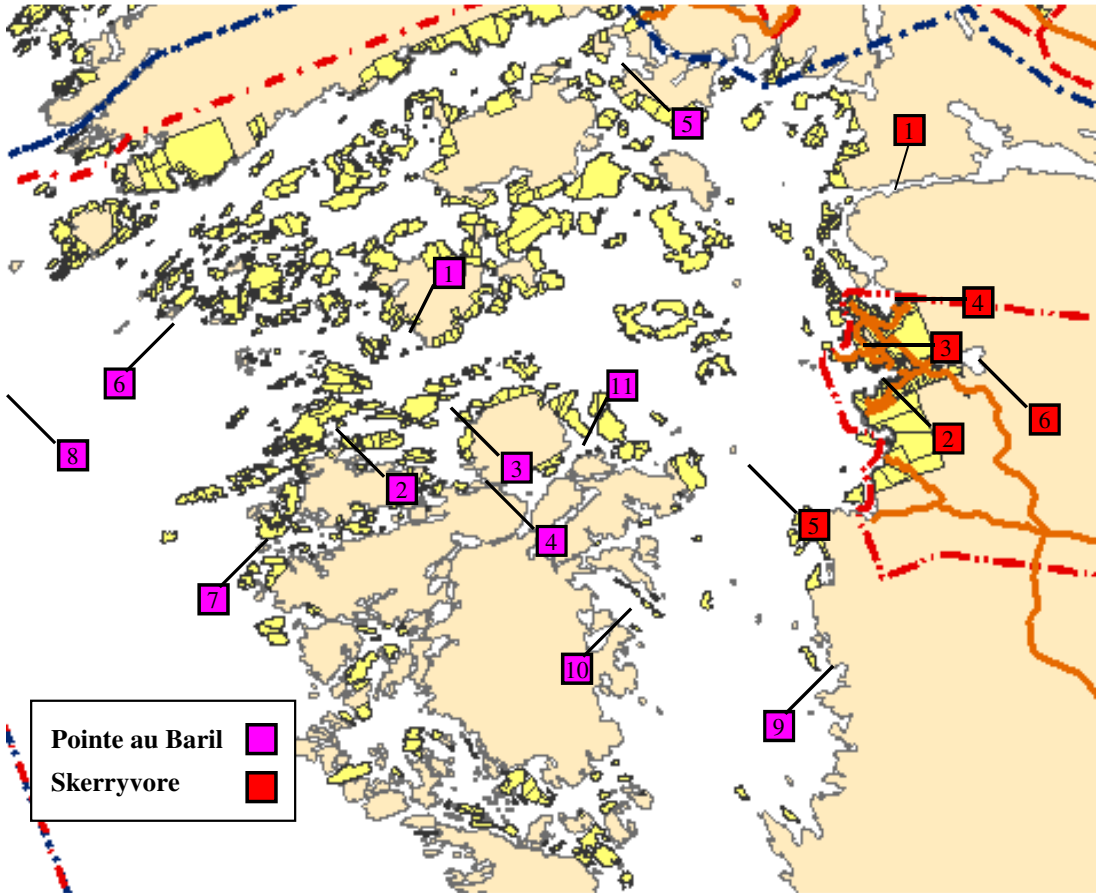
2.1.2 South Channel Sampling Locations



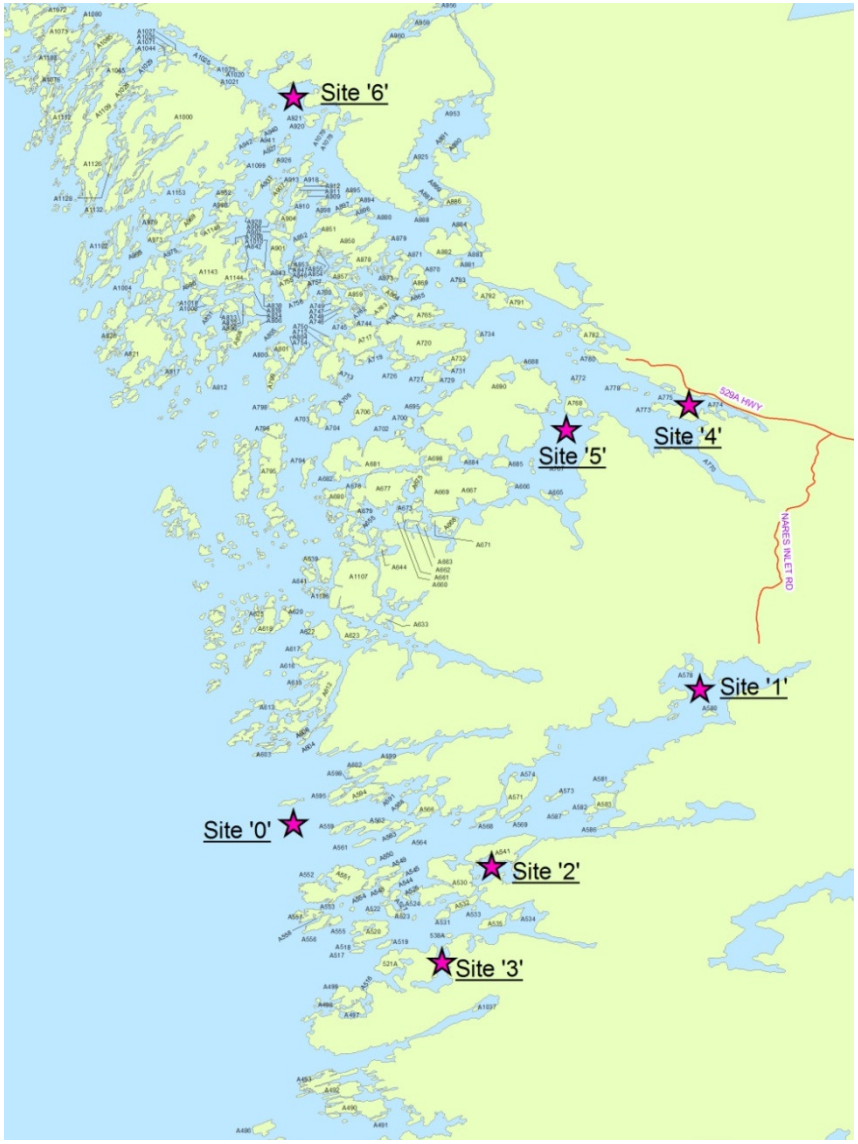
2.1.3 Sturgeon Bay Sampling Locations



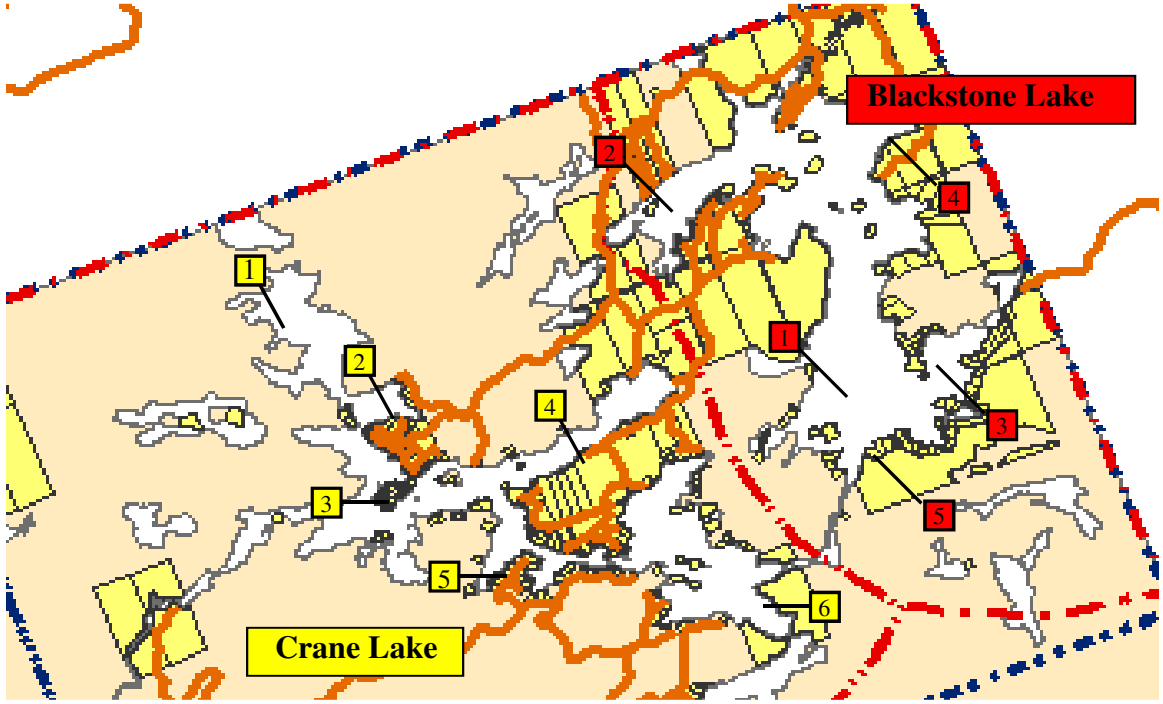
2.1.4 Skerryvore and Pointe au Baril Islands Sampling Locations



2.1.5 Bayfield Inlet and Nares Inlet Sampling Locations



2.1.6 Blackstone and Crane Lake Sampling Locations



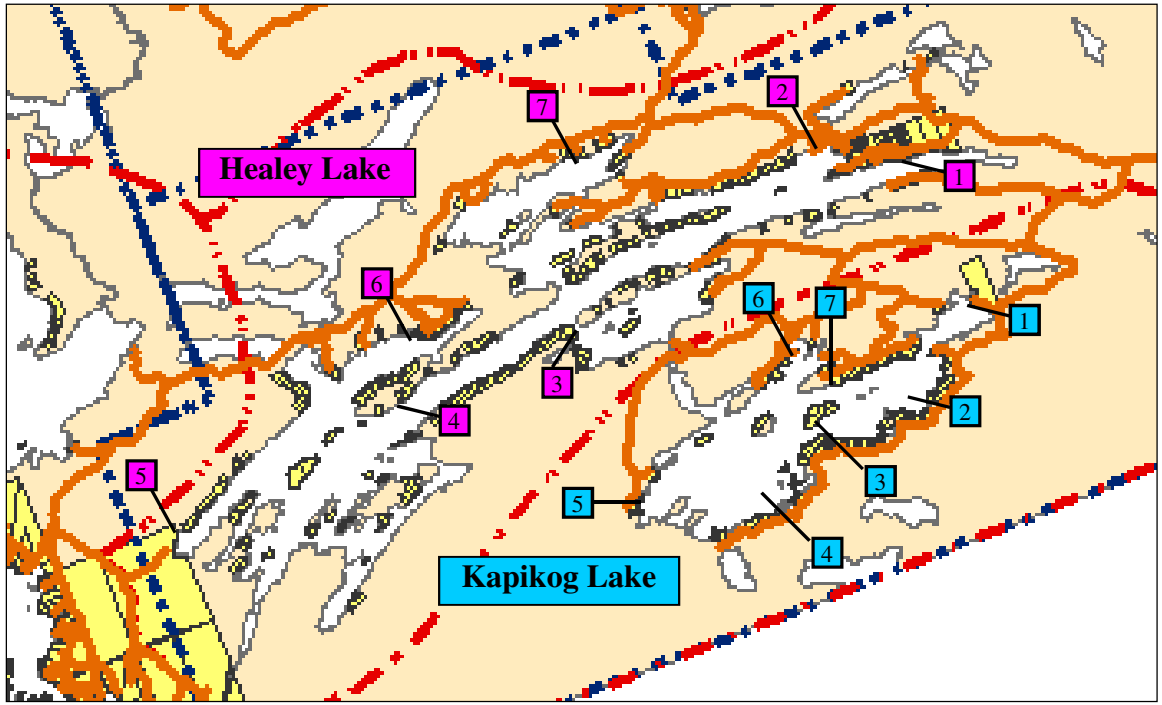
Blackstone Lake Sampling Sites:

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

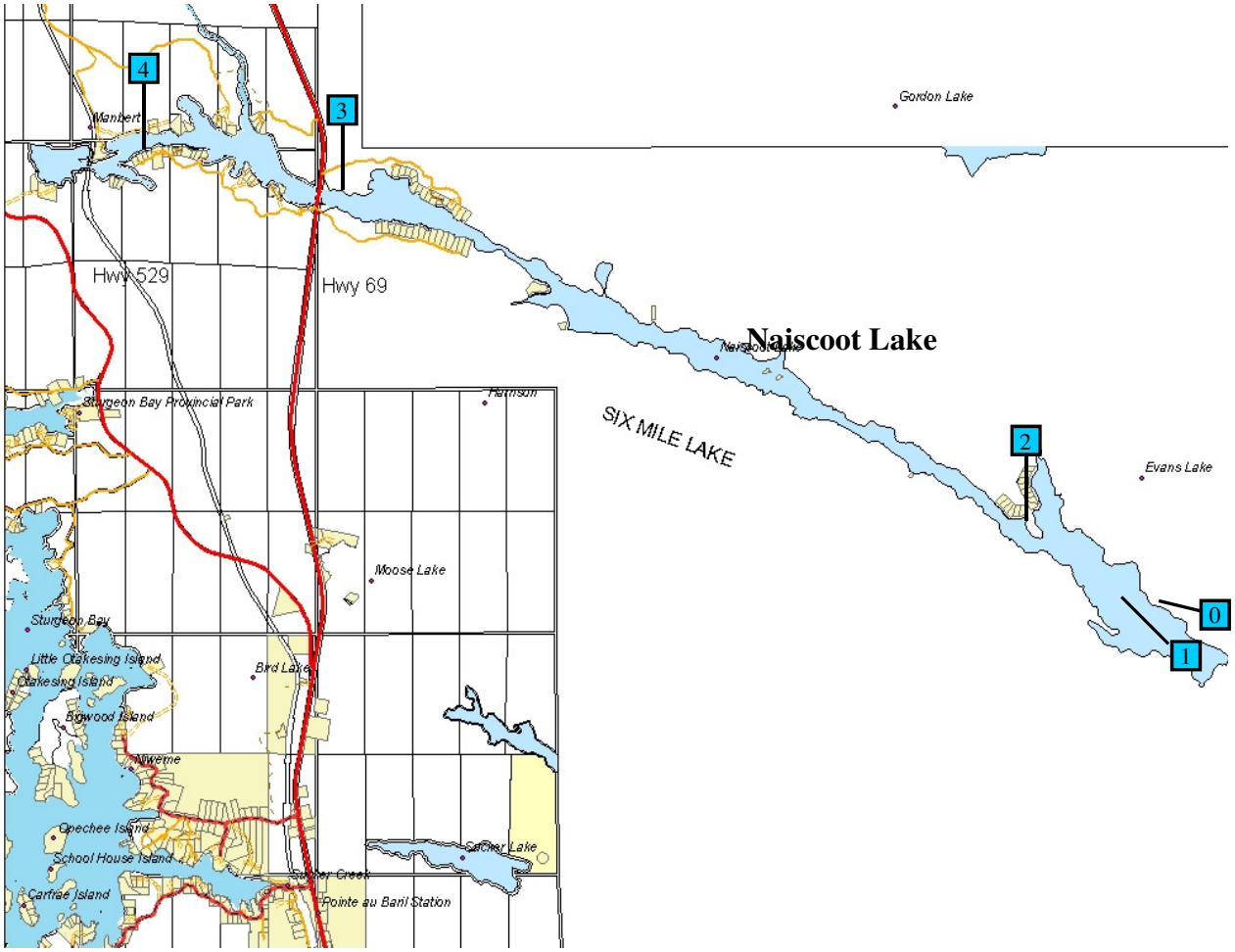
Crane Lake Sampling Sites:

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 2015

2015 Results Unavailable for Sans Souci Area

Average Water Clarity Results for Previous Years

Year	Station							Average for All Stations
	1	2	3	4	5	6	7	
2014	8.5	7.9	NA	5.1	5.1	10.1	4.8	6.5
2013	9.4	8.4	NA	6.4	4.6	10.4	6.3	7.8
2012	9.6	8.3	NA	6.7	4.8	11.0	5.7	7.9
2011	9.7	9.8	NA	7.0	5.8	11.5	5.4	8.6
2010	10.9	11.6	NA	7.6	5.8	13.7	5.8	7.7

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

2.2.2 Secchi Depths (Water Clarity) in the Woods Bay Area 2015

Date	Station						Average for All Stations
	1	2	3	5	6	7	
07-July	2	2.5	3.5	2.5	3.0	2.5	2.7
19-July	3	2.5	4	4	4.5	4.5	3.8
31-July	2.5	2.3	2.5	2.5	4	4	3.0
29-Aug	4.5	3.5 t.b.	4	4	4	4	4.0
Average	3.0	2.7	3.5	3.3	3.9	3.8	3.3
Std. Dev.	1.1	0.5	0.7	0.9	0.6	0.9	0.8

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

Average Water Clarity Results for Previous Year

Year	Station						Average for All Stations
	1	2	3	5	6	7	
2014	3.5	3.3	3.8	4.0	3.8	4.0	3.7
2013	3.5	3.4	3.5	4.0	3.9	4.0	3.7
2012	4.2	3.8	4.0	4.4	4.1	4.3	4.1
2011	3.6	3.4	3.8	4.0	3.9	3.9	3.8

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

2.2.3 Secchi Depths (Water Clarity) for the South Channel Area 2015 (NA)

2015 Results Unavailable for South Channel Area

Average Water Clarity Results for Previous Years

Date	Station										Average for All Stations
	1	3	4	5	6	7	8	12	13	14	
2013	3.9	4.3	5.1	5.2	7.5	5.0	6.5	5.1	3.9	4.4	5.1
2012	4.2	4.5	5.6	5.4	7.4	5.0	6.1	4.8	3.7	5.1	5.2
2011	2.9	3.9	5.0	4.7	6.5	4.8	5.5	4.3	2.8	3.9	4.4
2009	3.2	3.8	5.1	4.9	7.0	4.7	5.9	4.7	3.0	4.2	4.6

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom
Note: 2014 Data unavailable.

2.2.4 Secchi Depths (Water Clarity) for the Sturgeon Bay Area 2015

2015 Results Unavailable for Sturgeon Bay Area

Average Water Clarity Results for Previous Years

Year	Station														Average for All Stations
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2014	1.4	1.4	1.7	1.7	1.7	1.6	1.8	1.9	2.1	1.1	2.0	2.0	2.3	2.1	1.7
2013	1.1	1.2	1.3	1.3	1.3	1.0	1.7	1.9	2.2	1.4	2.3	2.4	2.3	2.1	1.7
2012	1.1	1.1	1.1	1.1	1.1	0.7	1.5	1.7	1.7	1.4	1.8	2.0	2.1	1.6	1.5
2011	1.5	1.5	1.3	1.7	1.8	1.3	1.9	1.9	1.9	NA	2.2	2.3	2.5	2.5	2.0
2010	1.7	1.7	1.8	1.9	1.9	1.3	2.1	2.1	2.2	NA	2.3	2.4	2.3	2.0	2.0

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

2.2.5 Secchi Depth (Water Clarity) in Skerryvore Area 2015

Date	Station						Average for All Stations
	1	2	3	4	5	6	
10-July	2.7	4.0	2.4 t.b.	2.0 t.b.	5.8	1.5	3.1
20-July	2.7	3.4	2.4 t.b.	3.1	5.8	1.2	3.1
08-Aug	2.4	4.3	2.4 t.b.	2.4 t.b.	4.0	1.5	2.8
01-Sept	2.7	3.3	2.4 t.b.	3.0	3.3	1.2	2.7
25-Sept	2.7 t.b.	3.0	2.3 t.b.	3.0	3.3	1.5	2.6
Average	2.6	3.6	2.4	2.7	4.4	1.4	2.9
Std. Dev.	0.2	0.5	0.0	0.5	1.3	0.2	0.4

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

Average Water Clarity Results for Previous Years

Year	Station						Average for All Stations
	1	2	3	4	5	6	
2014	2.2	2.7	1.2	2.8	4.2	1.2	2.4
2012	2.6	3.5	1.2	2.3	4.6	0.5	2.4
2010	2.5	4.0	2.5	4.7	NA	NA	3.8

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom
Note: 2011 and 2013 data unavailable

2.2.6 Secchi Depth (Water Clarity) in Pointe au Baril Islands Area 2015

Date	Station											Average for All Stations
	1	2	3	4	5	6	7	8	9	10	11	
06-July	4.1	7.6	2.4t.b.	5.0	3.5t.b.	4.6	4.1	4.1	4.0t.b.	3.0	4.7	4.3
10-July	4.6	7.6	2.4t.b.	4.9	3.5t.b.	4.6	4.3	3.5	3.0	3.0	4.1	4.1
18-July	4.7	8.7t.b.	2.4t.b.	4.9	3.2t.b.	4.7	3.7t.b.	6.2	4.4	2.3	6.4	4.7
31-July	4.3	NA	2.4t.b.	4.4	3.2t.b.	3.4	3.8t.b.	4.9	3.7	3.4	3.8	3.7
15-Aug	4.7	6.1	2.4t.b.	4.6	3.0t.b.	4.0	3.7t.b.	5.8	4.3t.b.	2.7	4.9	4.2
30-Aug	4.0	6.4	5.6t.b.	4.3	3.2	4.3	3.7t.b.	4.7	3.2	2.7	4.0	4.2
Average	4.4	7.3	2.9	4.7	3.3	4.3	3.9	4.9	3.8	2.9	4.7	4.3
Std. Dev.	0.3	1.0	1.3	0.3	0.2	0.5	0.3	1.0	0.6	0.4	1.0	0.6

Average Water Clarity Results for Previous Years

Year	Station										Average for All Stations
	1	2	3	4	5	6	7	8	9	10	11	
2014	4.4	NA	7.1	3.8	3.3	6.1	5.3	5.3	1.9	3.8	3.4	4.3
2013	5.3	NA	11.7	NA	NA	NA	NA	NA	NA	5.5	NA	7.0
2012	4.1	2.6	3.1	2.6	3.4	2.0	4.4	9.4	4.4	3.6	3.4	4.0
2011	4.9	NA	7.8	4.1	NA	5.0	NA	4.3	NA	4.3	NA	5.1
2009	5.2	NA	6.7	4.8	NA	5.2	NA	4.6	NA	5.2	NA	5.1

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

Note: 2010 Data is unavailable.

2.2.7 Secchi Depth (Water Clarity) in Blackstone Lake 2015

Date	Station *					Average for All Stations
	1	2	3	4	5	
02-June	3.5	NA	NA	NA	NA	3.5
26-June	3.8	NA	NA	NA	NA	3.8
09-July	4.5	NA	NA	NA	NA	4.5
23-July	4.7	NA	NA	NA	NA	4.7
07-Aug	4.2	NA	NA	NA	NA	4.2
03-Sept	4.7	NA	NA	NA	NA	4.7
14-Sept	5.5	NA	NA	NA	NA	5.5
Average	4.4	NA	NA	NA	NA	4.4
Std. Dev.	0.7	NA	NA	NA	NA	0.7

* All readings taken at one location - middle of channel

Average Water Clarity Results for Previous Years

Year	Station					Average for All Stations
	1	2	3	4	5	
2014	4.3	NA	NA	NA	NA	4.3
2013	4.8	NA	NA	NA	NA	4.8
2012	NA	NA	5.1	NA	NA	5.1
2011	5.3	5.3	5.3	5.3	5.3	5.3
2010	4.9	NA	NA	NA	NA	4.9

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

2.2.8 Secchi Depth (Water Clarity) in Crane Lake 2015

Date	Station						Average for All Stations
	1	2	3	4	5	6	
27-June	4.4	4.6	4.6	4.1	4.1	4.3	4.4
12-July	4.5	4.2	4.0	4.2	4.1	4.1	4.2
04-Aug	4.5	4.0	4.0	4.2	4.1	4.0	4.1
16-Aug	5.1	4.9	5.0	5.0	4.8	5.0	5.0
06-Sept	5.5	5.4	5.4	5.1	5.4	5.1	5.3
20-Sept	6.1	5.9	5.8	5.4	5.6	6.0	5.8
Average	5.0	4.8	4.8	4.7	4.7	4.8	4.8
Std. Dev.	0.7	0.7	0.7	0.6	0.7	0.8	0.7

Average Water Clarity Results for Previous Years

Year	Station						Average for All Stations
	1	2	3	4	5	6	
2014	4.5	4.3	4.4	4.4	4.4	4.4	4.4
2013	5.0	4.8	4.8	4.7	4.7	5.0	4.8
2012	5.7	5.4	5.2	4.8	5.0	5.4	5.3
2011	4.9	4.7	4.9	4.7	4.8	4.8	4.8
2010	4.8	4.9	4.8	4.5	4.9	5.0	4.8

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom .

2.2.9 Secchi Depth (Water Clarity) in Healey Lake 2015 (NA)

2015 Results Unavailable for Healey Lake

Average Water Clarity Results for Previous Years

Year	Station							Average for All Stations
	1	2	3	4	5	6	7	
2013	3.1	2.9	3.0	2.8	2.7	2.8	1.8	2.7
2012	3.4	3.0	3.6	3.4	3.4	3.4	2.0	3.2
2011	3.0	3.0	3.3	3.4	3.4	3.0	1.7	3.0

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom
2014 and 2010 Results unavailable.

2.2.10 Secchi Depth (Water Clarity) in Kapikog Lake 2015

Date	Station								Average for All Stations
	1	2	3	4	5	6	7	8	
28-July	4.3	4.0	4.0	4.6	4.6	4.6	4.3	4.6	4.4
16-Sept	4.9	4.6	4.6	4.6	4.0	4.3	4.0	4.6	4.5
Average	4.6	4.3	4.3	4.6	4.3	4.5	4.2	4.6	4.4
Std. Dev.	0.4	0.4	0.4	0.0	0.4	0.2	0.2	0.0	0.3

Average Water Clarity Results for Previous Years

Year	Station								Average for All Stations
	1	2	3	4	5	6	7	8	
2014	3.7	4.0	4.3	4.3	4.0	4.0	4.0	4.0	4.0
2013	4.5	4.8	5.1	4.8	4.8	5.1	4.9	4.9	4.8
2012	4.6	5.1	5.4	4.9	5.4	4.8	5.1	5.1	5.0
2011	4.6	5.0	4.9	4.8	4.8	4.8	5.1	4.9	4.9
2010	4.5	5.0	4.9	4.8	4.9	4.9	5.1	4.9	4.9

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

2.2.11 Secchi Depth (Water Clarity) in Naiscoot Lake 2015

2015 Results Unavailable for Naiscoot Lake

Average Water Clarity Results for Previous Years

Year	Station						Average for All Stations
	0	1	2	3	4	2a	
2014	3.4	3.4	3.1	3.1	2.9	NA	3.2
2012	3.7	3.7	3.9	3.7	3.5	4.0	3.8
2011	4.2	4.2	4.1	3.8	3.5	4.1	4.0
2010	4.2	4.3	4.1	4.0	3.8	4.2	4.1
2009	3.4	3.7	3.3	3.2	3.2	3.5	3.4

Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

Note: 2013 Data Unavailable

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; and
- 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 location 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 Sans Souci Area 2015

2015 Results Unavailable for Sans Souci Area

Average Bacterial Monitoring Results for Previous Years

Year	Station														Average All Stations	
	1		2		3		4		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**1002.6**	**17.6**	**555.0**	**16.0**	**571.8**	**25.4**	**88.2**	**3.6**	**905.2**	**16.4**	**57.4**	**1.0**	**79.2**	**2.6**	**465.6**	**11.8**
2014 SD	1297.8	23.7	1046.1	22.7	1037.1	45.3	41.1	5.7	1087.6	29.6	110.5	2.2	44.5	5.8	503.0	13.0
2013 Avg	**239.0**	**4.2**	**25.2**	**2.8**	**31.2**	**2.0**	**48.2**	**4.4**	**157.6**	**33.4**	**7.3**	**0.8**	**51.4**	**3.2**	**82.3**	**7.5**
2013 SD	233.7	1.1	19.6	4.8	40.1	2.7	59.0	4.1	145.2	55.2	5.9	1.5	55.7	3.4	73.3	7.9
2012 Avg	**368.8**	**20.8**	**30.4**	**0.6**	**38.6**	**2.2**	**63.0**	**10.4**	**71.6**	**12.4**	**7.0**	**1.6**	**41.8**	**2.2**	**88.7**	**7.2**
2012 SD	563.6	27.0	18.7	1.3	15.4	2.2	74.8	12.8	52.3	15.6	6.4	3.6	26.5	3.5	79.4	5.7
2011 Avg	**98.3**	**16.3**	**28.8**	**2.0**	**33.0**	**6.8**	**40.8**	**7.5**	**226.8**	**6.3**	**11.0**	**0.0**	**51.3**	**0.0**	**70.0**	**5.5**
2011 SD	98.0	30.5	17.1	4.0	24.3	6.2	27.2	11.9	116.1	12.5	9.2	0.0	39.1	0.0	30.6	4.5
2010 Avg	**219.4**	**2.2**	**90.0**	**3.6**	**82.0**	**9.2**	**83.6**	**7.8**	**142.2**	**5.8**	**34.2**	**0.0**	**65.8**	**4.2**	**102.5**	**4.7**
2010 SD	269.7	3.5	63.9	3.5	33.1	9.7	67.8	8.2	62.1	7.8	34.4	0.0	27.8	2.9	48.8	1.8

2.3.2 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Woods Bay Area 2015

Date	Station												Average All Stations	
	1		2		3		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
07-July	52	8	43	8	22	3	33	5	510	11	16	8	112.7	7.2
19-July **	43	16	166	5	49	3	90	<3	119	5	69	5	89.3	6.8
31-July	22	5	72	5	69	22	46	3	28	11	19	8	42.7	9.0
29-Aug *	94	5	289	11	79	5	76	8	146	5	123	11	134.5	7.5
Average	**52.8**	**8.5**	**142.5**	**7.3**	**54.8**	**8.3**	**61.3**	**5.3**	**200.8**	**8.0**	**56.8**	**8.0**	**94.8**	**7.6**
Std. Dev.	30.2	5.2	110.9	2.9	25.1	9.2	26.3	2.5	212.3	3.5	50.4	2.4	39.3	1.0

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SC = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station												Average All Stations	
	1		2		3		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**33.3**	**14.5**	**38.0**	**11.0**	**38.0**	**20.3**	**38.0**	**2.3**	**44.3**	**7.5**	**49.5**	**5.5**	**40.2**	**10.2**
2014 SD	31.2	9.6	37.5	12.2	26.8	15.3	12.3	1.5	12.5	11.9	18.5	4.9	18.4	5.3
2013 Avg	**14.8**	**2.8**	**20.7**	**2.0**	**39.2**	**3.5**	**22.2**	**3.7**	**56.5**	**7.5**	**66.3**	**2.8**	**36.6**	**3.7**
2013 SD	9.6	2.9	11.9	1.5	33.5	2.0	30.0	4.8	55.3	11.3	118.5	1.6	20.3	2.7
2012 Avg	**87.3**	**5.0**	**53.0**	**4.9**	**28.4**	**6.9**	**30.6**	**3.4**	**67.9**	**5.0**	**23.7**	**4.6**	**48.5**	**5.0**
2012 SD	59.6	6.3	30.3	4.0	16.7	4.8	33.1	2.9	79.2	4.2	26.3	3.4	24.9	2.1
2011 Avg	**105.6**	**4.6**	**32.6**	**2.3**	**52.9**	**6.1**	**18.4**	**3.4**	**47.1**	**7.4**	**33.1**	**4.1**	**48.3**	**4.7**
2011 SD	105.4	4.6	17.1	2.3	68.8	4.1	10.0	2.9	34.7	12.0	27.8	4.9	24.9	3.0

2.3.3 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E.Coli (EC) in South Channel Area 2015

2015 Results Unavailable for South Channel Area

Average Bacterial Monitoring Results for Previous Years

Year	Station											
	1		3		4		5		6		7	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2013 Avg	**269.0**	**37.8**	**68.3**	**4.5**	**22.0**	**2.3**	**21.3**	**1.5**	**22.0**	**<3**	**56.3**	**3.3**
2013 SD	211.4	36.3	18.0	3.3	12.2	1.5	6.2	1.7	13.5	<3	33.9	3.9
2012 Avg	**285.8**	**23.3**	**23.8**	**2.0**	**22.3**	**2.0**	**19.5**	**<3**	**21.5**	**1.5**	**37.0**	**<3**
2012 SD	174.9	7.5	14.1	2.4	17.3	2.4	7.0	<3	14.9	3.0	18.8	<3
2011 Avg	**726.0**	**58.0**	**67.8**	**5.0**	**33.2**	**1.8**	**18.6**	**<3**	**35.2**	**1.2**	**36.2**	**2.4**
2011 SD	958.4	49.4	38.0	6.3	24.8	1.6	16.2	<3	32.2	1.6	30.5	1.3
2009 Avg	**187.5**	**23.3**	**53.3**	**4.8**	**54.8**	**1.0**	**14.0**	**0.8**	**21.3**	**<3**	**38.7**	**2.2**
2009 SD	84.4	9.1	26.7	1.8	39.8	1.5	11.4	2.0	16.8	<3	21.6	2.5

Year	Station								Average All Stations	
	8		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2013 Avg	**32.5**	**5.5**	**28.8**	**1.3**	**83.5**	**14.3**	**53.0**	**11.0**	**66.5**	**8.1**
2013 SD	34.3	11.0	18.6	2.5	21.1	6.1	34.0	9.9	31.5	5.4
2012 Avg	**26.8**	**1.5**	**32.3**	**2.8**	**106.5**	**12.3**	**47.8**	**1.5**	**62.3**	**6.8**
2012 SD	10.8	1.7	11.7	3.8	38.8	12.7	39.3	1.7	20.8	3.6
2011 Avg	**38.4**	**1.6**	**65.8**	**4.8**	**157.8**	**16.0**	**67.2**	**4.2**	**120.9**	**8.4**
2011 SD	22.0	2.3	53.1	2.0	73.6	9.7	44.4	2.9	111.0	3.8
2009 Avg	**59.8**	**3.7**	**63.7**	**5.8**	**138.7**	**30.5**	**82.7**	**3.3**	**69.0**	**8.7**
2009 SD	37.5	4.8	45.1	6.7	59.9	15.2	63.0	4.0	25.3	5.6

Std. Dev. or SC = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Note: 2014 and 2010 Data Unavailable

2.3.4 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Sturgeon Bay Area 2015

2015 Results Unavailable for Sturgeon Bay

Average Bacterial Monitoring Results for Previous Years

Year	Station															
	1		2		3		4		5		6		7		8	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**198.0**	**9.5**	**194.0**	**14.0**	**363.5**	**5.5**	**239.5**	**4.0**	**411.0**	**2.5**	**346.5**	**6.5**	**73.5**	**6.5**	**69.0**	**NA**
2014 SD	268.7	9.2	256.0	15.6	467.4	3.5	299.1	1.4	541.6	3.5	434.9	9.2	57.3	9.2	46.7	NA
2013 Avg	**40.3**	**1.3**	**40.5**	**4.5**	**21.3**	**2.3**	**61.5**	**1.3**	**15.5**	**0.0**	**83.5**	**1.5**	**67.0**	**5.5**	**64.8**	**3.5**
2013 SD	31.7	2.5	17.3	3.3	6.7	1.5	88.5	2.5	9.5	0.0	39.8	1.7	41.6	7.1	34.8	1.0
2012 Avg	**48.6**	**4.4**	**30.4**	**4.4**	**12.6**	**1.0**	**36.4**	**8.4**	**19.2**	**1.2**	**95.8**	**2.6**	**102.6**	**6.6**	**81.0**	**1.6**
2012 SD	22.1	6.7	17.6	6.7	11.7	2.2	26.8	11.3	7.3	1.6	37.2	2.5	49.7	5.7	48.5	3.6
2011 Avg	**448.2**	**10.8**	**278.6**	**10.4**	**352.6**	**12.6**	**314.0**	**20.2**	**552.8**	**1.6**	**644.2**	**9.4**	**664.8**	**14.2**	**196.6**	**8.4**
2011 SD	536.2	11.8	330.8	12.8	573.3	10.2	488.9	35.2	1048.0	2.3	995.8	13.2	988.6	6.1	193.8	5.7

Year	Station												Average All Stations	
	9		10		11		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**42.5**	**1.5**	**58.0**	**2.5**	**49.0**	**5.5**	**72.5**	**3.0**	**47.5**	**NA**	**38.0**	**1.5**	**146.8**	**4.5**
2014 SD	4.9	2.1	35.4	3.5	18.4	7.8	24.7	0.0	16.3	NA	7.1	2.1	165.2	4.5
2013 Avg	**31.8**	**1.5**	**80.5**	**6.8**	**22.8**	**1.3**	**36.3**	**4.8**	**7.3**	**3.0**	**22.0**	**0.0**	**39.7**	**2.6**
2013 SD	11.8	1.7	37.3	10.4	8.5	2.5	18.2	7.6	2.9	1.5	12.9	0.0	24.1	2.9
2012 Avg	**51.6**	**2.2**	**158.4**	**3.8**	**37.2**	**2.2**	**58.0**	**3.8**	**57.8**	**2.0**	**47.5**	**4.8**	**63.3**	**3.5**
2012 SD	30.2	2.2	178.0	6.9	23.4	2.2	55.1	5.4	40.7	2.4	10.1	4.6	38.3	3.8
2011 Avg	**170.2**	**11.4**	**305.6**	**13.2**	**100.4**	**5.2**	**623.0**	**11.4**	**98.3**	**6.8**	**132.3**	**12.0**	**151.9**	**12.0**
2011 SD	92.4	12.7	219.1	10.1	35.0	4.8	1009.8	10.3	65.2	9.0	48.4	5.2	68.2	8.3

2.3.4.1 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Skerryvore Area 2015

Date	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
10-July	16	8	13	3	16	<3	5	<3	11	3	59	28	20.0	10.5
20-July	19	8	69	8	52	13	16	8	11	<3	94	11	43.5	9.6
8-Aug	43	3	11	<3	87	3	36	8	22	<3	114	19	52.2	8.3
1-Sept	43	<3	90	<3	62	5	43	3	28	<3	98	19	60.7	9.0
25-Sept	49	5	98	3	59	3	65	11	83	<3	206	36	93.3	11.6
Average	**34.0**	**6.0**	**56.2**	**4.7**	**55.2**	**6.0**	**33.0**	**7.5**	**31.0**	**3.0**	**114.2**	**22.6**	**53.9**	**9.8**
Std. Dev.	15.3	2.4	41.7	2.9	25.6	4.8	23.5	3.3	30.0	0.0	55.1	9.6	26.7	1.3

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**65.3**	**4.3**	**94.7**	**8.0**	**57.7**	**4.3**	**16.3**	**2.7**	**19.3**	**1.0**	**144.3**	**23.7**	**66.3**	**7.3**
2014 SD	66.1	1.2	99.1	5.0	64.8	4.0	7.4	2.5	10.3	1.7	77.0	13.7	51.8	1.0
2013 Avg	**31.8**	**1.5**	**80.5**	**6.8**	**22.8**	**1.3**	**36.3**	**4.8**	**7.3**	**3.0**	**22.0**	**0.0**	**39.7**	**2.6**
2013 SD	11.8	1.7	37.3	10.4	8.5	2.5	18.2	7.6	2.9	1.5	12.9	0.0	24.1	2.9
2012 Avg	**52.0**	**6.0**	**54.0**	**7.5**	**44.3**	**12.3**	**41.0**	**11.0**	**42.3**	**0.0**	**528.8**	**23.0**	**127.0**	**10.0**
2012 SD	32.0	4.7	26.2	7.3	12.5	11.4	12.9	16.8	49.2	0.0	472.9	21.6	91.2	4.7
2011 Avg	**95.8**	**13.5**	**37.4**	**4.1**	**303.3**	**11.8**	**56.0**	**7.0**	**39.8**	**0.8**	**704.8**	**87.3**	**206.1**	**20.7**
2011 SD	75.0	13.7	33.8	4.8	491.4	11.8	45.1	12.1	33.7	1.5	1152.1	123.3	287.0	22.5
2010 Avg	**533.2**	**5.4**	**56.2**	**1.8**	**94.8**	**5.2**	**52.6**	**8.2**	**60.8**	**1.0**	**238.0**	**37.0**	**172.6**	**9.8**
2010 SD	1058.1	5.1	45.6	1.6	49.8	3.3	26.5	7.4	76.5	2.2	74.7	36.9	196.8	6.5

2.3.4.2 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in the Pointe au Baril Islands Area 2015

Date	Station											
	1		2		3		4		5		6	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
18-July	22	<3	<3	<3	62	16	33	<3	13	3	36	11
31-July	127	11	36	<3	127	16	76	5	200	22	166	11
15-Aug	36	<3	5	3	28	3	19	<3	55	<3	8	<3
30-Aug	39	3	28	<3	22	<3	36	8	119	<3	52	5
Average	**56.0**	**7.0**	**23.0**	**3.0**	**59.8**	**11.7**	**41.0**	**6.5**	**96.8**	**12.5**	**65.5**	**9.0**
Std. Dev.	47.9	5.7	16.1	0.0	48.2	7.5	24.5	2.1	81.5	13.4	69.4	3.5

Date	Station										Average All Stations	
	7		8		9		10		11			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
18-July	16	3	13	<3	28	3	33	3	33	<3	28.9	6.5
31-July	33	<3	87	16	388	22	255	19	119	11	146.7	14.8
15-Aug	8	<3	5	3	16	3	72	<3	46	<3	27.1	3.0
30-Aug	65	3	98	5	33	<3	72	3	127	5	62.8	4.6
Average	**30.5**	**3.0**	**50.8**	**8.0**	**116.3**	**9.3**	**108.0**	**8.3**	**81.3**	**8.0**	**66.3**	**7.8**
Std. Dev.	25.3	0.0	48.5	7.0	181.3	11.0	99.7	9.2	48.6	4.2	46.6	4.4

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station											
	1		2		3		4		5		6	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**505.2**	**0.6**	**294.0**	**19.8**	**81.0**	**5.4**	**50.2**	**2.8**	**72.6**	**3.4**	**70.2**	**1.0**
2014 SD	1072.8	1.3	492.0	23.6	112.7	8.4	9.6	3.3	26.2	4.5	23.1	2.2
2013 Avg	**47.6**	**4.8**	**68.8**	**6.6**	**18.0**	**1.6**	**40.2**	**3.2**	**61.2**	**8.2**	**45.8**	**4.8**
2013 SD	36.5	8.2	62.9	7.5	12.9	3.6	18.5	4.9	26.6	12.3	43.9	4.6
2012 Avg	**59.0**	**24.4**	**47.4**	**9.4**	**19.2**	**3.8**	**19.0**	**2.8**	**24.4**	**2.6**	**29.8**	**1.6**
2012 SD	77.4	50.1	47.6	16.7	9.1	5.4	10.0	1.8	15.8	3.7	11.0	2.3
2011 Avg	**58.0**	**6.0**	**127.6**	**36.2**	**73.4**	**4.8**	**115.6**	**9.6**	**69.4**	**12.4**	**53.6**	**8.4**
2011 SD	38.1	9.2	80.6	75.4	75.2	6.6	94.8	12.6	39.9	19.3	45.3	10.1

Year	Station										Average All Stations	
	7		8		9		10		11			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**41.8**	**1.6**	**81.8**	**12.0**	**507.6**	**13.6**	**285.2**	**2.8**	**56.6**	**5.6**	**186.0**	**6.1**
2014 SD	30.9	2.3	78.3	20.8	1071.4	28.8	498.3	3.3	45.9	10.9	137.5	6.1
2013 Avg	**42.4**	**2.6**	**63.8**	**2.8**	**119.2**	**11.0**	**73.4**	**2.8**	**75.0**	**7.8**	**59.5**	**5.1**
2013 SD	26.1	2.5	76.9	3.3	90.0	17.1	89.5	3.3	93.1	15.8	42.3	4.1
2012 Avg	**26.4**	**5.8**	**81.6**	**40.0**	**18.0**	**2.2**	**17.0**	**3.2**	**35.0**	**4.4**	**34.3**	**8.7**
2012 SD	13.8	6.1	179.7	89.4	10.9	2.2	12.6	2.0	18.9	3.5	26.7	14.5
2011 Avg	**81.0**	**4.2**	**146.8**	**13.6**	**56.8**	**6.4**	**76.4**	**4.0**	**79.2**	**2.8**	**85.3**	**9.9**
2011 SD	42.5	4.0	150.9	21.8	35.9	7.8	46.8	4.1	82.3	4.8	48.8	12.3

2.3.5 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Bayfield and Nares Inlets 2015

2015 Results Unavailable for Bayfield and Nares Inlets

Average Bacterial Monitoring Results for Previous Years

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**94.0**	**1.0**	**407.4**	**2.8**	**126.6**	**12.6**	**137.4**	**19.2**	**79.0**	**4.4**	**256.6**	**85.4**	**219.8**	**1.8**
2014 SD	32.6	2.2	720.5	4.8	60.1	22.1	84.8	29.7	76.1	6.0	343.2	177.6	223.1	1.9
2013 Avg	**51.8**	**2.8**	**542.8**	**5.0**	**586.4**	**10.4**	**77.3**	**5.3**	**68.7**	**2.7**	**77.0**	**4.7**	**443.2**	**6.2**
2013 SD	39.7	4.8	1052.7	9.6	1036.1	13.5	36.7	6.8	65.6	2.5	43.4	2.9	572.5	8.7
2012 Avg	**58.0**	**2.0**	**77.8**	**6.8**	**254.0**	**6.0**	**81.3**	**6.3**	**420.0**	**12.0**	**403.3**	**14.7**	**300.1**	**7.4**
2012 SD	31.4	2.7	45.0	11.9	256.7	8.0	25.5	5.8	653.0	13.9	550.9	21.2	188.2	7.4
2011 Avg	**40.3**	**4.3**	**25.7**	**0.0**	**1625.3**	**7.7**	**161.7**	**7.3**	**82.0**	**10.0**	**52.0**	**7.3**	**439.6**	**2.6**
2011 SD	28.7	1.2	4.0	0.0	1383.3	4.6	163.3	10.2	67.1	17.3	46.8	12.7	11.7	1.3
2010 Avg	**69.0**	**4.3**	**24.7**	**1.0**	**197.7**	**2.0**	**91.7**	**3.7**	**68.3**	**3.7**	**49.7**	**2.0**	**78.8**	**1.4**
2010 SD	59.0	4.0	7.6	1.7	160.6	1.7	65.5	4.0	27.7	6.4	34.2	1.7	37.9	0.6
2009 Avg	**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**
2009 SD	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

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

2.3.6 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Blackstone Lake 2015

Date	Station										Average All Stations	
	1		2		3		4		5			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
08-July *	1696	49	2424	5	1038	11	938	3	1696	5	1558.4	14.6
27-July	1370	5	2424	5	350	0	1696	3	200	3	1208.0	3.2
07-Aug	136	3	171	8	280	5	213	0	289	0	217.8	3.2
10-Sept **	289	3	171	22	226	8	106	11	90	3	176.4	9.4
Average	**872.8**	**15.0**	**1297.5**	**10.0**	**473.5**	**6.0**	**738.3**	**4.3**	**568.8**	**2.8**	**790.2**	**7.6**
Std. Dev.	776.4	22.7	1300.8	0.0	379.7	4.7	737.7	4.7	755.9	2.1	329.1	9.1

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station										Average All Stations	
	1		2		3		4		5			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**93.3**	**1.5**	**66.5**	**1.5**	**405.5**	**4.8**	**151.5**	**3.3**	**56.0**	**0.0**	**154.6**	**2.2**
2014 SD	56.5	1.7	19.2	1.7	316.1	4.6	118.6	3.9	45.6	0.0	82.2	1.0
2013 Avg	**702.0**	**4.5**	**530.3**	**1.3**	**733.5**	**1.5**	**665.5**	**0.8**	**685.0**	**4.8**	**663.3**	**2.6**
2013 SD	1152.1	1.0	784.7	2.5	1130.6	1.7	1173.3	1.5	1162.6	9.5	1078.9	1.6
2012 Avg	**1322.5**	**5.5**	**663.8**	**5.5**	**522.5**	**2.0**	**932.0**	**0.8**	**589.5**	**2.0**	**806.1**	**3.2**
2012 SD	1280.6	9.1	1174.7	9.1	328.4	4.0	1085.4	1.5	765.5	2.4	871.4	4.9
2011 Avg	**703.4**	**1.6**	**294.8**	**3.8**	**383.2**	**2.8**	**589.6**	**4.2**	**360.2**	**5.0**	**466.2**	**3.5**
2011 SD	701.2	2.3	332.5	2.9	565.6	3.3	534.8	5.4	305.7	6.3	373.7	1.7
2010 Avg	**550.4**	**1.6**	**599.4**	**3.2**	**644.0**	**3.8**	**1360.6**	**1.6**	**661.8**	**3.4**	**763.2**	**2.7**
2010 SD	1048.6	3.6	1024.3	3.4	1008.8	5.4	1164.5	3.6	992.9	2.9	960.7	2.6

2.3.7 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Crane Lake 2015

Date	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
27-June	30	0	19	5	25	3	83	8	25	3	19	0	34	3
13-July	11	0	28	5	11	0	98	8	65	8	233	5	74	4
04-Aug **	33	5	59	11	57	8	110	13	110	13	69	13	73	11
17-Aug	36	0	110	11	52	5	83	5	83	5	114	5	80	5
06-Sept	434	0	328	3	247	3	206	5	156	9	469	22	307	7
20-Sept *	1174	5	587	3	2424	11	76	13	114	11	59	2	739	8
Average	**286**	**2**	**189**	**6**	**469**	**5**	**109**	**9**	**92**	**8**	**161**	**8**	**218**	**6**
Std. Dev.	464	3	226	4	961	4	49	4	45	4	168	8	274	3

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**39**	**2**	**90**	**6**	**84**	**5**	**112**	**5**	**66**	**5**	**144**	**7**	**89**	**5**
2014 SD	13	1	53	7	55	8	83	5	28	3	73	11	39	4
2013 Avg	**40**	**4**	**99**	**11**	**44**	**5**	**64**	**7**	**43**	**5**	**56**	**8**	**57**	**7**
2013 SD	16	3	61	5	24	4	32	6	23	6	33	12	26	5
2012 Avg	**482**	**13**	**187**	**19**	**89**	**14**	**66**	**15**	**97**	**15**	**92**	**21**	**169**	**16**
2012 SD	953	13	209	18	66	17	53	21	76	14	67	22	189	16
2011 Avg	**53**	**5**	**49**	**12**	**49**	**9**	**74**	**17**	**54**	**6**	**100**	**7**	**63**	**9**
2011 SD	51	4	20	1	14	4	66	16	31	4	63	3	30	4
2010 Avg	**36**	**5**	**60**	**9**	**55**	**17**	**64**	**9**	**104**	**14**	**79**	**5**	**66**	**10**
2010 SD	13	3	49	6	29	13	46	4	87	15	65	6	42	4

2.3.8 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Healey Lake 2015 (NA)

2015 Data Unavailable for Healey Lake

Average Bacterial Monitoring Results for Previous Years

Year	Station														Average All Stations	
	1		2		3		4		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2013 Avg	**55.3**	**4.7**	**71.0**	**1.0**	**27.0**	**2.7**	**74.3**	**0.0**	**90.0**	**2.7**	**110.3**	**2.7**	**26.0**	**3.3**	**64.9**	**2.4**
2013 SD	38.8	5.7	51.2	1.7	32.9	2.5	89.5	0.0	61.8	2.5	43.4	4.6	14.1	2.9	41.6	1.5
2012 Avg	**100.0**	**7.0**	**124.7**	**1.0**	**80.7**	**3.0**	**86.3**	**2.0**	**90.3**	**3.7**	**320.3**	**5.0**	**112.7**	**1.0**	**130.7**	**3.2**
2012 SD	13.7	5.4	33.5	1.7	16.2	0.0	49.1	1.7	7.5	1.2	85.0	0.0	41.5	1.7	26.5	0.6
2011 Avg	**33.3**	**10.0**	**32.7**	**5.3**	**112.0**	**11.7**	**18.0**	**7.0**	**22.7**	**4.3**	**48.7**	**6.3**	**21.0**	**2.7**	**41.2**	**6.8**
2011 SD	5.5	1.7	12.3	5.5	21.1	7.5	1.7	1.7	14.2	4.0	11.0	2.9	9.5	2.5	4.2	1.7
2009 Avg	**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**
2009 SD	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

Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Note: 2014 and 2010 Data Unavailable

2.3.9 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E.Coli (EC) in Kapikog Lake 2015

Date	Station																Average All Stations	
	1		2		3		4		5		6		7		8			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
28-July	22	<3	13	<3	72	<3	3	<3	19	3	13	<3	55	5	3	<3	25.0	1.0
16-Sept	8	<3	19	3	106	13	<3	<3	8	<3	22	<3	28	<3	<3	<3	23.9	2.0
Average	**15.0**	**<3**	**16.0**	**1.5**	**89.0**	**6.5**	**1.5**	**<3**	**13.5**	**1.5**	**17.5**	**<3**	**41.5**	**2.5**	**1.5**	**<3**	**24.4**	**3.0**
Std. Dev.	9.9	<3	4.2	2.1	24.0	9.2	2.1	<3	7.8	2.1	6.4	<3	19.1	3.5	2.1	<3	8.0	3.4

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Average Bacterial Monitoring Results for Previous Years

Year	Station																Average All Stations	
	1		2		3		4		5		6		7		8			
	TC	EC	TC	EC	TC	EC	TC	TC	EC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**29.0**	**0.0**	**40.0**	**4.0**	**18.0**	**0.0**	**55.0**	**1.5**	**23.5**	**1.5**	**31.0**	**0.0**	**10.5**	**5.5**	**2.5**	**0.0**	**26.2**	**1.6**
2014 SD	9.9	0.0	41.0	1.4	14.1	0.0	55.2	2.1	17.7	2.1	25.5	0.0	3.5	3.5	3.5	0.0	20.4	0.6
2013 Avg	**53.0**	**4.0**	**80.0**	**1.5**	**132.5**	**0.0**	**77.5**	**4.0**	**104.0**	**1.5**	**55.0**	**5.5**	**132.5**	**2.5**	**86.5**	**0.0**	**90.1**	**2.4**
2013 SD	48.1	5.7	48.1	2.1	26.2	0.0	7.8	5.7	45.3	2.1	0.0	7.8	70.0	3.5	4.9	0.0	19.3	3.4
2012 Avg	**50.5**	**4.0**	**47.0**	**5.0**	**46.0**	**0.0**	**49.0**	**0.0**	**69.5**	**5.5**	**69.0**	**0.0**	**42.5**	**1.5**	**59.5**	**1.5**	**54.1**	**2.2**
2012 SD	16.3	1.4	35.4	0.0	22.6	0.0	14.1	0.0	51.6	7.8	19.8	0.0	13.4	2.1	23.3	2.1	6.2	1.7
2011 Avg	**51.0**	**5.3**	**325.3**	**2.7**	**236.3**	**2.7**	**267.3**	**8.0**	**818.0**	**2.7**	**314.0**	**7.0**	**590.3**	**11.7**	**320.7**	**3.0**	**365.4**	**5.4**
2011 SD	36.7	5.5	530.8	2.5	362.5	4.6	409.5	7.0	1390.8	2.5	472.3	8.2	957.8	9.1	534.6	0.0	585.6	2.6
2010 Avg	**51.0**	**5.3**	**325.3**	**2.7**	**236.3**	**2.7**	**267.3**	**8.0**	**818.0**	**2.7**	**314.0**	**7.0**	**590.3**	**11.7**	**320.7**	**3.0**	**365.4**	**5.4**
2010 SD	36.7	5.5	530.8	2.5	362.5	4.6	409.5	7.0	1390.8	2.5	472.3	8.2	957.8	9.1	534.6	0.0	585.6	2.6

2.3.10 Bacterial Sampling of Surface Water for Total Coliforms (TC) and E. Coli (EC) in Naiscoot Lake 2015

2015 Data Unavailable for Naiscoot Lake

Average Bacterial Monitoring Results for Previous Years

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2014 Avg	**59.8**	**2.8**	**73.8**	**0.6**	**62.4**	**0.0**	**68.0**	**1.0**	**86.2**	**2.8**	**NA**	**NA**	**70.0**	**1.4**
2014 SD	56.0	3.3	59.1	1.3	51.2	0.0	42.4	2.2	33.5	4.8	NA	NA	44.4	1.8
2012 Avg	**32.4**	**1.8**	**40.0**	**2.8**	**52.0**	**1.6**	**62.0**	**1.2**	**129.0**	**7.0**	**38.2**	**0.6**	**58.9**	**2.5**
2012 SD	13.3	1.6	29.0	1.8	32.4	2.3	23.4	1.6	64.0	7.0	27.0	1.3	22.4	1.9
2011 Avg	**12.8**	**0.6**	**19.2**	**1.2**	**15.4**	**0.6**	**93.6**	**4.4**	**54.2**	**2.4**	**22.0**	**2.8**	**36.2**	**2.0**
2011 SD	3.4	1.3	10.2	1.6	8.8	1.3	57.0	4.1	46.1	1.3	9.5	3.3	13.0	1.0
2010 Avg	**21.0**	**2.4**	**41.2**	**2.8**	**48.0**	**2.2**	**67.4**	**3.2**	**92.0**	**3.8**	**39.6**	**2.6**	**51.5**	**2.8**
2010 SD	13.0	1.3	24.7	3.3	33.2	2.2	56.1	2.0	37.3	1.1	25.4	3.7	15.3	0.9
2009 Avg	**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**
2009 SD	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

* Recent light rain event, ** Recent heavy rain event, Std. Dev. or SD = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Note: 2013 Data Unavailable

APPENDIX A

Average Water Clarity Results for Previous Years

* Depths in metres (m), NA = Not Available, Std. Dev. = Standard Deviation, t.b. = visible to bottom

Sans Souci Area

Year	Station							Average for All Stations
	1	2	3	4	5	6	7	
2009	9.0	7.8	t.b.	6.2	5.9	10.0	5.2	7.3
2008	7.8	7.4	NA	4.1	4.3	9.1	4.3	6.7
2007	8.8	4.7	3.3	5.0	6.0	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	NA	NA	NA	NA	NA	NA	NA	7.8
2001	NA	NA	NA	NA	NA	NA	NA	8.5

Woods Bay Area

Year	Station						Average for All Stations
	1	2	3	5	6	7	
2009	3.4	3.3	3.1	3.2	3.7	3.8	3.4
2008	3.8	3.2	3.3	2.2	4	4.1	3.4
2007	3.3	NA	2.8	4.2	4.2	4	3.7
2006	3.3	NA	NA	3.8	3.8	4	3.7
2005	2.8	NA	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	NA	3.2	NA	NA	3.8	4.2	3.7
2001	NA	4.5	NA	NA	5.0	NA	4.8

South Channel Area

Date	Station										Average for All Stations
	1	3	4	5	6	7	8	12	13	14	
2009	3.2	3.8	5.1	4.9	7.0	4.7	5.9	4.7	3.0	4.2	4.6
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	NA	4.5
2004	2.7	3.7	4.8	4.3	6.2	4.2	5.1	4.2	2.9	NA	4.3
2003	2.7	3.3	4.5	4.5	6.1	4.2	4.9	3.8	2.9	NA	4.0
2002	3.5	NA	NA	NA	5.5	4.6	NA	5.5	NA	NA	4.8
2001	3.0	NA	NA	NA	6.0	NA	NA	NA	NA	NA	4.5

Sturgeon Bay Area

Year	Station														Average for All Stations
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
2009	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
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	t.b.	1.8	2.0	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	2.0	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	2.0	1.9	1.9	2.0	1.6	2.2	2.2	2.6	2.0	2.6	2.3	2.7	2.4	2.0
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	NA	NA	NA	0.7	NA	NA	NA	NA	NA	2.1	NA	NA	NA	1.1
2001	1.2	NA	NA	NA	1.6	NA	NA	NA	NA	NA	2.8	NA	NA	NA	1.9

Skerryvorre Area

Year	Station						Average for All Stations
	1	2	3	4	5	6	
2010	2.5	4.0	2.5	4.7	NA	NA	3.8
2009	2.5	4.8	3.2	5.3	NA	NA	4.5
2005	5.8	3.3	3.3	5.2	NA	NA	4.3
2004	3.6	4.5	3	4.5	NA	NA	3.9

Pointe Au Baril Islands Area

Year	Station											Average for All Stations
	1	2	3	4	5	6	7	8	9	10	11	
2013	5.3	NA	11.7	NA	NA	NA	NA	NA	NA	5.5	NA	7.0
2012	4.1	2.6	3.1	2.6	3.4	2.0	4.4	9.4	4.4	3.6	3.4	4.0
2011	4.9	NA	7.8	4.1	NA	5.0	NA	4.3	NA	4.3	NA	5.1
2009	5.2	NA	6.7	4.8	NA	5.2	NA	4.6	NA	5.2	NA	5.1
2008	4.4	NA	8.1	4.2	NA	NA	NA	NA	NA	3.3	NA	5.0

Blackstone Lake

Year	Station					Average for All Stations
	1	2	3	4	5	
2009	4.8	NA	NA	NA	NA	4.8
2008	5.1	NA	NA	NA	NA	5.1
2007	6.0	NA	6.0	NA	NA	6.0
2005	5.4	4.7	5.8	5.3	4.6	5.1
2004	4.1	4.6	4.4	3.8	4.4	4.3
2003	4.7	4.5	4.8	4.9	4.2	4.6

Crane Lake

Year	Station						Average for All Stations
	1	2	3	4	5	6	
2009	4.8	4.6	4.7	4.5	4.3	5.0	4.6
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	4.0	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

Healey Lake

Year	Station							Average for All Stations
	1	2	3	4	5	6	7	
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	3.0
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

Kapikog

Year	Station								Average for All Stations
	1	2	3	4	5	6	7	8	
2009	4.3	4.3	4.2	NA	4.3	4.4	4.3	4.2	4.3
2008	4.0	4.1	4.0	NA	4.1	4.3	4.1	4.0	4.1
2007	3.7	3.8	3.9	NA	4.1	4.0	4.0	4.0	4.0
2006	4.0	4.0	3.9	NA	4.3	4.2	4.2	4.2	4.1
2005	4.3	4.5	4.3	NA	4.3	4.5	4.4	4.6	4.4
2004	3.8	3.7	4.2	NA	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

Naiscoot

Year	Station						Average for All Stations
	0	1	2	3	4	2a	
2009	3.4	3.7	3.3	3.2	3.2	3.5	3.4
2008	3.6	3.5	3.6	3.3	3.1	NA	3.4
2007	4.1	3.9	3.9	3.9	3.6	NA	3.9

APPENDIX B

Average Bacterial Monitoring Results for Previous Years

Std. Dev. or SC = Standard Deviation, Avg = Average, TC = Total Coliforms, EC = *E. coli*

Sans Souci Area

Year	Station														Average All Stations	
	1		2		3		4		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**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**
2009 SD	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
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**
2008 SD	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**
2007 SD	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**
2006 SD	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**
2005 SD	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**
2004 SD	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**
2003 SD	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	12.46
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**
2002 SD	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**
2001 SD	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

Woods Bay Area

Year	Station												Average All Stations	
	1		2		3		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**48.4**	**11.3**	**25.7**	**4.1**	**46.2**	**22.3**	**49.2**	**17.0**	**33.6**	**12.8**	**181.3**	**20.3**	**64.7**	**15.1**
2009 SD	36.5	18.3	14.6	3.8	25.7	18.1	38.6	8.9	17.8	10.3	219.0	21.4	53.1	11.8
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**
2008 SD	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**
2007 SD	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**
2006 SD	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**
2005 SD	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**
2004 SD	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**
2003 SD	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**
2002 SD	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**
2001 SD	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

South Channel Area

Year	Station											
	1		3		4		5		6		7	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**187.5**	**23.3**	**53.3**	**4.8**	**54.8**	**1.0**	**14.0**	**0.8**	**21.3**	**<3**	**38.7**	**2.2**
2009 SD	84.4	9.1	26.7	1.8	39.8	1.5	11.4	2.0	16.8	<3	21.6	2.5
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**
2008 SD	255.4	53.5	24.3	4.8	129.4	8.8	44.9	13.3	31.5	4.3	30.4	2.9
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**
2007 SD	1108.8	60.5	45.1	2.8	81.5	4.1	23.3	2.8	25.3	4.4	47.3	4.0
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**
2006 SD	397.7	36.1	334.8	4.8	30.2	3.0	171.6	1.1	42.9	2.8	29.5	6.5
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**
2005 SD	1110.4	305.1	263.6	1.5	423.5	0.0	1034.3	10.2	118.8	0.9	745.1	10.3
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**
2004 SD	777.4	23.8	1243.0	8.7	1186.8	4.1	1062.9	4.3	1193.3	7.7	1146.7	2.2
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**
2003 SD	834.1	26.3	65.6	11.2	17.3	1.5	122.2	37.0	913.1	0.0	904.4	2.0
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**
2002 SD	1085.0	59.0	784.0	2.9	862.0	1.5	89.0	1.5	1160.0	3.0	942.0	1.5
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**
2001 SD	731.0	87.1	887.0	16.2	1009.0	10.1	1066.0	9.2	1081.0	9.0	1209.0	1.7

Year	Station								Average All Stations	
	8		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC

Year	Station								Average All Stations	
	8		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**59.8**	**3.7**	**63.7**	**5.8**	**138.7**	**30.5**	**82.7**	**3.3**	**69.0**	**8.7**
2009 SD	37.5	4.8	45.1	6.7	59.9	15.2	63.0	4.0	25.3	5.6
2008 Avg	**122.2**	**4.0**	**63.5**	**7.2**	**209.7**	**13.7**	**119.5**	**7.3**	**108.2**	**9.1**
2008 SD	181.5	4.1	37.5	7.3	125.3	10.1	130.8	7.4	37.4	4.3
2007 Avg	**107.6**	**4.0**	**87.4**	**10.6**	**178.2**	**19.0**	**64.3**	**2.6**	**222.8**	**12.4**
2007 SD	148.6	4.8	51.1	8.7	132.0	19.1	38.2	2.5	124.7	5.7
2006 Avg	**43.6**	**1.0**	**57.4**	**6.1**	**264.1**	**12.9**	**452.1**	**29.5**	**175.7**	**12.1**
2006 SD	47.0	1.9	57.5	7.9	375.8	10.5	807.2	60.3	145.0	9.2
2005 Avg	**271.4**	**3.2**	**69.1**	**2.7**	**61.7**	**7.8**	**70.0**	**1.0**	**278.8**	**25.5**
2005 SD	757.8	6.2	92.6	4.1	34.0	8.9	39.3	1.7	319.6	31.3
2004 Avg	**564.3**	**3.3**	**1408.6**	**10.7**	**1058.2**	**27.1**	**NA**	**NA**	**969.8**	**11.5**
2004 SD	763.6	5.1	1205.3	13.1	1059.2	52.5	NA	NA	609.6	6.9
2003 Avg	**23.4**	**0.4**	**450.9**	**6.0**	**77.1**	**8.6**	**NA**	**NA**	**231.2**	**8.0**
2003 SD	24.6	1.1	883.3	4.5	39.1	9.5	NA	NA	213.4	5.8
2002 Avg	**631.4**	**2.4**	**462.0**	**14.6**	**1210.0**	**17.7**	**NA**	**NA**	**780.0**	**14.0**
2002 SD	923.3	1.8	870.0	14.2	972.0	21.1	NA	NA	961.0	32.0
2001 Avg	**375.0**	**3.0**	**998.0**	**11.0**	**1330.0**	**27.4**	**NA**	**NA**	**1067.9**	**21.5**
2001 SD	NA	NA	999.0	11.1	1039.0	34.5	NA	NA	142.1	27.9

Sturgeon Bay Area

Year	Station															
	1		2		3		4		5		6		7		8	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**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**
2009 SD	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
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**
2008 SD	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
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**
2007 SD	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
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**
2006 SD	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
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**
2005 SD	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
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**
2004 SD	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
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**
2003 SD	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
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**
2002 SD	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

Year	Station												Average All Stations	
	9		10		11		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**122.0**	**9.0**	**671.5**	**21.3**	**100.0**	**4.0**	**78.0**	**7.5**	**63.8**	**4.0**	**172.5**	**2.8**	**492.8**	**9.8**
2009 SD	130.8	11.9	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	**82.5**	**13.0**	**82.8**	**6.8**	**83.8**	**2.0**	**49.3**	**4.0**	**40.8**	**3.3**	**100.5**	**5.3**	**72.1**	**6.2**
2008 SD	20.7	8.5	57.2	7.0	97.0	2.4	44.5	4.6	14.6	2.4	58.8	7.5	25.7	5.4

Year	Station												Average All Stations	
	9		10		11		12		13		14			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2007 Avg	**93.8**	**18.8**	**125.0**	**8.5**	**30.3**	**4.0**	**65.0**	**9.5**	**54.3**	**1.3**	**34.3**	**2.8**	**125.7**	**11.1**
2007 SD	39.0	27.2	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	**218.8**	**47.8**	**783.2**	**98.0**	**346.2**	**8.2**	**139.8**	**10.5**	**72.0**	**3.8**	**507.3**	**26.7**	**254.6**	**37.4**
2006 SD	128.7	71.9	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	**117.7**	**16.3**	**277.4**	**17.6**	**48.0**	**9.0**	**56.0**	**18.4**	**74.6**	**12.9**	**34.7**	**7.3**	**118.6**	**14.2**
2005 SD	133.4	23.1	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	**419.7**	**4.3**	**186.6**	**11.3**	**183.7**	**3.9**	**109.3**	**1.6**	**183.4**	**2.0**	**148.0**	**4.4**	**218.6**	**4.0**
2004 SD	884.3	1.9	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	**664.3**	**11.5**	**914.6**	**6.8**	**508.4**	**4.3**	**742.4**	**5.1**	**519.8**	**3.0**	**1084.1**	**1.1**	**729.3**	**3.8**
2003 SD	1086.9	26.4	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	**186.0**	**11.5**	**204.0**	**6.0**	**355.0**	**4.8**	**209.0**	**6.8**	**145**	**3**	**328**	**8.2**	**456**	**6**
2002 SD	242.0	14.8	220.0	7.1	837.0	6.4	343.0	10.0	201	5	469	15.8	708	9.4

Skerryvore Area

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**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**
2009 SD	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
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**
2008 SD	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**
2007 SD	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**
2006 SD	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

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
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**
2005 SD	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**
2004 SD	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	**1037.8**	**7.4**	**77.4**	**1.6**	**104.4**	**5.4**	**58.0**	**9.4**	**105.6**	**2.1**	**209.7**	**25.5**	**259.2**	**7.8**
2003 SD	998.3	2.8	31.4	1.2	41.5	2.0	27.8	6.8	47.2	2.2	97.6	16.0	172.1	3.8
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**
2002 SD	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**
2001 SD	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

Pointe au Baril Area

Year	Station											
	1		2		3		4		5		6	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**41.4**	**2.8**	**67.6**	**6.8**	**17.8**	**1.8**	**116.6**	**2.8**	**68.4**	**4.2**	**99.4**	**11.4**
2009 SD	37.0	3.3	46.6	6.5	15.7	1.6	75.2	1.8	41.5	5.4	79.1	16.3
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**
2008 SD	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**
2007 SD	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**
2006 SD	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**
2005 SD	177.7	32.8	46.1	18.0	1079.1	2.2	61.3	11.2	40.0	2.4	739.0	12.3

Year	Station											
	1		2		3		4		5		6	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
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**
2004 SD	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**
2003 SD	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**
2002 SD	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**
2001 SD	335.6	1.2	28.1	9.5	17.5	1.5	29.8	7.0	13.8	2.0	237.0	20.4

Year	Station										Average All Stations	
	7		8		9		10		11			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**49.0**	**1.6**	**94.2**	**19.4**	**113.0**	**8.8**	**64.6**	**11.4**	**103.5**	**7.5**	**75.0**	**7.0**
2009 SD	24.3	3.6	80.3	17.2	91.9	3.5	53.1	14.6	90.8	10.4	38.5	6.2
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**
2008 SD	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**
2007 SD	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	**NA**	**NA**	**0.8**	**0.0**	**41.8**	**3.4**	**NA**	**NA**	**NA**	**NA**	**25.8**	**4.2**
2006 SD	NA	NA	1.5	0.0	14.9	2.9	NA	NA	NA	NA	9.4	1.1
2005 Avg	**NA**	**NA**	**7.8**	**1.2**	**508.4**	**7.0**	**NA**	**NA**	**NA**	**NA**	**211.0**	**8.3**
2005 SD	NA	NA	10.0	1.6	1071.0	7.0	NA	NA	NA	NA	374.5	7.5
2004 Avg	**NA**	**NA**	**61.2**	**0.6**	**976.9**	**23.4**	**NA**	**NA**	**NA**	**NA**	**493.4**	**23.5**
2004 SD	NA	NA	54.4	1.3	1043.9	27.1	NA	NA	NA	NA	530.4	32.0
2003 Avg	**NA**	**NA**	**NA**	**NA**	**643.0**	**46.7**	**NA**	**NA**	**NA**	**NA**	**262.1**	**128.6**
2003 SD	NA	NA	NA	NA	913.0	74.0	NA	NA	NA	NA	333.3	215.6

2002 Avg	**NA**	**NA**	**NA**	**NA**	**187.0**	**41.7**	**NA**	**NA**	**NA**	**NA**	**85.2**	**8.5**
2002 SD	NA	NA	NA	NA	56.7	5.1	NA	NA	NA	NA	86.7	14.2
2001 Avg	**NA**	**NA**	**NA**	**NA**	**1624.0**	**812.0**	**NA**	**NA**	**NA**	**NA**	**297.7**	**120.3**
2001 SD	NA	NA	NA	NA	1239.0	1249.0	NA	NA	NA	NA	445.3	469.5

Blackstone Lake

Year	Station										Average All Stations	
	1		2		3		4		5			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**570.0**	**3.5**	**813.3**	**1.3**	**351.0**	**6.3**	**1290.3**	**9.5**	**951.0**	**5.8**	**795.1**	**5.1**
2009 SD	570.7	3.3	1077.8	2.5	340.2	2.9	1310.1	8.6	1064.0	5.4	731.9	4.2
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**
2008 SD	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**
2007 SD	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**
2006 SD	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**
2005 SD	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**
2004 SD	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**
2003 SD	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**
2002 SD	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**	**NA**	**NA**	**20.2**	**3.1**
2001 SD	18.6	1.5	3.8	3.9	3.5	1.7	28.2	2.1	NA	NA	12.1	1.1

Crane Lake

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**45**	**3**	**86**	**10**	**47**	**5**	**56**	**8**	**74**	**14**	**83**	**7**	**65**	**8**
2009 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2008 Avg	**50**	**6**	**64**	**10**	**48**	**11**	**51**	**11**	**64**	**22**	**54**	**14**	**55**	**12**
2008 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2007 Avg	**135**	**16**	**101**	**19**	**70**	**19**	**112**	**25**	**64**	**25**	**60**	**13**	**90**	**20**
2007 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2006 Avg	**62**	**8**	**78**	**18**	**187**	**16**	**199**	**16**	**240**	**13**	**407**	**9**	**196**	**13**
2006 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2005 Avg	**795**	**8**	**913**	**10**	**502**	**9**	**555**	**9**	**585**	**8**	**844**	**7**	**699**	**8**
2005 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2004 Avg	**1105**	**4**	**1175**	**13**	**1081**	**7**	**1142**	**8**	**1077**	**7**	**1393**	**8**	**1162**	**8**
2004 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2003 Avg	**631**	**6**	**726**	**9**	**499**	**7**	**506**	**5**	**512**	**6**	**696**	**6**	**595**	**6**
2003 SD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Healey Lake

Year	Station														Average All Stations	
	1		2		3		4		5		6		7			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**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**
2009 SD	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
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**
2008 SD	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**
2007 SD	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**
2006 SD	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**
2005 SD	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**
2004 SD	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**
2003 SD	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**
2002 SD	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**
2001 SD	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

Kapikog Lake

Year	Station									
	1		2		3		4		5	
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**65.0**	**25.8**	**42.3**	**5.3**	**57.7**	**11.7**	**95.8**	**8.5**	**242.0**	**41.0**
2009 SD	40.2	45.5	35.5	5.5	29.7	9.1	94.2	13.1	257.8	30.6
2008 Avg	**1825.5**	**2.8**	**991.4**	**11.4**	**790.6**	**2.8**	**59.8**	**2.2**	**623.8**	**1.3**
2008 SD	1197.0	2.1	1308.2	19.4	1077.0	1.8	68.5	2.2	1200	2.5
2007 Avg	**214.2**	**19.0**	**69.8**	**9.5**	**597.6**	**11.6**	**167.0**	**1.0**	**548.4**	**3.2**
2007 SD	335.5	29.7	47.6	10.0	1025.6	10.5	350.6	2.2	1051	3.4
2006 Avg	**39.6**	**5.8**	**31.4**	**9.2**	**76.0**	**6.2**	**38.8**	**0.0**	**44.8**	**1.2**
2006 SD	36.4	2.2	30.6	6.8	54.9	4.8	32.2	0.0	37.6	1.6
2005 Avg	**354.3**	**8.5**	**53.3**	**4.5**	**629.0**	**2.0**	**56.3**	**7.5**	**58.5**	**4.0**
2005 SD	320.7	11.0	48.4	3.3	1196.9	2.4	36.0	5.2	47.3	3.4
2004 Avg	**67.5**	**1.5**	**38.0**	**4.0**	**60.5**	**1.5**	**37.0**	**4.8**	**20.0**	**0.8**
2004 SD	29.0	1.7	41.6	3.4	54.1	1.7	28.9	7.6	26.4	1.5
2003 Avg	**38.5**	**3.2**	**59.7**	**4.5**	**12.8**	**1.3**	**43.3**	**4.0**	**23.5**	**1.5**
2003 SD	29.1	1.8	44.8	5.1	13.2	2.2	32.4	6.2	32.7	1.6
2002 Avg	**449**	**737**	**764**	**7**	**55**	**3**	**471**	**13**	**410**	**5**
2002 SD	878.0	5.5	1136.0	7.0	54.0	3.6	865.0	16.3	892.0	6.0

Kapikog Lake

Year	Station						Average All Stations	
	6		7		8			
	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**105.5**	**23.5**	**44.0**	**27.0**	**95.0**	**30.7**	**88.1**	**21.0**
2009 SD	59.5	25.3	34.8	33.0	57.2	15.0	48.8	11.9
2008 Avg	**1520**	**6.3**	**1234.0**	**9.5**	**1015.0**	**1.6**	**879.2**	**5.4**
2008 SD	1138	5.6	1047.6	5.4	1289.0	2.3	790.3	4.4
2007 Avg	**93.8**	**3.8**	**708.5**	**8.8**	**506.0**	**13.8**	**345.2**	**10.2**
2007 SD	66.7	2.9	1152.6	6.7	1072.5	14.8	438.0	5.0
2006 Avg	**98.4**	**8.2**	**66.2**	**9.0**	**69.0**	**2.2**	**58.0**	**5.2**
2006 SD	89.1	7.4	65.3	5.8	83.4	2.2	44.4	0.4
2005 Avg	**32.0**	**3.5**	**20.5**	**2.0**	**55.8**	**6.0**	**157.4**	**4.8**
2005 SD	22.2	5.2	21.0	2.4	73.5	7.7	209.6	4.4
2004 Avg	**44.0**	**6.3**	**96.3**	**2.0**	**297.8**	**1.5**	**82.6**	**2.8**
2004 SD	50.8	3.9	83.6	2.4	382.0	1.7	36.5	1.6
2003 Avg	**15.8**	**1.3**	**55.7**	**1.5**	**16.7**	**2.3**	**35.6**	**2.5**
2003 SD	6.6	2.2	29.8	1.6	19.0	2.0	9.1	1.6
2002 Avg	**616**	**9**	**727**	**2**	**446**	**4**	**492**	**6**
2002 SD	1008	9.7	1160.0	3.3	878.0	4.4	883.0	8.2

Naiscoot Lake

Year	Station												Average All Stations	
	1		2		3		4		5		6			
	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC	TC	EC
2009 Avg	**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**
2009 SD	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
2008 Avg	**48.3**	**7.5**	**42.8**	**5.5**	**50.5**	**8.0**	**83.5**	**2.3**	**196.0**	**4.8**	**NA**	**NA**	**79.8**	**4.8**
2008 SD	36.8	3.3	17.6	6.4	11.8	4.1	46.1	1.5	188.0	4.6	NA	NA	41.5	2.3
2007 Avg	**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**
2007 SD	12.2	4.6	35.8	2.5	25.5	2.5	20.7	9.8	57.5	98.7	NA	NA	26.3	23.3