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Environmental Sciences Ltd.

Lake of Bays Water Quality Report 2016

Prepared for: Lake of Bays Association
Job #: J100013

April 2017

Final Report



April 30, 2017

HESL Job #: J100013

Deb Cumming
Environment Committee
Lake of Bays Association
PO Box 8
Baysville, ON P0B 1A0

Dear Ms. Cumming:

Re: Lake of Bays Water Quality Report 2016

I am pleased to submit this final report for the Lake of Bays Water Quality Monitoring Program presenting the results of total phosphorus and bacteria sampling from the summer of 2016.

Total phosphorus and bacteria levels were well below applicable Provincial guidelines indicating excellent water quality in 2016. As observed in previous years, there was a statistically significant trend in total phosphorus records since 2002. Natural variability, in addition to regional or local environmental change (i.e., climate change, acid deposition, invasive species, etc.) and increased phosphorus inputs from human sources may be acting together as “multiple stressors” resulting in changes in total phosphorus concentrations over time.

I thank you and the Lake of Bays Association for the continued opportunity to assist with this project.

Sincerely,

per: Hutchinson Environmental Sciences Ltd.

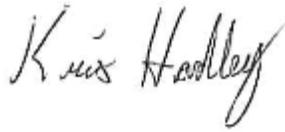
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- Appendix A. Monitoring Protocols for the LOBA Water Quality Monitoring Program
- Appendix B. LOBA Total Phosphorus and Bacteria Data



1. Introduction

Since 2001, the Lake of Bays Association (LOBA) has championed a volunteer-based water quality monitoring program in Lake of Bays. The aim of the program is to characterize phosphorus and bacteria levels as an indication of general lake and watershed health while fostering community involvement and education.

LOBA's monitoring program began with a pilot study in 2000 to monitor bacteria levels in the lake during the summer. This project was successful and LOBA expanded the area of study in the summer of 2001 to include near-shore areas adjacent to developed and undeveloped properties and areas influenced by wetlands and rivers. In 2002, the program was again expanded to include monitoring of phosphorus concentrations in near-shore areas. Over the course of the program, site selection has changed with an ever-increasing understanding of water quality conditions in Lake of Bays and since 2009, sampling has focussed on deep water sites and nearshore undisturbed locations, with reduced sampling effort in enclosed bays (e.g., South Portage Bay, Rat Bay, Little Trading Bay) and river and river-influenced sites (e.g., Narrows, Oxtongue River, Hollow River). This approach continues to allow comparison with other water quality programs, such as the Ministry of the Environment and Climate Change (MOECC) Lake Partner Program and the District Municipality of Muskoka (DMM) Lake System Health monitoring program, which collect data in central, deep offshore areas of the lake during spring overturn.

The LOBA monitoring program continues to focus on total phosphorus concentrations. For recreational lakes on the Precambrian Shield like Lake of Bays, water quality concerns are most often associated with nutrient enrichment due to increased human phosphorus sources. Phosphorus is a natural element in the environment and enters lakes from the atmosphere through precipitation, stream and overland flow, and to a lesser degree through groundwater. Increases in phosphorus loads to lakes from human sources can result in increased growth of aquatic plants and algae, which in turn can lead to a deterioration of water clarity and decrease deep-water oxygen concentrations that affect coldwater fish habitat.

Sampling frequency for bacteria (total coliform and *Escherichia coli*) was reduced to every other year from 2009 to 2013 because earlier monitoring results were very consistent between sites and years. Beginning in 2016, sampling will be conducted annually at the nearshore sites on one sampling event in mid-summer, and on all sampling events every five years thereafter. The reduced sampling frequency will continue to allow assessment of long-term trends, while increasing resources to expand the program to include other parameters of interest to the Association and maintaining familiarity with bacteria sampling techniques.

The program continues to demonstrate that Lake of Bays is a clear water lake with low phosphorus and bacteria levels and no obvious impact of development on water quality. In this report we present the results of the summer phosphorus monitoring completed by the LOBA in 2016 and discuss them in the context of long-term water quality data collected by the LOBA and the DMM Lake System Health program, human phosphorus loading and local precipitation records.

2. Methods

Volunteers, coordinated by the LOBA Environment Committee, collected samples for analysis of total phosphorus on five occasions during the summer of 2016 (July 1 and 18, August 1 and 14, and September 1) and on one occasion (August 1) for bacteria (*E. coli* and total coliforms). The sampling and analytical methods in 2016 were consistent with those used in previous monitoring years and are summarized below. Detailed sampling instructions that are provided to the volunteers are presented in Appendix A.

2.1 Sample Collection

Water samples for bacteria and total phosphorus were collected at 20 sites in Lake of Bays to include deep, open water locations ('Deep Water' sites, n=9), nearshore sites adjacent to developed ('Disturbed' sites, n=3) and undeveloped shorelines ('Nearshore Undisturbed' sites, n=5), and river (Oxtongue and Hollow rivers) and river-influenced (Oxtongue Delta) sites ('River' sites, n=3) (Table 1, Figure 1).

At each Deep Water site, a composite water sample was collected from the euphotic zone, at approximately two times the Secchi depth. At all other sites, the water sample was collected at a depth of ~30 cm. Four field duplicate samples for bacteria and 24 field duplicate samples for total phosphorus were collected to assess the variability of results related to sampling and analytical procedures (Table 1).

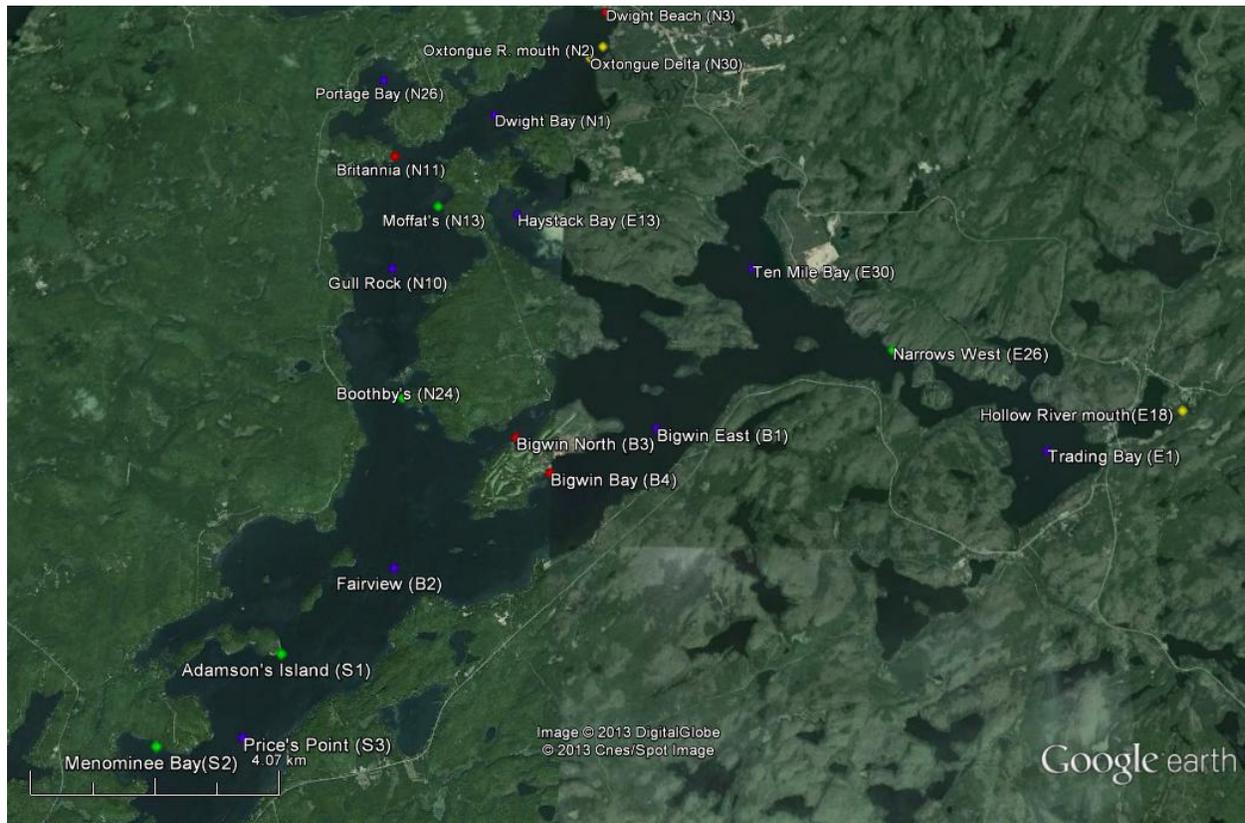
Phosphorus samples were coarse-filtered using a mesh filter in order to remove zooplankton (microscopic animals living in the water, such as water fleas) or other large debris that can contaminate the sample and result in non-representative, high phosphorus values (Clark et al. 2010). Samples were then directly poured into glass tubes used for phosphorus analysis, stored in a cool place and submitted for analysis to the Trent University laboratory at the MOECC Dorset Environmental Science Centre (DESC).

Table 1. 2016 Sampling Sites and Dates

Site Name	Total Phosphorus Sampling					Bacteria Sampling
	1-Jul	18-Jul	1-Aug	14-Aug	1-Sep	1-Aug
Deep Water Sites						
Bigwin East	1	1	1	1	2	1
Dwight Bay	2	1	1	2	1	1
Fairview	2	1	1	2	1	2
Gull Rock	1	2	1	1	-	1
Haystack Bay	1	2	1	1	-	1
Portage Bay	1	1	2	1	-	1
Price's Point	1	2	2	1	1	2
Ten Mile Bay	-	1	1	1	2	2
Trading Bay	-	1	1	2	1	1
Disturbed Sites						
Bigwin Bay	1	1	1	1	1	1
Bigwin North	1	1	1	2	2	1
Britannia	1	1	2	2	1	1
Nearshore Undisturbed						
Adamson's Island	1	1	1	1	2	1
Boothby's	2	1	1	1	1	1
Menominee Bay	2	1	1	2	1	1
Moffat's	1	1	1	2	1	2
Narrows West	-	2	1	1	1	1
River Sites						
Hollow River mouth*	-	1	1	1	1	1
Oxtongue Delta	1	2	1	1	2	1
Oxtongue River mouth*	1	1	1	1	1	1

Notes: 1 = single sample collected, 2 = field duplicate samples collected, - = no sample collected; *Sampled in the mouth of the rivers just upstream of their discharge to the lake.

Figure 1. Map of Lake of Bays and LOBA monitoring sites.



Notes: Deep Water sites (blue dots), Disturbed sites (red dots), Nearshore Undisturbed sites (green dots), River sites (yellow dots).
Dwight Beach (N3) was not sampled in 2016.

2.2 Quality Control

2.2.1 Bacteria

Field duplicate bacteria concentrations were compared to assess variability in the results due to sampling and analysis by the Coliplate method.

In previous monitoring years, samples were also submitted to the Central Ontario Analytical Laboratory (COAL), an accredited laboratory in Orillia, Ontario, for membrane filtration analysis of total coliform and *E. coli* for comparison with the Coliplate method. Unfortunately, COAL was not able to process the samples in 2016 due to issues at the laboratory. Laboratory analysis for bacteria will continue in future monitoring years, but at another laboratory.

2.2.2 Total Phosphorus

2.2.2.1 Field Duplicates

Field duplicates analyzed at the DESC laboratory showed excellent agreement between sample pairs with an absolute mean difference of 0.7 µg/L, but a consistent percentage of the samples (5%) had larger than expected differences between field duplicates (i.e., >4 µg/L) (Clark et al. 2010). Separate experiments excluded sample container cleanliness, lab apparatus, variation in the sub 80µ-sample matrix, and external inputs of phosphorus as sources of contamination that would explain the measured differences and it remains unclear how these samples were contaminated. In almost every case, however, when these samples were reanalyzed, the retested pair of samples agreed with the lower of the original two samples in the bad field split. After testing hundreds of such pairs with sample returns from the Lake Partner Program, sufficient confidence was gained to allow the elimination of the higher of the two samples in cases where there are bad splits (Clark et al. 2010).

Bad splits in the LOBA dataset were identified for duplicate samples that were >35% different or had an absolute difference of >5 µg/L (Hyatt et al., 2012). If a bad split was identified, the higher of the two values was discarded.

2.2.2.2 Outliers

In relatively small datasets like the LOBA data set, the calculation of average total phosphorus concentration is sensitive to outliers, that is, extreme values that are not representative of the site condition. Rosner's ESD Many-Outlier Procedure (Rosner's Test; Rosner, 2011) was used to identify outliers in total phosphorus concentrations collected since 2002 for each LOBA monitoring site. This procedure detects high and low extreme values and is not limited for multiple outliers.

Statistically significant outliers (at $p < 0.05$) were removed from the dataset for further analyses, but will be re-evaluated each year as additional data are collected, as outliers may, over time, indicate a change to average conditions.

2.3 Data Analysis

2.3.1 Bacteria

Bacteria (*E. coli* and total coliform) levels were compared to the Provincial Water Quality Objectives (PWQO) for recreational water use (MOEE, 1994). For total coliform, the PWQO is 1,000 colony forming units (cfu) per 100 mL, based on a geometric mean for a series of water samples and is intended as a general guideline. Bacterial assessment of water quality should be based on more specific fecal bacteria indicators such as *E. coli*. The PWQO for *E. coli* is 100 cfu per 100 mL, based on a geometric mean of at least five samples taken from one site within one month. Where testing indicates sewage or fecal contamination, a site-specific judgment must be made as to the severity of the problem and the appropriate course of action.

2.3.2 Total Phosphorus

Mean total phosphorus concentrations were calculated for each site and site type for the 2016 monitoring period following the assessment of bad splits between duplicate samples and outliers.

In previous years, mean total phosphorus concentrations in Lake of Bays were evaluated against the revised Provincial Water Quality Objective (PWQO) for lakes located on the Precambrian Shield (Background + 50%; Province of Ontario, 2010), which were calculated for District Municipality of Muskoka (DMM) lakes using a water quality model developed for the Lake System Health program (Gartner Lee Ltd., 2005). The DMM model used to set the revised PWQO, however, is currently under review. Results were therefore evaluated against the interim PWQO for phosphorus, which states that: "To avoid nuisance concentrations of algae in lakes, average total phosphorus concentrations for the ice-free period should not exceed 20 µg/L. A high level of protection against aesthetic deterioration will be provided by a total phosphorus concentration for the ice-free period of 10 µg/L or less. This should apply to all lakes naturally below this value. Excessive plant growth in rivers and streams should be eliminated at a total phosphorus concentration below 30 µg/L." (MOEE, 1994)

Long-term trends over time (2002-2016) for each site were determined by the Mann-Kendall Trend Test computed using the statistical software, R (R Core Team, 2013). All other descriptive statistics were performed in MS Excel.

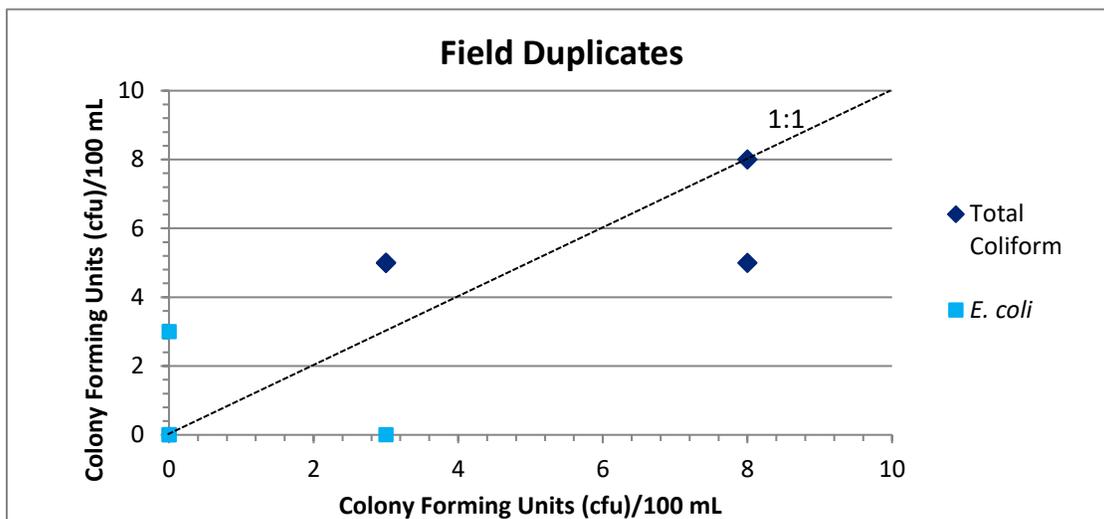
3. 2016 Monitoring Results

3.1 Quality Control

3.1.1 Bacteria

The quality control program in 2016 again yielded positive results that provide a high degree of confidence in the sampling protocols and analyses for bacteria (Figure 2). The maximum differences between bacteria duplicates using the Coliplate method was 3 cfu/100 mL for *E. coli* and for total coliform.

Figure 2. Comparison of field duplicate results for total coliform and *E. coli*, 2016.

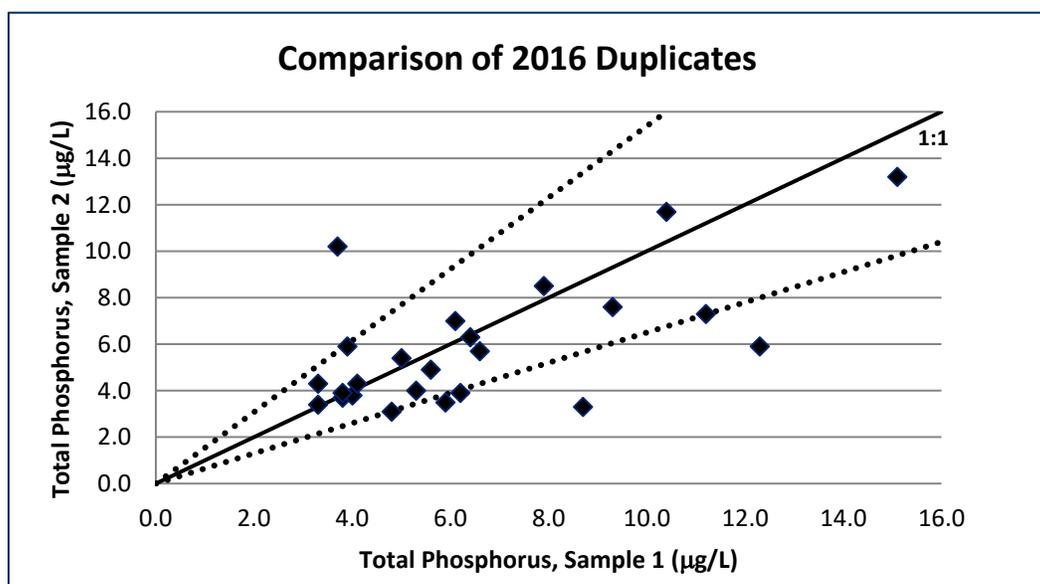


3.1.2 Total Phosphorus

3.1.2.1 Field Duplicates

In 2016, 33% of the field duplicate samples were bad splits (i.e., 5 µg/L or >35% difference between sample pairs) in comparison to the average of 13% since duplicate sampling began in 2005 (Figure 2, Table 2). A similarly higher percentage of bad splits also occurred in 2015. Sampling protocols should therefore be reviewed to reduce the potential for contamination during sample collection.

Figure 3. Total phosphorus field duplicates in Lake of Bays, 2016.



Note: Dotted lines enclose 35% difference from the 1:1 line.

Table 2. Summary of Bad Splits between Total Phosphorus Field Duplicates in Lake of Bays, 2005-2016

Site	Date	TP1 (µg/L)	TP2 (µg/L)
Adamson's Island	1-Sep-06	7.7	4.1
Bigwin East	20-Jul-14	6	9.5
Bigwin North	2-Sep-11	5.9	3.7
	4-Sep-15	4.5	8.7
	4-Aug-15	19.3	4
	14-Aug-16	5.9	3.5
Boothby's	23-Aug-15	5	2.1
	20-Jul-15	4.1	7.4
	1-Jul-16	8.7	3.3
Britannia	1-Aug-16	3.9	5.9
Dwight Bay	1-Sep-06	9.2	31.9
	4-Sep-15	7	4.4
	20-Jul-15	4.3	8.3
	14-Aug-16	11.2	7.3
Fairview	7-Aug-06	4.3	7.5
	14-Aug-16	3.7	10.2
Gull Rock	29-Jun-14	5.5	9
Menominee Bay	1-Sep-06	15.9	8.1
	1-Jul-16	4.8	3.1
Moffat's	4-Jul-05	5.7	4
	7-Sep-10	5.1	3.3
	18-Aug-13	4.1	6.1
	28-Aug-14	4.4	6.9
	23-Aug-15	3.9	1.8
Narrows West	23-Jul-07	8.2	4.1
	18-Jul-16	12.3	5.9
Price's Point	1-Aug-16	6.2	3.9
Ten Mile Bay	14-Jul-08	4.7	6.9
	7-Sep-10	6.1	12.9
Trading Bay	17-Jul-06	7.3	4.5

Note: Values in grey shaded cells were considered to be contaminated and were excluded from further analyses. Values in orange shaded cells were unusually low and therefore considered as suspect and excluded from further analyses.

The mean difference between field duplicates was 0.8 µg/L in 2015 and 2016, and 0.6 µg/L in all previous years (2005-2013) after removing the bad splits, which is comparable to the DESC dataset that has a mean difference of 0.7 µg/L between thousands of field duplicate samples.

3.1.3 Outliers

A total of 45 samples were identified as outliers in the LOBA dataset (excluding River sites) using the Rosner's Test, five of which occurred in the 2016 monitoring year (Table 3). The higher proportion of outliers in 2016 relative to other sample years in combination with the higher number of 'bad splits' (Section 3.1.2) suggests that sample contamination may be problematic and sampling protocols should be reviewed to ensure proper handling and sampling techniques in the future.

Table 3. Outliers in the LOBA Dataset (2002-2016), Rosner's Test ($p < 0.05$) (excluding River sites)

Site	Date	Total Phosphorus (µg/L)	Site	Date	Total Phosphorus (µg/L)
Adamson's Island	18-Jul-11	15.1	Menominee Bay	4-Jul-05	11.0
	31-Aug-12	7.9	Moffat's	5-Aug-02	36.7
	18-Aug-13	9.9		6-Aug-07	15.1
	18-Jul-16	8.9		5-Aug-13	11.4
		18-Jul-16		17.2	
Bigwin Bay	15-Jul-02	9.6	Narrows West	4-Jul-11	11.4
	20-Jul-14	10.1		1-Aug-11	8.5
	4-Aug-15	12.0		4-Sep-15	8.9
Bigwin East	28-Jun-15	18.1			
Bigwin North	23-Aug-04	27.7	Portage Bay	20-Aug-12	61.3
	6-Aug-07	97.7		1-Jul-2016	0.6
Boothby's	14-Aug-05	10.3	Price's Point	2-Aug-10	12.7
Britannia	1-Sep-03	12.6		18-Jul-11	12.8
	1-Sep-05	9.4	Ten Mile Bay	21-Aug-06	10.2
	18-Aug-13	21.6		29-Jun-14	10.3
	28-Aug-13	13.3		18-Jul-16	15.0
Dwight Bay	14-Jul-03	0.7	Trading Bay	19-Aug-02	17.7
	31-Aug-07	12.5		19-Jul-04	12.3
	17-Jul-09	12.3		1-Sep-16	15.8
Gull Rock	14-Jul-03	16.9			
Haystack Bay	6-Sep-04	74.0			
	7-Aug-06	40.3			
	1-Sep-06	14.1			
	6-Aug-07	12.8			
	17-Jul-09	57.7			
	31-Aug-12	22.4			
	28-Jun-15	14.6			
	4-Sep-15	18.1			

With the addition of the 2016 data, four previously identified outliers were no longer considered to be extreme values and were added to back to the data set for statistical analyses (Trading Bay, TP = 11.0 µg/L on August 21, 2006 and TP = 10.6 µg/L on June 28, 2015; Dwight Bay, TP = 11.7 µg/L on July 19, 2010; Britannia, TP = 8.4 µg/L on August 4, 2008).

Outliers were removed from all analyses in this report, but will be reassessed each year as additional data are added to the dataset. Several samples from the River sites were statistical outliers, however, these samples were not removed from the analysis as river-influenced sites are expected to be highly variable between sampling events and the high measured total phosphorus values likely reflects this variability.

3.2 Bacteria

Bacteria levels in Lake of Bays on August 1, 2016 were low at all sites and did not pose any human health risk with respect to exposure from recreational activity. Absolute and geomean bacteria counts were well below the PWQO of 100 cfu/100 mL for *E. coli* and 1,000 cfu/100 mL for total coliform at all sampling sites (Table 4). Marginally higher bacteria counts were observed in the river-influenced and nearshore sites, a pattern that has been observed in previous years in Lake of Bays and that is expected as rivers and nearshore areas are more exposed to bacteria sources from wildlife and shoreline development in comparison to the offshore deepwater sites.

Table 4. Summer E. coli and Total Coliform Concentration in Surface Water, 2016

Site	<i>E. coli</i> (cfu/100 mL)	Total Coliform (cfu/100 mL)
Deep water		
Bigwin East	3	5
Dwight Bay	0	3
Fairview	0	4
Gull Rock	0	3
Haystack Bay	0	8
Price's Point	2	7
Ten Mile Bay	2	8
Trading Bay	3	8
Portage Bay	3	11
Disturbed		
Bigwin Bay	5	16
Bigwin North	5	13
Britannia	3	5
Nearshore Undisturbed		
Adamson's Island	3	8
Boothby's	3	8
Hollow River mouth	5	8
Menominee Bay	0	4
Moffat's	3	8
Narrows West	3	8
River		
Oxtongue Delta	5	16
Hollow River mouth	3	11
Oxtongue River mouth	3	13

3.3 2016 Total Phosphorus Concentrations

Results of the 2016 monitoring continue to demonstrate low phosphorus concentrations in Lake of Bays that are characteristic of low productivity (oligotrophic), clear-water lakes on the Precambrian Shield. The summer total phosphorus concentration of the Deep Water, Disturbed and Nearshore Undisturbed sites ranged from 3.8 to 8.9 µg/L, with an overall mean concentration of 5.6 µg/L (Table 5). The River sites were more phosphorus-enriched (mean TP = 10.4 µg/L), which is consistent with higher concentrations of phosphorus-rich particulate matter and dissolved organic carbon in rivers. Mean summer total phosphorus concentration was less than the interim PWQO for phosphorus of 10 µg/L for the lake sites and of 30 µg/L for the river sites, thereby providing a “high level of protection against aesthetic deterioration” due to nuisance aquatic plant growth (MOEE, 1994).

Table 5. Total Phosphorus Concentrations (µg/L) in Lake of Bays, 2016

Site ID	Site Name	1-Jul	18-Jul	1-Aug	14-Aug	1-Sep	AVG	SD
Deep Water		6.2	7.2	5.5	5.5	5.8	6.0	1.5
B1	Bigwin East	5.1	2.9	4.5	5.0	4.7	4.4	0.9
B2	Fairview	3.8	3.6	4.7	3.7	4.8	4.1	0.6
E1	Trading Bay	n/d	8.8	6.6	5.2	n/d	6.9	1.8
E13	Haystack Bay	7.2	4.2	5.8	5.5	n/d	5.7	1.2
E30	Ten Mile Bay	n/d	n/d	7.3	7.9	6.6	7.3	0.7
N1	Dwight Bay	11.1	12.4	6.5	7.3	7.3	8.9	2.6
N10	Gull Rock	3.8	8.2	4.1	4.8	n/d	5.2	2.0
N26	Portage Bay	n/d	8.7	6.2	5.6	n/d	6.8	1.7
S3	Price's Point	6.1	8.5	3.9	4.1	5.9	5.7	1.8
Disturbed		3.6	5.2	6.1	3.9	4.4	4.6	1.6
B3	Bigwin North	3.9	4.9	9.4	3.5	3.9	5.1	2.4
B4	Bigwin Bay	3.1	7.3	3.9	3.9	4.5	4.5	1.6
N11	Britannia	3.7	3.5	5.1	4.2	4.9	4.3	0.7
Nearshore Undisturbed		3.7	6.8	5.4	3.8	6.8	5.3	1.6
E26	Narrows West	n/d	5.9	5.8	3.7	6.1	5.4	1.1
N13	Moffat's	3.5	n/d	4.5	3.4	3.8	3.8	0.5
N24	Boothby's	3.3	7.3	4.7	2.7	8.3	5.3	2.5
S1	Adamson's Island	4.9	n/d	4.5	4.0	3.8	4.3	0.5
S2	Menominee Bay	3.1	7.1	7.3	5.3	12.0	7.0	3.3
River		5.6	13.1	6.7	12.5	10.5	9.7	4.7
E18	Hollow River Mouth	n/d	13.3	7.3	25.7	18.3	16.2	7.8
N2	Oxtongue River Mouth	5.6	11.9	6.2	5.6	6.7	7.2	2.7
N30	Oxtongue Delta	5.5	14.2	6.6	6.3	6.4	7.8	3.6
All sites:							6.3	2.0
All sites excluding River sites:							5.6	1.5

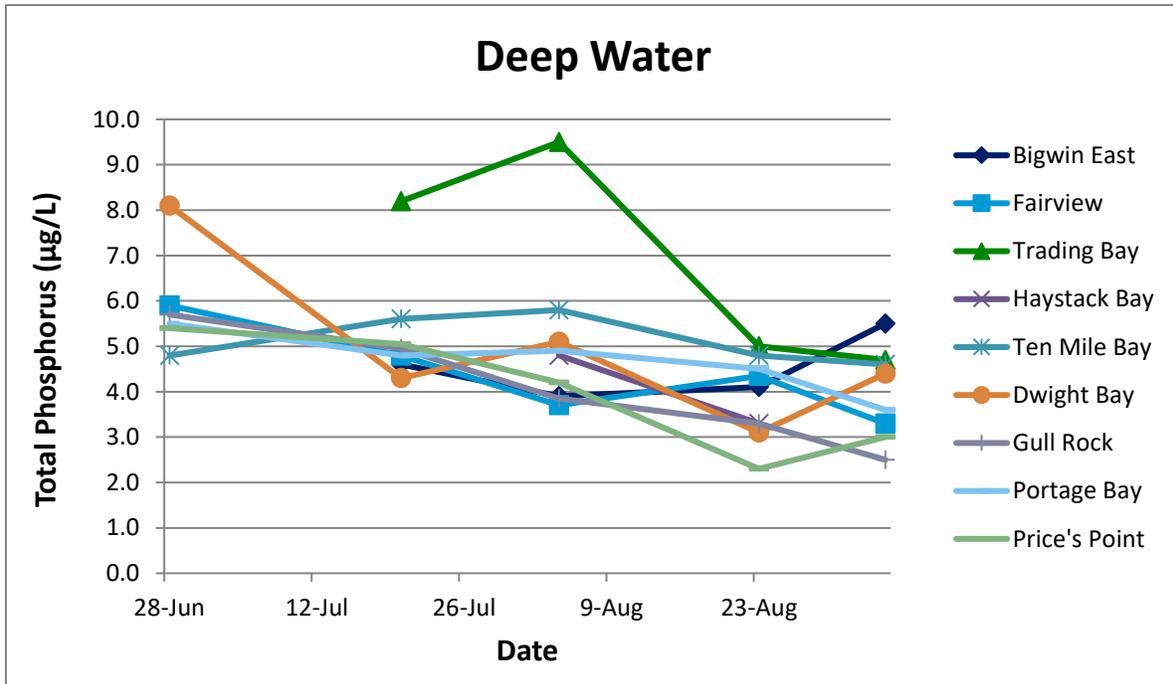
Total phosphorus concentrations were variable at the non-River sampling locations over the 2016 monitoring period, with an average difference of 3.5 µg/L between the minimum and maximum values (range of 1.2 to 8.9 µg/L) measured at each site. This variability represents a 27% difference (Coefficient of Variation, CV) from the mean phosphorus concentration observed over the 2016 monitoring. On average, there was less variability in total phosphorus at Deep Water (average CV = 24%) sites than at nearshore (Nearshore Undisturbed and Disturbed; average CV = 30%) sites. Higher variability is expected at sites closer to shore as they are more susceptible to local changes in phosphorus from runoff events, uptake by plants in shallow areas, sediment resuspension due to wave action, and phosphorus release by bacterial decomposition of organic matter.

There was no consistent pattern in total phosphorus concentrations between sites or site types over the summer of 2016 (Figures 4 to 8). A decline in phosphorus over the summer period, however, is common in deep, stratified, oligotrophic lakes like Lake of Bays as particles containing phosphorus settle through

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the mixed layer of the water column into the hypolimnion and are eventually lost to the sediments. It is likely that variation between sampling events caused by other controlling factors such as significant storm events could have masked this pattern, which has been observed in previous monitoring years. Phosphorus concentrations tend to increase at fall turnover when more phosphorus-rich water contained in the hypolimnion¹ mixes with the surface waters and again in spring due to inputs of phosphorus in runoff from snowmelt.

Figure 4. Total phosphorus concentrations in Lake of Bays 2016, Deep Water sites.



¹ The hypolimnion is the deep, cool layer of water in lakes that is prevented from mixing with warmer, less dense surface waters.

Figure 5. Total phosphorus concentrations in Lake of Bays 2016, Nearshore Undisturbed sites.

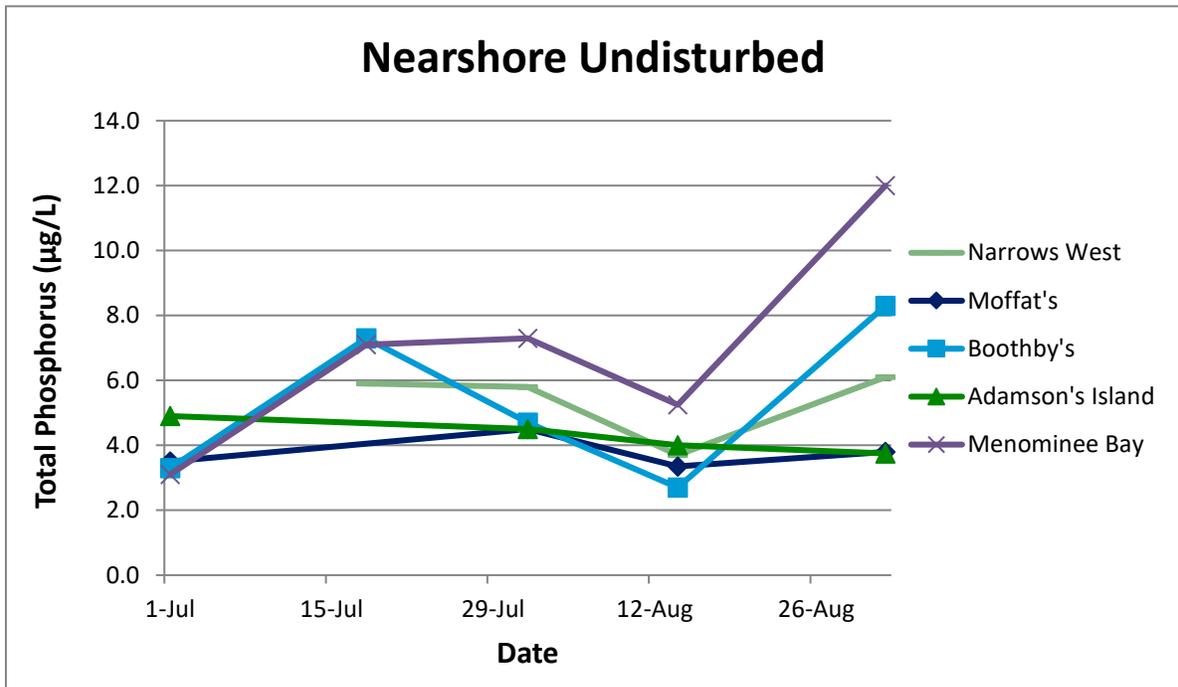


Figure 6. Total phosphorus concentrations in Lake of Bays 2016, Disturbed sites.

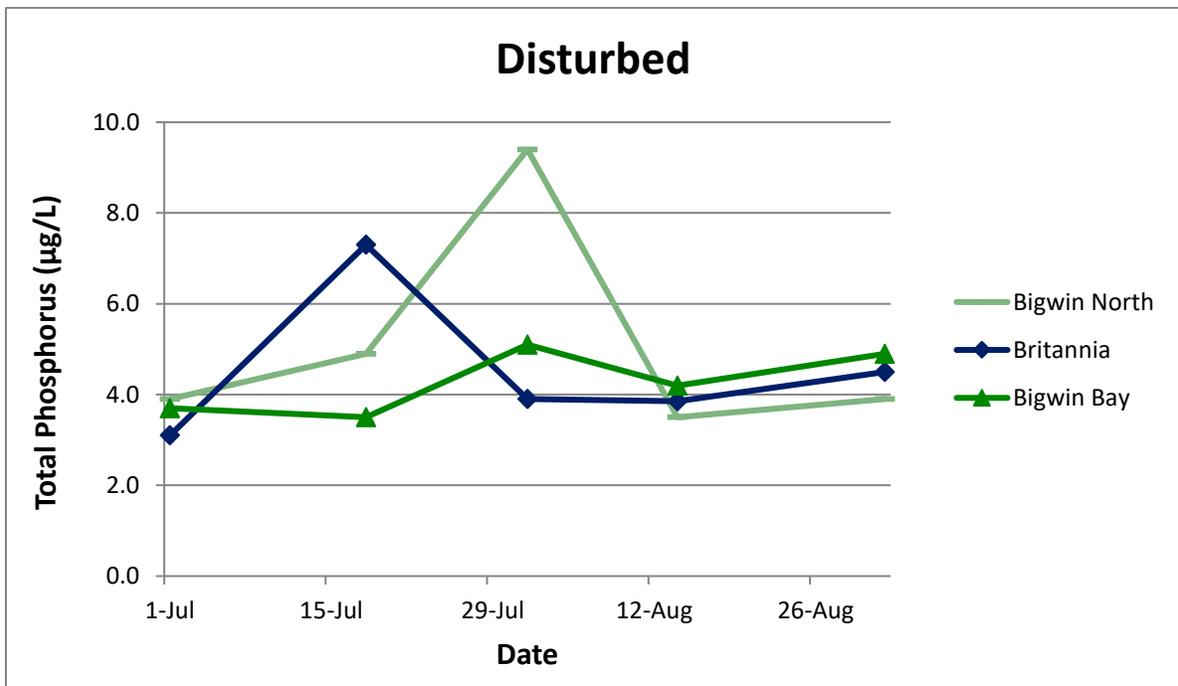


Figure 7. Total phosphorus concentrations in Lake of Bays 2016, River sites.

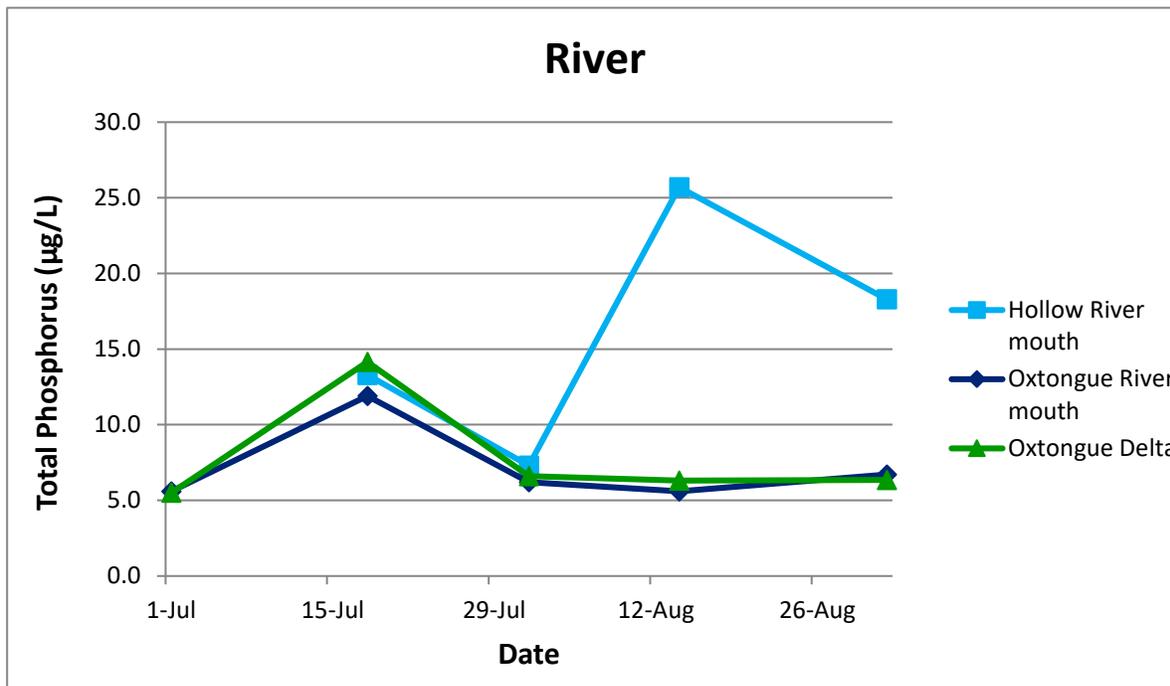
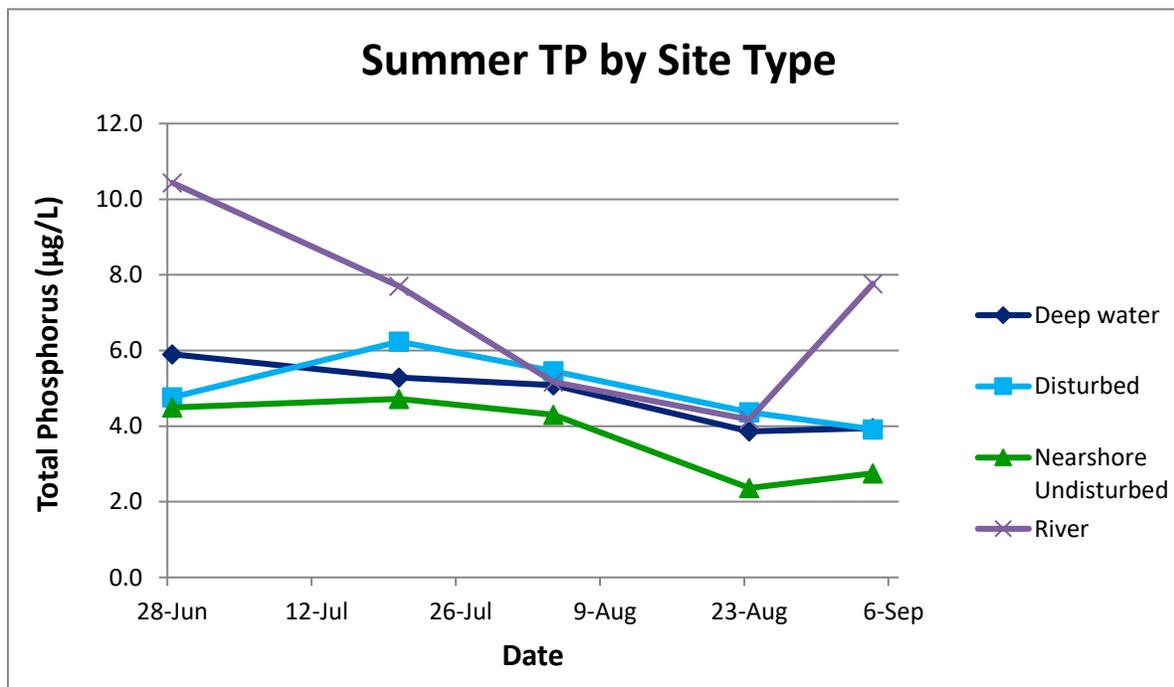


Figure 8. Total phosphorus concentrations in Lake of Bays 2016 by Site Type.



Note: Data points for each date represent mean values of all sites of one type.

There was no significant difference (Mann-Witney test; $U = 5$, $p > 0.05$) in phosphorus concentration between the Nearshore Undisturbed (mean TP = 5.3 $\mu\text{g/L}$) and Disturbed (mean TP = 4.6 $\mu\text{g/L}$) sites suggesting that shoreline disturbance has had little impact on summer phosphorus concentrations.

In 2012, Portage Bay was added as a monitoring site due to LOBA concerns regarding the potential impact of construction activities. Mean total phosphorus concentration in Portage Bay ranged from 6.8 $\mu\text{g/L}$ to 4.7 $\mu\text{g/L}$ from 2013 to 2016, representing a decline from elevated concentrations observed in 2012 (mean TP = 9.6 $\mu\text{g/L}$) that were coincident with construction activities. The 2016 monitoring results confirmed that potential impacts of construction activities at Portage Bay were short term although it is possible that the high concentration in 2012 was spurious and not the result of construction activity. Monitoring at Portage Bay can be discontinued if there is no longer a concern regarding localized impacts at this site from human disturbance.

4. Long-term Phosphorus Patterns

The Lake of Bays Water Quality Monitoring Program has collected data over the summer season for 15 years at numerous locations throughout the lake. The yearly number of samples collected including QA/QC samples ranged from 50 in 2002 to 123 in 2012, with a total of 1,442 samples collected at the end of the 2016 program (Table 6). The large number of sites monitored and samples collected under the program since 2002 provide for an excellent data set to assess long-term trends and variability in total phosphorus concentration in Lake of Bays. All data collected by the LOBA monitoring program since 2002 are provided in Appendix B.

Since 2002, the mean summer total phosphorus concentration has ranged between 2.5 and 9.6 $\mu\text{g/L}$ in the Deep Water (mean TP = 5.1 $\mu\text{g/L}$), Disturbed (mean TP = 4.7 $\mu\text{g/L}$) and Nearshore Undisturbed (mean TP = 4.3 $\mu\text{g/L}$) sites (Table 7, Figure 9). The River sites have been more variable with generally higher concentrations that have ranged from 4.0 to 16.2 $\mu\text{g/L}$ (mean TP = 7.1 $\mu\text{g/L}$).

Table 6. Number of Total Phosphorus Samples Collected by the Lake of Bays Monitoring Program (2002-2016)

Year	Deep Water	Disturbed	Nearshore Undisturbed	River	Total # of Samples
2002	30	15	5		50
2003	39	22	7	16	84
2004	28	13	5	7	53
2005	29	8	14	8	59
2006	53		21		74
2007	54	10	36	10	110
2008	48	13	32	15	108
2009	47	15	21	10	93
2010	46	15	29	16	106
2011	44	28	28	13	113
2012	51	26	31	15	123
2013	57	19	25	15	116
2014	53	16	32	18	119
2015	52	19	32	19	122
2016	52	14	30	16	112
Total # of Samples	683	233	348	178	1,442

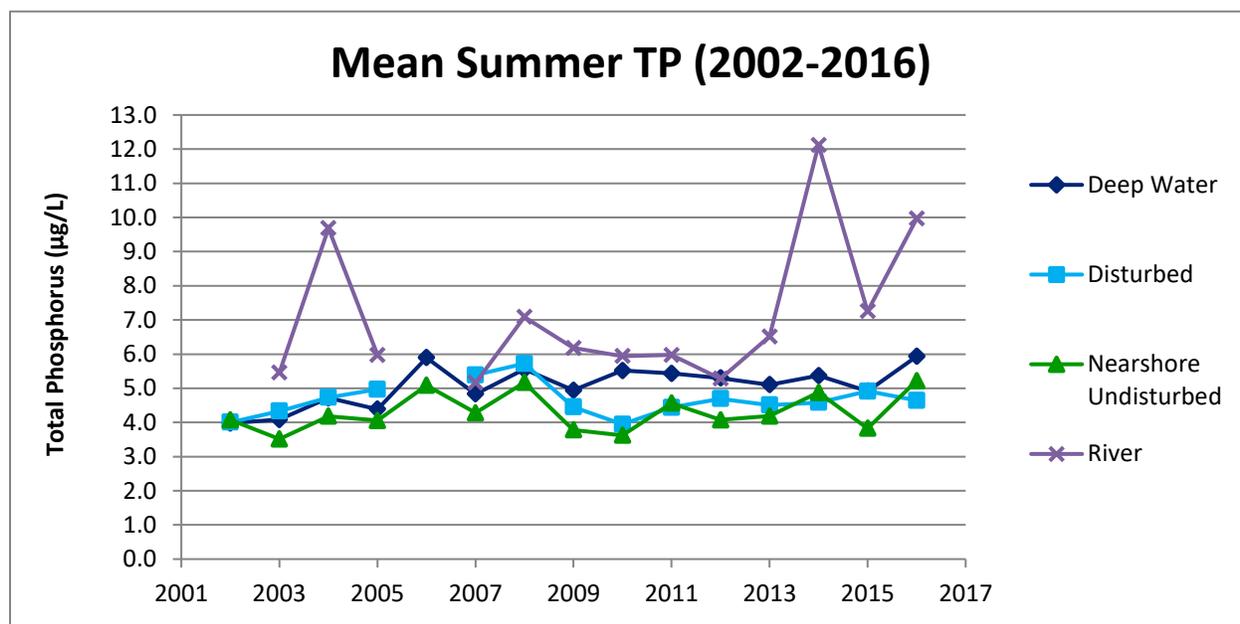
Table 7. Mean Summer Total Phosphorus Concentrations in Lake of Bays (2002-2016)

Site	Total Phosphorus (µg/L)															
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	AVG.
Deep Water	4.0	4.1	4.7	4.4	5.9	4.8	5.6	4.9	5.5	5.4	5.7	5.2	5.5	4.9	6.0	5.1
Bigwin East	4.2	4.2	4.2	4.0	5.5	4.5	6.4	4.1	5.7	4.9	5.0	4.9	6.2	4.5	4.4	4.9
Dwight Bay	4.6	4.2	6.1	4.7	6.4	5.9	6.1	4.9	6.2	5.3	6.5	5.3	6.1	5.0	8.9	5.7
Fairview	2.8	3.6	4.0	4.7	5.3	3.9	6.1	4.6	5.2	4.9	4.7	4.5	4.8	4.4	4.1	4.5
Gull Rock	4.0	4.2	5.1	4.4	5.6	4.7	5.0	4.4	5.5	5.8	5.1	3.9	5.0	4.1	5.2	4.8
Haystack Bay	4.2	4.4	4.6		6.8	5.3	5.3	6.4	5.9	6.2	4.7	7.3	6.2	4.1	5.7	5.5
Portage Bay											9.6	5.7	6.3	4.7	6.8	6.6
Price's Point				3.4	6.0	4.5	4.7	5.7	5.2	5.5	4.5	5.8	4.5	4.0	5.7	4.9
Ten Mile Bay					6.1	5.0	5.5	4.8	5.2	5.1	6.8	5.7	6.5	5.1	7.3	5.7
Trading Bay	4.1	4.0	4.9	5.1	6.0	4.7	5.4	4.9	5.2	5.8	5.1	2.5	4.2	7.6	6.9	5.1
Disturbed	4.0	4.3	4.7	5.0		5.4	5.7	4.5	3.9	4.4	4.7	4.5	4.6	4.9	4.6	4.7
Bigwin Bay	3.6	4.7	4.9				5.5	4.2	3.6	4.5	4.5	4.5	4.3	4.8	4.3	4.4
Bigwin North	5.0	3.9	5.3	5.2		6.3	6.1	5.6	4.5	4.6	4.8	4.8	4.6	5.1	5.1	5.1
Britannia	3.3	4.4	4.0	4.6		4.7	5.5	3.6	3.8	4.2	4.8	4.1	4.8	4.9	4.5	4.4
Nearshore Undisturbed	4.1	3.5	4.2	4.1	5.1	4.3	5.2	3.8	3.6	4.6	4.1	4.2	4.9	3.8	5.2	4.3
Adamson's Island				4.8	4.7	3.3	4.5	2.9	2.8	4.2	3.9	4.0	4.2	3.5	4.3	3.9
Boothby's				6.2	5.8	5.2	5.4	4.3	4.6	4.8	3.9	4.3	5.0	3.7	5.3	4.9
Menominee Bay				3.1	5.0	3.9	6.0	3.1	2.9	4.9	3.7	4.3	4.8	3.7	7.0	4.4
Moffat's	4.1	3.5	4.2	3.7	4.9	3.8	5.2	4.8	3.6	4.6	4.5	3.9	5.5	4.1	3.8	4.3
Narrows West						5.1	4.7		4.3	4.0	4.5	4.5	4.9	4.4	5.4	4.6
River		5.5	9.7	6.0		5.2	7.1	6.2	5.9	6.0	5.3	6.5	12.1	7.3	10.0	7.1
Hollow River mouth		5.5	12.7	6.0		5.2	7.1		4.5	5.3	5.1	4.1	5.5	9.6	16.2	7.2
Oxtongue Delta							6.9	4.8	4.0	4.9	4.4	6.3	8.5	6.0	7.8	6.0
Oxtongue River mouth			7.4	5.9			7.3	7.6	9.4	7.8	6.4	8.1	22.4	6.6	7.2	8.7

Note: Includes only those sites with at least three years of data collected within the last five years



Figure 9. Long-term (2002-2016) mean summer euphotic zone total phosphorus (TP) by Site Type.



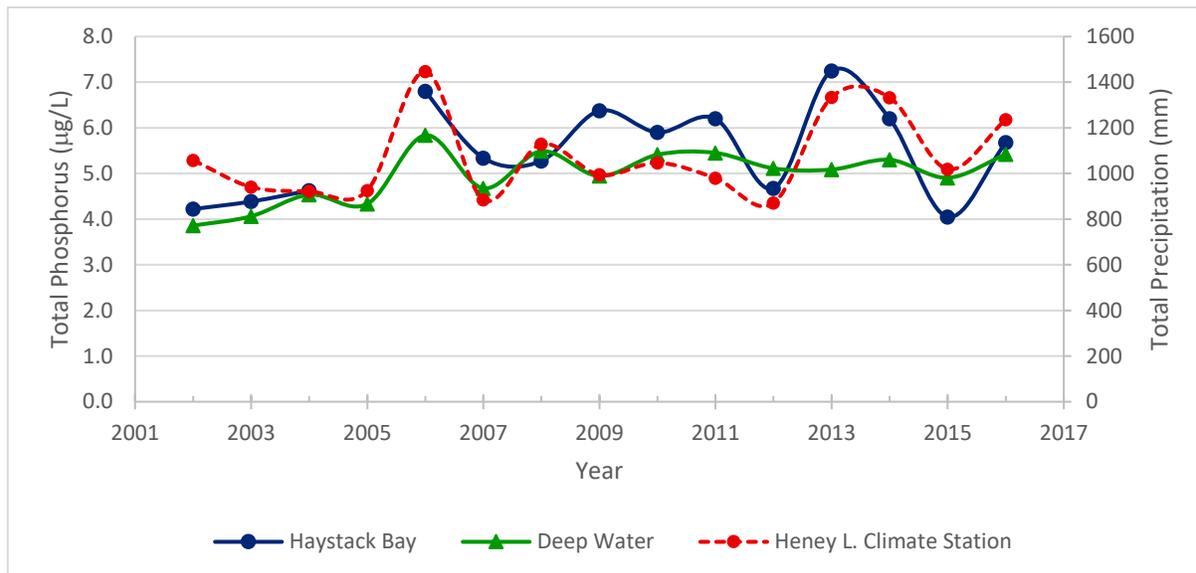
Note: Only includes sites with at least five years of data.

Changes in annual precipitation patterns (amount of precipitation, frequency and duration of storm events) can strongly influence phosphorus loads from atmospheric deposition and also the mobilization and transport of phosphorus from the watershed. Comparison of average summer total phosphorus concentration to precipitation records from the nearby Heney Lake climate station operated by the Ontario Ministry of the Environment and Climate Change² suggests that annual changes in precipitation strongly influence phosphorus concentrations at Deep Water sites in Lake of Bays (Figure 10). In general, total phosphorus concentrations tended to increase in wetter years over the period of record.

The relationship between mean annual summer phosphorus concentrations and total annual precipitation was particularly strong at Haystack Bay (Pearson rho = 0.73, df = 12, p = 0.003), which is a large, relatively isolated bay with no large tributary input. Haystack Bay has a large surface area (4.94 km²) relative to the area of its watershed (8.13 km²). This means that direct phosphorus loads from precipitation contribute to a large portion of the natural phosphorus load to this bay making the bay especially sensitive to changes in precipitation. Phosphorus loading estimates by the DMM indicated that the total load from precipitation constitutes 49% of the natural load to Haystack Bay in comparison to 28% for the main basin of the lake (GLL, 2005).

² Months with greater than 25 days of missing data were replaced with monthly average precipitation from the Environment Canada climate station at Beatrice (Station 6110607) located ~30 km from Lake of Bays

Figure 10. Mean summer euphotic zone total phosphorus at Haystack Bay and Deep Water sites of Lake of Bays and total annual precipitation at Heney Lake (2002-2016) climate station.



Note: Deep Water sites exclude Little Trading Bay and Portage Bay; months with greater than 25 days of missing data were replaced with monthly average precipitation from the Environment Canada climate station at Beatrice (Station 6110607) located ~30 km from Lake of Bays

Spring total phosphorus concentrations collected by the DMM have been more variable between sample years than the summer concentrations collected by LOBA (Figures 11 and 12), most probably related to the varying intensity and timing of spring snowmelt, which would result in varying amounts of phosphorus in the lake during spring that would settle out with stratification and have no effect on summer concentrations. The variability in spring data could therefore mask long-term trends in lake total phosphorus concentration that occur in the summer months. Despite seasonal differences in the two monitoring programs, they provide similar long-term mean phosphorus concentrations for the Deep Water sites monitored by both programs (DMM TP spring₀₂₋₁₅ = 5.4 µg/L, LOBA TP summer₀₂₋₁₅ = 5.0 µg/L).

Figure 11. Long-term mean spring overturn (DMM data) and mean summer euphotic zone total phosphorus in Haystack Bay, Dwight Bay, Ten Mile Bay and Trading Bay.

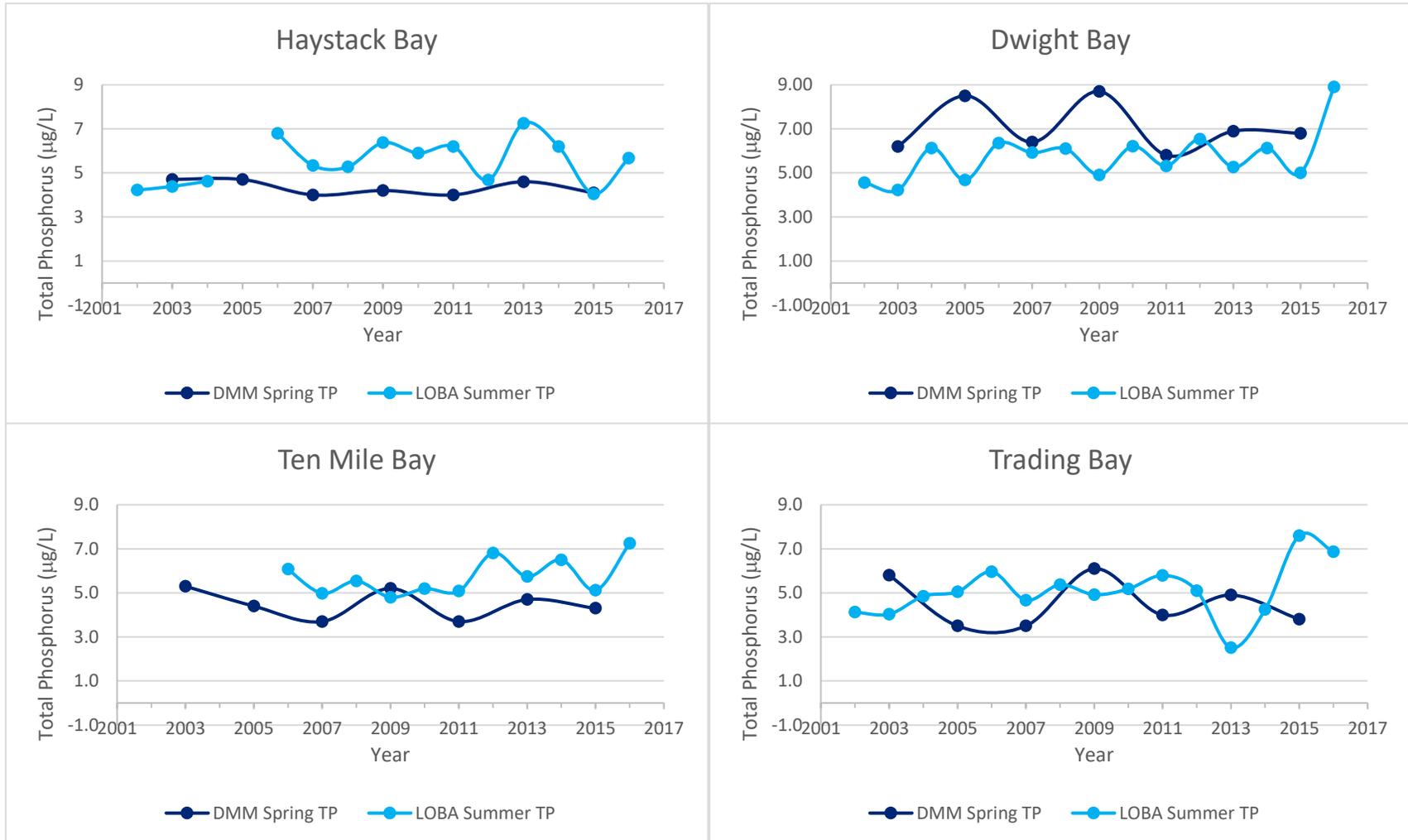
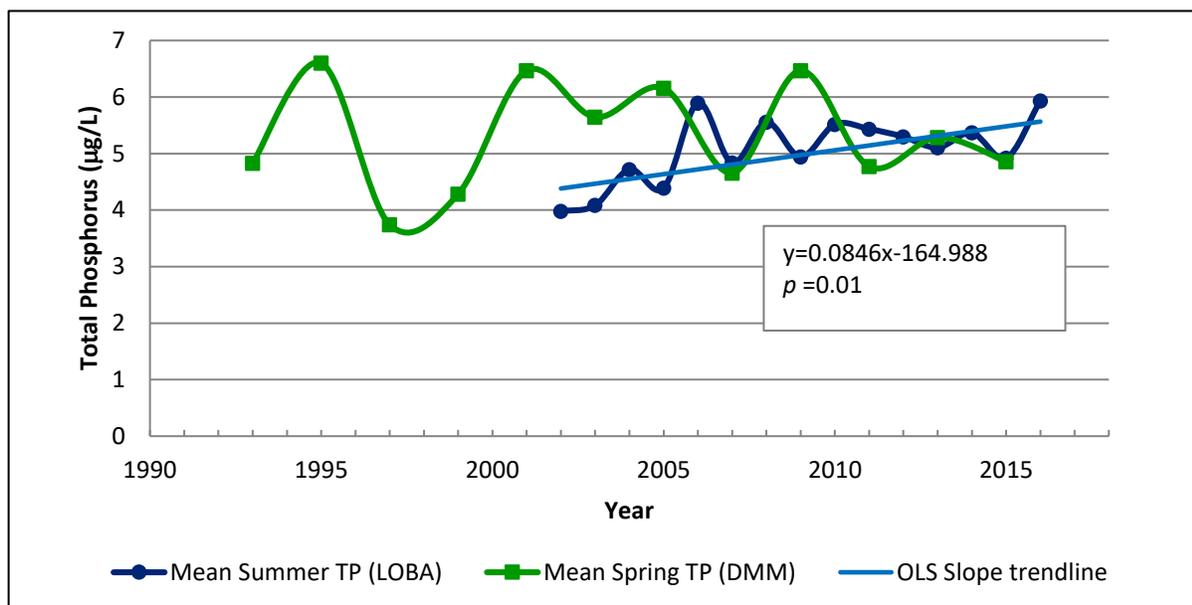


Figure 12. Long-term mean spring overturn (DMM data) and mean summer euphotic zone total phosphorus in Deep Water areas of Lake of Bays.



Note: LOBA sites exclude Little Trading Bay and Portage Bay. DMM sites include Dwight, Haystack, Rat, South Muskoka River, South Portage, Ten Mile and Trading bays.

Previous LOBA monitoring reports identified a statistically significant increasing trend in mean summer total phosphorus concentration of the Deep Water sites³ since 2002. This trend continued in 2016 (Mann Kendall Trend Test, $S=44$, $p=0.01$), but did not occur at any individual Deep Water site, nor was it observed at any of the Nearshore Undisturbed, Disturbed or River sites. The average increase in total phosphorus concentration for Deep Water sites was $0.085 \mu\text{g}/\text{yr}$, representing a total increase of 30% or $1.3 \mu\text{g}/\text{L}$ over 15 years (based on the Ordinary Least Squares (OLS) trendline, $p = 0.01$). This degree of change exceeded what would be expected due to natural year to year variability for low productivity lakes on the Precambrian Shield, which have been found to vary naturally by an average of 21-23% between years (Clark et al., 2010).

Over the past 10 to 12 years, increasing trends in total phosphorus occurred in some Muskoka lakes monitored by the DESC, while other lakes exhibited decreasing or no trends (Andrew Paterson, MOECC lake scientist, pers. comm.). These lakes had little to no development in their watersheds and regional (e.g., climate change, long range atmospheric deposition) or local factors other than development, therefore, appear to be influencing lakes in the Muskoka area, including the trend observed for Deep Water sites in Lake of Bays. The MOECC are investigating the potential causes of differential patterns in phosphorus concentrations in the DESC monitoring lakes and results of this work may help to determine the mechanisms of change in Lake of Bays.

Some increase in total phosphorus concentration over natural conditions is expected in Lake of Bays due to shoreline development. Much of the shoreline area of Lake of Bays is well developed with seasonal cottages, permanent residences and resorts that, in combination with development on upstream lakes, are

³ All data combined from eight Deep Water sites with at least five years of data.

estimated to potentially increase the phosphorus load. Not all phosphorus from septic systems is likely to reach the lake, however, due to the attenuation of phosphorus by mineral-rich acidic soils that are characteristic of the Precambrian Shield. Where migration of phosphorus does occur it is slow, averaging ~ 1 m/yr (Robertson et al. 1998) and so may take many years to reach a lake. It is possible that some phosphorus from existing septic systems has only started reaching the lake over the monitoring period, contributing to the observed trend in Deep Water sites. Nevertheless, Gartner Lee Ltd. (2005) concluded that the potential increase in concentration in Lake of Bays due to shoreline development ranged from ~ 0.5 µg/L (Main Basin) to 1 µg/L (Haystack and Ten Mile Bay). This is an ~ 20% increase and is well below the revised PWQO for lakes on the Precambrian Shield that allows for a 50% increase in phosphorus concentration over natural conditions to protect water quality from nutrient enrichment (Province of Ontario, 2010).

In summary, summer total phosphorus concentration in Lake of Bays is variable from year to year, and evidence suggests that this variability is likely due to natural processes related to precipitation patterns. Natural variability, in addition to regional or local environmental change (i.e., climate change, acid deposition, invasive species, etc.) and increased phosphorus inputs from human sources can act together as “multiple stressors” resulting in changes in total phosphorus concentrations over time. The Lake of Bays Association water quality monitoring program provides a high-quality long term data set to evaluate these stressors and other emerging issues as they arise.

5. Summary

The total phosphorus and bacteria data collected by the LOBA over the summer of 2016 indicated excellent water quality at all sampling sites in the Lake of Bays. The main results of data analyses from 2016 and from previous years are as follows:

1. The LOBA monitoring program continued to provide high quality phosphorus data, although there were a greater number of bad splits and outliers in the last two sampling years than in previous years. Continued vigilance and a review of sampling protocols are recommended to reduce the potential of contamination of the phosphorus samples.
2. Bacteria levels were low on all sampling events at all sites, well below the PWQO for recreational use.
3. Total phosphorus concentrations (mean TP = 5.6 µg/L excluding the River sites) were characteristic of lakes with low primary productivity and on average, met the highest Provincial standards for protection of nuisance aquatic plant growth due to phosphorus of 10 µg/L at all sites.
4. Mean summer total phosphorus concentration in Portage Bay has been consistently low since 2013, representing a decline from elevated concentrations observed in 2012 that coincided with construction activities. This confirms that potential impacts of construction activities were short term and continued monitoring at this site is no longer required unless other concerns arise.
5. There was no significant difference in phosphorus concentration between the Deep Water, Disturbed and Nearshore Undisturbed sites suggesting that shoreline disturbance is having little impact on summer phosphorus concentrations. Concentrations were highest in river sites compared to lake sites, and were more variable in shallow nearshore areas (Nearshore Undisturbed and Disturbed sites) than Deep Water sites as expected due to natural processes.
6. Between year variability in phosphorus in Lake of Bays appeared to be strongly driven by natural fluctuations in annual precipitation.

7. Deep Water sites exhibited a significant increasing trend in total phosphorus concentration from 2002-2016, representing an average total increase of 30% (1.3 µg/L). Natural variability, in addition to regional or local environmental change (i.e., climate change, acid deposition, invasive species, etc.) and increased phosphorus inputs from human sources may be acting together as “multiple stressors” resulting in changes in total phosphorus concentrations over time.

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Appendix A. Monitoring Protocols for the LOBA Water Quality Monitoring Program



WATER QUALITY SAMPLING PROCEDURES

General:

1. Check for equipment, including:
 - metre depth pole (if required)
 - thermometer
 - cooler and ice packs
 - sterilized jars, phosphorus tubes, duplicates
 - secchi depth disc and jar (if required)
 - data sheets and pen
2. verify that you have the appropriate boating safety equipment on board and that the weather is safe for sampling
3. record air temperature on data sheet as you leave the dock. Then attach thermometer to a rope in preparation for taking water temperature at sampling sites.
4. at each site, complete the data sheet, recording any factors or conditions that may make the sampling trip unusual or that may have an influence on sample results (eg. cloudy water, unusual activity in the area, presence of waterfowl)

Coliform and E coli testing

*Near shore sample collected 22 – 30 cm. below the surface in water that is 1 m. in depth
Deep water samples also collected 22 – 30 cm. below the surface of the water.*

1. Carefully and correctly assemble the jars required for the specific site (all should be named and number coded)
2. Remove the cap/lid from the jar/bottle **without touching the inside of the lid or jar**, and place carefully, upside down on a flat stable surface
3. Grip the bottle at the base and plunge it into the water in a downward motion to the a depth of 22 – 30 cm. (9 – 15 in). The bottle goes in **upside down** (open end to lake bottom) and the appropriate depth is roughly around your elbow.
4. Adjust the bottle position in your hand so that the bottle is now parallel to lake surface and lake bottom, facing forward and **collect sample by sweeping the bottle forward** (forward, not up). This directional motion is important so that the water being collected in the bottle/jar does not pass over your hand. Collect water from that 22 – 30 cm. depth and then bring bottle to surface.
5. Empty it slightly (if it is full to the brim) and then recap bottle.
6. Store in the cooler chest.
7. **re quality control sample (lab and field duplicates)**. Quality assurance is necessary to validate that the sampling and processing protocols have been followed appropriately. It is very important that these procedures are followed in order to ensure high quality results ...

If we are running duplicates (field and lab) on your site, there will be a large sampling jar, clearly marked, as well as a smaller one. Using the large jar, take your sample as per the steps outlined above. As soon as the sample is obtained, recap the jar (without touching interior of lid or jar) and shake it two or three times to ensure a uniform distribution of the discreet bacteria in the water sample. Immediately transfer some of the sample to the smaller jar. Cap both jars and store both jars. The contents of the

small jar are the sample, part of the remaining content of the large jar becomes the field duplicate and the balance of water in the large jar is sent for a quality control test at the Central Ontario Analytical Laboratory in Orillia.

The last part of quality assurance is distilled water. After the site sample and field duplicate have been collected, open the distilled water jug and fill the collection jar marked Distilled Water. Cap the glass bottle and place it in the cooler with the ice pack. Distilled water is, or should be, free of coliforms and e coli, and running a distilled water sample through our process (sterilized jars, sampling volunteers, Deb working the coliplates) is an excellent test of the scientific rigour of our program.

Near shore Phosphorus testing:

sample collected 22 – 30 cm. below the surface in water that is 1 m. in depth

There are always a test tube **and** a PET jar associated with each phosphorus site (and sometimes extra test tubes for quality assurance purposes). The PET jar is used to actually collect the sample, which is then transferred to the test tube(s).

1. Carefully and correctly assemble the jars required for the specific site (all should be named and number coded)
2. Remove the top from the PET jar without touching the inside of top or jar and place in a flat, stable place.
3. **Rinse the jar in surface water at site.**
4. Rinse the filter (plastic funnel and filter cloth) in surface site water (filter stored in freezer bag.)
5. Grip the bottle at the base and plunge it into the water in a downward motion to the a depth of 22 – 30 cm. (9 – 15 in). The bottle goes in **upside down** (open end to lake bottom) and the appropriate depth is roughly around your elbow.
6. Adjust the bottle position in your hand so that the bottle is now parallel to lake surface and lake bottom, facing forward and **collect sample by sweeping the bottle forward** (forward, not up). This directional motion is important so that the water being collected in the bottle/jar does not pass over your hand. Collect water from that 22 – 30 cm. depth and then bring bottle to surface.
7. Take the top off the test tube, being careful not to touch the inside of the top or the test tube interior.
8. Gently swirl the water in the PET jar (don't spill it!) and then filter the water from the PET jar into the test tube using the filter (funnel plus filter cloth) provided. Fill the test tube to the line marked near the top of the test tube (want a tiny bit of air space in the tube for the lab to add some material.) Be prepared ... the filter cloth is a pain in the neck but it is important to filter out zooplankton which can distort phosphorus readings.
9. Cap tightly – both test tube and PET jar – and put both in the cooler.

Note: be careful with the filters ... they are light and blow away easily and it is also easy to lose/damage the filter cloths. **There is one filter per sampler for the entire summer!**

Deep Water Phosphorus Testing

sample is collected 10 – 15 m.(metres, not centimeters) below the surface in deep water

While the process of collecting and filtering the sample is the same as that for near shore phosphorus, the sample is collected from further down in the water column. The process is as follows:

1. Attach the rope to the Secchi disc and measure the secchi depth by lowering the disc over the side of the boat until it disappears from view. It may take a bit of playing with it to verify when it actually disappears. Haul it up until you see it again and then slowly lower it. (Know that in 8 years of doing this, I have NEVER had a secchi reading anywhere on Lake of Bays of less than 4.5 metres, and have occasionally had them up to 8 metres.) As you pull the disc back to the surface, count the number of metres (the rope is calibrated in 1 metre intervals.) Record this number. Redo to double check.
2. Record the colour of the water (orangey brown, bluey-green, etc.)
3. Attach the calibrated rope to the container for the secchi collection jar.
4. Rinse the collection jar in surface site water.
5. Lower the bottle (now in the weighted container to a distance that is **2 X** the secchi depth you observed and recorded above (the sample is being collected at a level to which light penetrates and given the refraction of light, that distance is 2 X the depth at which you could last see the disc.) The bottle should be lowered in a quick, smooth, but controlled motion (Don't let it free fall.)
6. Pull the container and collection jar back to the surface at a steady pace.
7. Use this water to rinse and fill the PET jar.
8. Swirl the water in the PET jar and then pour into the test tube **through the filter**. Fill test tube to the indicated line (just shy of full.)
9. Cap and place test tube and PET jar in cooler.

Re quality assurance for phosphorus ... near shore and deep water:

Quality assurance is necessary to validate that the sampling and processing protocols have been followed appropriately. It is very important that these procedures are followed in order to ensure high quality results ...

1. If we are running phosphorus duplicates on your site, there will be an extra test tube, clearly marked as the field duplicate. Simply fill that second test tube in the same manner as the first, taking the time to gently swirl the contents of the PET jar before pouring water into the second test tube through the funnel and filter cloth Cap test tubes and PET jar and store in cooler.
2. The last part of quality assurance is distilled water. After the site sample and field duplicate have been collected, open the distilled water jug and fill the clearly marked test tube to the line (7/8th full). Cap and store with rest of samples from that particular site.

Appendix B. LOBA Total Phosphorus and Bacteria Data



Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
B4 P/B	B4	Bigwin Bay	Disturbed	2002	2-Sep-02	2.9				
B4 P/B	B4	Bigwin Bay	Disturbed	2002	1-Jul-02	3.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2002	19-Aug-02	3.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2002	5-Aug-02	5.4				
B4 P/B	B4	Bigwin Bay	Disturbed	2002	15-Jul-02	9.6				x
B1P	B1	Bigwin East	Deep Water	2002	2-Sep-02	2.7				
B1P	B1	Bigwin East	Deep Water	2002	19-Aug-02	3.7				
B1P	B1	Bigwin East	Deep Water	2002	5-Aug-02	4.3				
B1P	B1	Bigwin East	Deep Water	2002	1-Jul-02	4.4				
B1P	B1	Bigwin East	Deep Water	2002	15-Jul-02	5.8				
B3 P/B	B3	Bigwin North	Disturbed	2002	2-Sep-02	2.3	0.5	33		
B3 P/B	B3	Bigwin North	Disturbed	2002	19-Aug-02	2.7	0.5	43		
B3 P/B	B3	Bigwin North	Disturbed	2002	15-Jul-02	5.1	0.5	8		
B3 P/B	B3	Bigwin North	Disturbed	2002	5-Aug-02	6.2	11	213		
B3 P/B	B3	Bigwin North	Disturbed	2002	1-Jul-02	8.8	52	94		
B3 P/B	B3	Bigwin North	Disturbed	2002	26-May-02		0.5	3		
B3 P/B	B3	Bigwin North	Disturbed	2002	29-Sep-02		0.5	39		
N11 P/B	N11	Britannia	Disturbed	2002	2-Sep-02	2.0				
N11 P/B	N11	Britannia	Disturbed	2002	19-Aug-02	2.7				
N11 P/B	N11	Britannia	Disturbed	2002	1-Jul-02	3.3				
N11 P/B	N11	Britannia	Disturbed	2002	5-Aug-02	3.8				
N11 P/B	N11	Britannia	Disturbed	2002	15-Jul-02	4.7				
N1 P	N1	Dwight Bay	Deep Water	2002	2-Sep-02	1.8				
N1 P	N1	Dwight Bay	Deep Water	2002	19-Aug-02	3.8				
N1 P	N1	Dwight Bay	Deep Water	2002	5-Aug-02	4.8				
N1 P	N1	Dwight Bay	Deep Water	2002	15-Jul-02	5.7				
N1 P	N1	Dwight Bay	Deep Water	2002	1-Jul-02	6.7				
B2 P/B	B2	Fairview	Deep Water	2002	2-Sep-02	2.1				
B2 P/B	B2	Fairview	Deep Water	2002	1-Jul-02	2.2				
B2 P/B	B2	Fairview	Deep Water	2002	15-Jul-02	2.3				
B2 P/B	B2	Fairview	Deep Water	2002	19-Aug-02	3.3				
B2 P/B	B2	Fairview	Deep Water	2002	5-Aug-02	4.2				
N10 P/B	N10	Gull Rock	Deep Water	2002	2-Sep-02	2.4	0.5	33		
N10 P/B	N10	Gull Rock	Deep Water	2002	19-Aug-02	3.8	0.5	30		
N10 P/B	N10	Gull Rock	Deep Water	2002	5-Aug-02	4.3	5	52		
N10 P/B	N10	Gull Rock	Deep Water	2002	1-Jul-02	4.6	3	25		
N10 P/B	N10	Gull Rock	Deep Water	2002	15-Jul-02	4.9				
N10 P/B	N10	Gull Rock	Deep Water	2002	26-May-02		0.5	0.5		
N10 P/B	N10	Gull Rock	Deep Water	2002	28-Sep-02		0.5	3		
E13 P/B	E13	Haystack Bay	Deep Water	2002	2-Sep-02	2.5				
E13 P/B	E13	Haystack Bay	Deep Water	2002	1-Jul-02	3.5				
E13 P/B	E13	Haystack Bay	Deep Water	2002	19-Aug-02	4.1				
E13 P/B	E13	Haystack Bay	Deep Water	2002	5-Aug-02	4.9				
E13 P/B	E13	Haystack Bay	Deep Water	2002	15-Jul-02	6.1				
E 6 P/B	E6	Hollow River Lagoon	River	2002	26-May-02		3	43		
E 6 P/B	E6	Hollow River Lagoon	River	2002	1-Jul-02		13	166		
E 6 P/B	E6	Hollow River Lagoon	River	2002	15-Jul-02		11	188		
E 6 P/B FD	E6	Hollow River Lagoon	River	2002	15-Jul-02		16	256		
E 6 P/B	E6	Hollow River Lagoon	River	2002	5-Aug-02		8	1174		
E 6 P/B	E6	Hollow River Lagoon	River	2002	19-Aug-02		22	587		
E 6 P/B	E6	Hollow River Lagoon	River	2002	2-Sep-02		0.5	2424		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	2-Sep-02	1.8	0.5	55.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	19-Aug-02	3.8	0.5	55.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	15-Jul-02	5.1	0.5	33.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	1-Jul-02	5.6	0.5	11.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	5-Aug-02	36.7	0.5	123.0		x
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	26-May-02		0.5	0.5		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2002	29-Sep-02		0.5	8.0		
E1 P/B	E1	Trading Bay	Deep Water	2002	2-Sep-02	1.8	0.5	8		
E1 P/B	E1	Trading Bay	Deep Water	2002	15-Jul-02	4.2	0.5	3		
E1 P/B	E1	Trading Bay	Deep Water	2002	1-Jul-02	4.6	0.5	11		
E1 P/B	E1	Trading Bay	Deep Water	2002	5-Aug-02	5.9	0.5	5		
E1 P/B	E1	Trading Bay	Deep Water	2002	19-Aug-02	17.7	0.5	13		x
E1 P/B	E1	Trading Bay	Deep Water	2002	26-May-02		0.5	3		
E1 P/B	E1	Trading Bay	Deep Water	2002	29-Sep-02		0.5	59		
B4 P/B	B4	Bigwin Bay	Disturbed	2003	1-Sep-03	2.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	30-Jun-03	3.5				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	4-Aug-03	4.8				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	8-Jun-03	4.9				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	14-Jul-03	5.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	28-Sep-03	5.4				
B4 P/B	B4	Bigwin Bay	Disturbed	2003	18-Aug-03	7.3				
B1P	B1	Bigwin East	Deep Water	2003	28-Sep-03	2.7				
B1P	B1	Bigwin East	Deep Water	2003	1-Sep-03	2.9				
B1P	B1	Bigwin East	Deep Water	2003	4-Aug-03	4.1				
B1P	B1	Bigwin East	Deep Water	2003	30-Jun-03	4.6				
B1P	B1	Bigwin East	Deep Water	2003	18-Aug-03	5.2				
B1P	B1	Bigwin East	Deep Water	2003	14-Jul-03	5.5				
B1P	B1	Bigwin East	Deep Water	2003	8-Jun-03					
B3 P/B	B3	Bigwin North	Disturbed	2003	14-Aug-03	2.7	1	43		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
B3 P/B	B3	Bigwin North	Disturbed	2003	28-Sep-03	2.7	1	11		
B3 P/B	B3	Bigwin North	Disturbed	2003	1-Sep-03	3.3	3	87		
B3 P/B	B3	Bigwin North	Disturbed	2003	30-Jun-03	4.0	1	8		
B3 P/B	B3	Bigwin North	Disturbed	2003	4-Aug-03	4.4	1	19		
B3 P/B	B3	Bigwin North	Disturbed	2003	8-Jun-03	4.5				
B3 P/B	B3	Bigwin North	Disturbed	2003	4-Aug-03	4.5	1	19		
B3 P/B	B3	Bigwin North	Disturbed	2003	14-Jul-03	5.3	1	33		
N11 P/B	N11	Britannia	Disturbed	2003	28-Sep-03	3.5				
N11 P/B	N11	Britannia	Disturbed	2003	14-Jul-03	3.6				
N11 P/B	N11	Britannia	Disturbed	2003	4-Aug-03	3.8				
N11 P/B	N11	Britannia	Disturbed	2003	8-Jun-03	4.8				
N11 P/B	N11	Britannia	Disturbed	2003	14-Aug-03	5.3				
N11 P/B	N11	Britannia	Disturbed	2003	30-Jun-03	5.6				
N11 P/B	N11	Britannia	Disturbed	2003	1-Sep-03	12.6				x
N1 P	N1	Dwight Bay	Deep Water	2003	14-Jul-03	0.7				s
N1 P	N1	Dwight Bay	Deep Water	2003	4-Aug-03	2.0				
N1 P	N1	Dwight Bay	Deep Water	2003	28-Sep-03	3.1				
N1 P	N1	Dwight Bay	Deep Water	2003	18-Aug-03	5.0				
N1 P	N1	Dwight Bay	Deep Water	2003	30-Jun-03	5.4				
N1 P	N1	Dwight Bay	Deep Water	2003	1-Sep-03	5.6				
N1 P	N1	Dwight Bay	Deep Water	2003	8-Jun-03					
B2 P/B	B2	Fairview	Deep Water	2003	1-Sep-03	2.4				
B2 P/B	B2	Fairview	Deep Water	2003	28-Sep-03	2.6				
B2 P/B	B2	Fairview	Deep Water	2003	18-Aug-03	3.2				
B2 P/B	B2	Fairview	Deep Water	2003	30-Jun-03	4.0				
B2 P/B	B2	Fairview	Deep Water	2003	14-Jul-03	4.2				
B2 P/B	B2	Fairview	Deep Water	2003	4-Aug-03	4.2				
B2 P/B	B2	Fairview	Deep Water	2003	8-Jun-03	4.4				
N10 P/B	N10	Gull Rock	Deep Water	2003	1-Sep-03	2.1	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2003	28-Sep-03	2.7	1	13		
N10 P/B	N10	Gull Rock	Deep Water	2003	18-Aug-03	4.4	5	8		
N10 P/B	N10	Gull Rock	Deep Water	2003	30-Jun-03	4.8	19	30		
N10 P/B	N10	Gull Rock	Deep Water	2003	8-Jun-03	5.0				
N10 P/B	N10	Gull Rock	Deep Water	2003	4-Aug-03	6.1	1	8		
N10 P/B	N10	Gull Rock	Deep Water	2003	14-Jul-03	16.9	1	5		x
E13 P/B	E13	Haystack Bay	Deep Water	2003	28-Sep-03	2.7				
E13 P/B	E13	Haystack Bay	Deep Water	2003	1-Sep-03	3.0				
E13 P/B	E13	Haystack Bay	Deep Water	2003	14-Aug-03	4.2				
E13 P/B	E13	Haystack Bay	Deep Water	2003	8-Jun-03	4.8				
E13 P/B	E13	Haystack Bay	Deep Water	2003	4-Aug-03	4.9				
E13 P/B	E13	Haystack Bay	Deep Water	2003	30-Jun-03	5.2				
E13 P/B	E13	Haystack Bay	Deep Water	2003	14-Jul-03	5.9				
E 6 P/B	E6	Hollow River Lagoon	River	2003	28-Sep-03	5.1				
E 6 P/B	E6	Hollow River Lagoon	River	2003	14-Aug-03	5.2	3	469		
E 6 P/B	E6	Hollow River Lagoon	River	2003	1-Sep-03	5.2				
E 6 P/B	E6	Hollow River Lagoon	River	2003	4-Aug-03	7.7	25	619		
E 6 P/B	E6	Hollow River Lagoon	River	2003	14-Jul-03	8.5	11	388		
E 6 P/B	E6	Hollow River Lagoon	River	2003	30-Jun-03	11.4	25	240		
E 6 P/B LD	E6	Hollow River Lagoon	River	2003	4-Aug-03		24	76		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2003	14-Aug-03	4.4	30	271		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2003	1-Sep-03	4.4				
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2003	4-Aug-03	6.4	403	619		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2003	14-Jul-03	6.5	102	534		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2003	30-Jun-03	7.3	30	177		
E18 P/B	E18	Hollow River mouth	River	2003	14-Aug-03	4.3	52	226		
E18 P/B	E18	Hollow River mouth	River	2003	1-Sep-03	4.3				
E18 P/B	E18	Hollow River mouth	River	2003	4-Aug-03	5.1	94	489		
E18 P/B	E18	Hollow River mouth	River	2003	14-Jul-03	6.2	46	307		
E18 P/B	E18	Hollow River mouth	River	2003	30-Jun-03	7.4	30	166		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	1-Sep-03	1.8	1.0	16.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	28-Sep-03	2.3	1.0	5.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	14-Aug-03	2.9	3.0	5.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	4-Aug-03	3.5	1.0	7.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	30-Jun-03	4.0	1.0	1.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	14-Jul-03	4.9	1.0	11.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2003	8-Jun-03	5.2				
E1 P/B	E1	Trading Bay	Deep Water	2003	1-Sep-03	2.4	1	1		
E1 P/B	E1	Trading Bay	Deep Water	2003	28-Sep-03	2.8	1	3		
E1 P/B	E1	Trading Bay	Deep Water	2003	18-Aug-03	2.9	1	5		
E1 P/B	E1	Trading Bay	Deep Water	2003	30-Jun-03	4.3	3	8		
E1 P/B	E1	Trading Bay	Deep Water	2003	14-Jul-03	4.9	1	3		
E1 P/B	E1	Trading Bay	Deep Water	2003	4-Aug-03	6.9	1	1		
E1 P/B	E1	Trading Bay	Deep Water	2003	8-Jun-03					
B4 P/B	B4	Bigwin Bay	Disturbed	2004	5-Jul-04	3.6				
B4 P/B	B4	Bigwin Bay	Disturbed	2004	6-Sep-04	4.3				
B4 P/B	B4	Bigwin Bay	Disturbed	2004	2-Aug-04	4.9				
B4 P/B	B4	Bigwin Bay	Disturbed	2004	19-Jul-04	6.6				
B4 P/B	B4	Bigwin Bay	Disturbed	2004	23-Aug-04					
B1P	B1	Bigwin East	Deep Water	2004	5-Jul-04	2.7				
B1P	B1	Bigwin East	Deep Water	2004	6-Sep-04	3.6				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
B1P	B1	Bigwin East	Deep Water	2004	2-Aug-04	4.2				
B1P	B1	Bigwin East	Deep Water	2004	23-Aug-04	5.1				
B1P	B1	Bigwin East	Deep Water	2004	19-Jul-04	5.3				
B3 P/B	B3	Bigwin North	Disturbed	2004	5-Jul-04	3.4	8	141		
B3 P/B	B3	Bigwin North	Disturbed	2004	2-Aug-04	5.1	16	72		
B3 P/B	B3	Bigwin North	Disturbed	2004	6-Sep-04	5.1	3	83		
B3 P/B	B3	Bigwin North	Disturbed	2004	19-Jul-04	7.7	5	280		
B3 P/B	B3	Bigwin North	Disturbed	2004	23-Aug-04	27.7	1	65		x
B3 P/B FD	B3	Bigwin North	Disturbed	2004	6-Sep-04		3	76		
B3 P/B LD	B3	Bigwin North	Disturbed	2004	6-Sep-04		1	80		
N11 P/B	N11	Britannia	Disturbed	2004	5-Jul-04	2.8				
N11 P/B	N11	Britannia	Disturbed	2004	23-Aug-04	3.6				
N11 P/B	N11	Britannia	Disturbed	2004	2-Aug-04	4.6				
N11 P/B	N11	Britannia	Disturbed	2004	19-Jul-04	5.1				
N11 P/B	N11	Britannia	Disturbed	2004	6-Sep-04					
N1 P	N1	Dwight Bay	Deep Water	2004	23-Aug-04	4.4				
N1 P	N1	Dwight Bay	Deep Water	2004	2-Aug-04	6.3				
N1 P	N1	Dwight Bay	Deep Water	2004	19-Jul-04	7.7				
N1 P	N1	Dwight Bay	Deep Water	2004	6-Sep-04					
B2 P/B	B2	Fairview	Deep Water	2004	5-Jul-04	1.7				
B2 P/B	B2	Fairview	Deep Water	2004	6-Sep-04	3.9				
B2 P/B	B2	Fairview	Deep Water	2004	23-Aug-04	4.4				
B2 P/B	B2	Fairview	Deep Water	2004	19-Jul-04	4.8				
B2 P/B	B2	Fairview	Deep Water	2004	2-Aug-04	5.3				
N10 P/B	N10	Gull Rock	Deep Water	2004	6-Sep-04	4.1				
N10 P/B	N10	Gull Rock	Deep Water	2004	23-Aug-04	4.7	1	8		
N10 P/B	N10	Gull Rock	Deep Water	2004	19-Jul-04	5.0	1	11		
N10 P/B	N10	Gull Rock	Deep Water	2004	2-Aug-04	5.4	1	11		
N10 P/B	N10	Gull Rock	Deep Water	2004	5-Jul-04	6.2	1	52		
E13 P/B	E13	Haystack Bay	Deep Water	2004	5-Jul-04	2.4				
E13 P/B	E13	Haystack Bay	Deep Water	2004	23-Aug-04	4.3				
E13 P/B	E13	Haystack Bay	Deep Water	2004	19-Jul-04	5.9				
E13 P/B	E13	Haystack Bay	Deep Water	2004	2-Aug-04	5.9				
E13 P/B	E13	Haystack Bay	Deep Water	2004	6-Sep-04	74				x
E18 P/B	E18	Hollow River mouth	River	2004	5-Jul-04	6.0	141	694		
E18 P/B	E18	Hollow River mouth	River	2004	2-Aug-04	7.1	62	1038		
E18 P/B	E18	Hollow River mouth	River	2004	19-Jul-04	25.1	33	166		R
E18 P/B FD	E18	Hollow River mouth	River	2004	2-Aug-04		119	1174		
E18 P/B LD	E18	Hollow River mouth	River	2004	2-Aug-04		38	80		
E18 P/B	E18	Hollow River mouth	River	2004	23-Aug-04		52	132		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2004	5-Jul-04	2.8	8.0	19.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2004	23-Aug-04	3.3	3.0	33.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2004	2-Aug-04	4.3	1.0	28.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2004	6-Sep-04	4.7	1.0	127.0		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2004	19-Jul-04	5.8	1.0	13.0		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2004	2-Aug-04		3.0	13.0		
N13 P/B LD	N13	Moffat's	Nearshore Undisturbed	2004	2-Aug-04		1.0	8.0		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2004	23-Aug-04		1.0	33.0		
N 2P/B	N2	Oxtongue mouth	River	2004	6-Sep-04	6.5	1	206		
N 2P/B	N2	Oxtongue mouth	River	2004	23-Aug-04	7.1	1	69		
N 2P/B	N2	Oxtongue mouth	River	2004	19-Jul-04	7.9	16	156		
N 2P/B	N2	Oxtongue mouth	River	2004	2-Aug-04	8.1	46	350		
N 2P/B	N2	Oxtongue mouth	River	2004	5-Jul-04					
E1 P/B	E1	Trading Bay	Deep Water	2004	5-Jul-04	1.9	3	19		
E1 P/B	E1	Trading Bay	Deep Water	2004	6-Sep-04	3.9	1	22		
E1 P/B	E1	Trading Bay	Deep Water	2004	23-Aug-04	5.8				
E1 P/B	E1	Trading Bay	Deep Water	2004	2-Aug-04	7.8	3	22		
E1 P/B	E1	Trading Bay	Deep Water	2004	19-Jul-04	12.3	3	16		x
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2005	1-Sep-05	3.7	1	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2005	18-Jul-05	4.3	1	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2005	4-Jul-05	6.5	3	8		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2005	1-Aug-05		1	11		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2005	1-Aug-05		1	8		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2005	14-Aug-05		1	5		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2005	1-Sep-05		1	8		
S1 P/B LD	S1	Adamson's Island	Nearshore Undisturbed	2005	1-Sep-05		1	4		
B1P	B1	Bigwin East	Deep Water	2005	4-Jul-05	2.8				
B1P	B1	Bigwin East	Deep Water	2005	1-Aug-05	3.7				
B1P	B1	Bigwin East	Deep Water	2005	1-Sep-05	3.8				
B1P	B1	Bigwin East	Deep Water	2005	18-Jul-05	4.8				
B1P	B1	Bigwin East	Deep Water	2005	14-Aug-05	4.8				
B3 P/B	B3	Bigwin North	Disturbed	2005	1-Aug-05	3.5	3	49		
B3 P/B	B3	Bigwin North	Disturbed	2005	4-Jul-05	3.9	5	33		
B3 P/B	B3	Bigwin North	Disturbed	2005	1-Sep-05	3.9	8	28		
B3 P/B	B3	Bigwin North	Disturbed	2005	18-Jul-05	9.3	8	25		
B3 P/B	B3	Bigwin North	Disturbed	2005	14-Aug-05		5	46		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2005	18-Jul-05	6.2	3	11		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2005	14-Aug-05	10.3	1	1		x
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2005	4-Jul-05		3	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2005	4-Jul-05		3	11		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2005	18-Jul-05		5	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2005	1-Aug-05		3	16		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2005	1-Aug-05		5	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2005	14-Aug-05		3	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2005	1-Sep-05		1	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2005	1-Sep-05		1	13		
N11 P/B	N11	Britannia	Disturbed	2005	18-Jul-05	2.1				
N11 P/B	N11	Britannia	Disturbed	2005	18-Jul-05	4.7				
N11 P/B	N11	Britannia	Disturbed	2005	14-Aug-05	5.8				
N11 P/B	N11	Britannia	Disturbed	2005	1-Sep-05	9.4				x
N11 P/B	N11	Britannia	Disturbed	2005	4-Jul-05					
N11 P/B	N11	Britannia	Disturbed	2005	1-Aug-05					
N1 P	N1	Dwight Bay	Deep Water	2005	1-Aug-05	3.3				
N1 P	N1	Dwight Bay	Deep Water	2005	1-Sep-05	3.4				
N1 P	N1	Dwight Bay	Deep Water	2005	14-Aug-05	5.9				
N1 P	N1	Dwight Bay	Deep Water	2005	18-Jul-05	6.1				
B2 P/B	B2	Fairview	Deep Water	2005	1-Aug-05	3.5				
B2 P/B	B2	Fairview	Deep Water	2005	14-Aug-05	4.0				
B2 P/B	B2	Fairview	Deep Water	2005	1-Sep-05	4.2				
B2 P/B	B2	Fairview	Deep Water	2005	18-Jul-05	7.2				
B2 P/B	B2	Fairview	Deep Water	2005	4-Jul-05					
N10 P/B	N10	Gull Rock	Deep Water	2005	1-Aug-05	2.7	3	8		
N10 P/B	N10	Gull Rock	Deep Water	2005	4-Jul-05	4.1	5	8		
N10 P/B	N10	Gull Rock	Deep Water	2005	1-Sep-05	4.4	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2005	18-Jul-05	5.0	1	5		
N10 P/B	N10	Gull Rock	Deep Water	2005	14-Aug-05	5.6	1	3		
N10 P/B FD	N10	Gull Rock	Deep Water	2005	18-Jul-05		3	8		
N10 P/B LD	N10	Gull Rock	Deep Water	2005	18-Jul-05		1	3		
N10 P/B FD	N10	Gull Rock	Deep Water	2005	1-Sep-05		1	1		
N10 P/B LD	N10	Gull Rock	Deep Water	2005	1-Sep-05		1	1		
E18 P/B	E18	Hollow River mouth	River	2005	1-Aug-05	3.0	8	59		
E18 P/B	E18	Hollow River mouth	River	2005	1-Sep-05	3.8	19	114		
E18 P/B	E18	Hollow River mouth	River	2005	18-Jul-05	6.3	11	102		
E18 P/B	E18	Hollow River mouth	River	2005	4-Jul-05	11.0	16	72		R
E18 P/B	E18	Hollow River mouth	River	2005	14-Aug-05		28	182		
E20 P/B	E20	Little Trading Bay	Deep Water	2005	1-Sep-05	4.8	3	33		
E20 P/B	E20	Little Trading Bay	Deep Water	2005	1-Aug-05	5.2	3	19		
E20 P/B	E20	Little Trading Bay	Deep Water	2005	18-Jul-05	5.8	5	11		
E20 P/B	E20	Little Trading Bay	Deep Water	2005	4-Jul-05	5.9	8	28		
E20 P/B FD	E20	Little Trading Bay	Deep Water	2005	18-Jul-05		3	8		
E20 P/B LD	E20	Little Trading Bay	Deep Water	2005	18-Jul-05		1	4		
E20 P/B	E20	Little Trading Bay	Deep Water	2005	14-Aug-05		1	33		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2005	18-Jul-05	2.4	1	3		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2005	1-Sep-05	2.9	1	5		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2005	14-Aug-05	3.9	1	8		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2005	4-Jul-05	11.0	1	5		x
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2005	1-Aug-05		1	16		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2005	14-Aug-05		1	11		
S2 P/B LD	S2	Menominee Bay	Nearshore Undisturbed	2005	14-Aug-05		1	12		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2005	18-Jul-05	2.8	5	39		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2005	1-Sep-05	3.5	8	22		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2005	4-Jul-05	4.0				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2005	14-Aug-05	4.4	3	19		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2005	4-Jul-05	5.7	3	16	bs	
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2005	18-Jul-05		3	30		
N13 P/B LD	N13	Moffat's	Nearshore Undisturbed	2005	18-Jul-05		1	56		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2005	1-Aug-05		3	43		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2005	1-Aug-05		5	28		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2005	14-Aug-05		3	22		
N13 P/B LD	N13	Moffat's	Nearshore Undisturbed	2005	14-Aug-05		1	8		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2005	1-Sep-05		8	28		
N 2P/B	N2	Oxtongue mouth	River	2005	1-Aug-05	4.2				
N 2P/B	N2	Oxtongue mouth	River	2005	1-Sep-05	6.1				
N 2P/B	N2	Oxtongue mouth	River	2005	14-Aug-05	6.2	52	87		
N 2P/B	N2	Oxtongue mouth	River	2005	18-Jul-05	7.2	28	132		
N 2P/B	N2	Oxtongue mouth	River	2005	4-Jul-05					
S3 P/B	S3	Price's Point	Deep Water	2005	14-Aug-05	2.4	1	11		
S3 P/B	S3	Price's Point	Deep Water	2005	18-Jul-05	3.7	1	8		
S3 P/B	S3	Price's Point	Deep Water	2005	1-Sep-05	4.1	1	8		
S3 P/B	S3	Price's Point	Deep Water	2005	4-Jul-05		1	11		
S3 P/B	S3	Price's Point	Deep Water	2005	1-Aug-05		1	5		
S3 P/B FD	S3	Price's Point	Deep Water	2005	14-Aug-05		1	3		
S3 P/B LD	S3	Price's Point	Deep Water	2005	14-Aug-05		1	1		
S3 P/B FD	S3	Price's Point	Deep Water	2005	1-Sep-05		1	5		
S3 P/B LD	S3	Price's Point	Deep Water	2005	1-Sep-05		1	1		
E1 P/B	E1	Trading Bay	Deep Water	2005	1-Aug-05	2.6	5	11		
E1 P/B	E1	Trading Bay	Deep Water	2005	18-Jul-05	4.9	8	16		
E1 P/B	E1	Trading Bay	Deep Water	2005	1-Sep-05	6.0	3	8		
E1 P/B	E1	Trading Bay	Deep Water	2005	4-Jul-05	6.7	5	8		
E1 P/B	E1	Trading Bay	Deep Water	2005	14-Aug-05		5	16		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2006	3-Jul-06	3.7	1	43		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2006	1-Sep-06	4.1				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2006	17-Jul-06	5.1	1	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2006	21-Aug-06	5.2	3	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2006	7-Aug-06	5.6	1	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2006	1-Sep-06	7.7	5	16	bs	
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2006	7-Aug-06		1	25		
S1 P/B LD	S1	Adamson's Island	Nearshore Undisturbed	2006	7-Aug-06		1	17		
B1P	B1	Bigwin East	Deep Water	2006	7-Aug-06	3.3	1	8		
B1P	B1	Bigwin East	Deep Water	2006	1-Sep-06	4.1	3	8		
B1P FD	B1	Bigwin East	Deep Water	2006	7-Aug-06	4.3				
B1P FD	B1	Bigwin East	Deep Water	2006	1-Sep-06	5.4	1	3		
B1P	B1	Bigwin East	Deep Water	2006	3-Jul-06	6.1	1	1		
B1P	B1	Bigwin East	Deep Water	2006	21-Aug-06	6.1	3	15		
B1P	B1	Bigwin East	Deep Water	2006	17-Jul-06	6.3	3	5		
B1P FD	B1	Bigwin East	Deep Water	2006	21-Aug-06	7.4				
B1P FD	B1	Bigwin East	Deep Water	2006	17-Jul-06		5	13		
B1P LD	B1	Bigwin East	Deep Water	2006	17-Jul-06		4	4		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	3-Jul-06	3.9	1	1		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	7-Aug-06	5.7	1	33		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	21-Aug-06	5.7	1	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	17-Jul-06	7.7	1	1		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2006	3-Jul-06		1	1		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2006	7-Aug-06		3	22		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2006	7-Aug-06		1	54		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	1-Sep-06		3	3		
N1 P	N1	Dwight Bay	Deep Water	2006	17-Jul-06	4.5	8	8		
N1 P/B FD	N1	Dwight Bay	Deep Water	2006	17-Jul-06	4.5				
N1 P	N1	Dwight Bay	Deep Water	2006	3-Jul-06	5.0	1	1		
N1 P	N1	Dwight Bay	Deep Water	2006	21-Aug-06	6.7	1	1		
N1 P	N1	Dwight Bay	Deep Water	2006	1-Sep-06	9.2	3	13		
N1 P/B FD	N1	Dwight Bay	Deep Water	2006	1-Sep-06	31.9			bs	
N1 P/B FD	N1	Dwight Bay	Deep Water	2006	21-Aug-06		3	3		
N1 P/B LD	N1	Dwight Bay	Deep Water	2006	21-Aug-06		4	8		
B2 P/B	B2	Fairview	Deep Water	2006	1-Sep-06	4.1	1	5		
B2 P/B	B2	Fairview	Deep Water	2006	7-Aug-06	4.3	3	8		
B2 P/B	B2	Fairview	Deep Water	2006	3-Jul-06	4.7	5	5		
B2 P/B	B2	Fairview	Deep Water	2006	17-Jul-06	6.3	1	1		
B2 P/B	B2	Fairview	Deep Water	2006	21-Aug-06	6.7	1	5		
B2P FD	B2	Fairview	Deep Water	2006	7-Aug-06	7.5	3	3	bs	
B2P FD	B2	Fairview	Deep Water	2006	21-Aug-06	7.5				
B2P LD	B2	Fairview	Deep Water	2006	7-Aug-06		4	12		
N10 P/B	N10	Gull Rock	Deep Water	2006	17-Jul-06	4.2	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2006	8-Aug-06	4.3	1	8		
N10 P/B	N10	Gull Rock	Deep Water	2006	3-Jul-06	4.7	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2006	21-Aug-06	6.7	5	13		
N10 P/B	N10	Gull Rock	Deep Water	2006	1-Sep-06	8.3	1	3		
N10 P/B FD	N10	Gull Rock	Deep Water	2006	3-Jul-06		3	5		
E13 P/B	E13	Haystack Bay	Deep Water	2006	3-Jul-06	5.6	3	3		
E13 P/B	E13	Haystack Bay	Deep Water	2006	17-Jul-06	5.7	3	8		
E13 P/B	E13	Haystack Bay	Deep Water	2006	21-Aug-06	9.1	3	3		
E13 P/B	E13	Haystack Bay	Deep Water	2006	1-Sep-06	14.1	3	5		x
E13 P/B	E13	Haystack Bay	Deep Water	2006	7-Aug-06	40.3	1	5		x
E13 P/B FD	E13	Haystack Bay	Deep Water	2006	21-Aug-06		5	11		
E13 P/B LD	E13	Haystack Bay	Deep Water	2006	21-Aug-06		4	8		
E20 P/B	E20	Little Trading Bay	Deep Water	2006	8-Aug-06	4.4	3	19		
E20 P/B	E20	Little Trading Bay	Deep Water	2006	17-Jul-06	6.1	5	19		
E20 P/B	E20	Little Trading Bay	Deep Water	2006	21-Aug-06	6.5				
E20 P/B	E20	Little Trading Bay	Deep Water	2006	1-Sep-06	10.3	3	11		
E20 P/B	E20	Little Trading Bay	Deep Water	2006	3-Jul-06	11.9	3	13		
E20 P/B FD	E20	Little Trading Bay	Deep Water	2006	17-Jul-06		5	19		
E20 P/B LD	E20	Little Trading Bay	Deep Water	2006	17-Jul-06		4	20		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2006	7-Aug-06	2.8	3	19		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2006	17-Jul-06	3.9	1	8		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2006	3-Jul-06	4.8	1	1		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2006	21-Aug-06	5.6	3	3		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2006	1-Sep-06	8.1				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2006	1-Sep-06	15.9	1	5	bs	
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2006	3-Jul-06		3	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	7-Aug-06	4.2	3	5		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	17-Jul-06	4.3	5	13		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	1-Sep-06	4.7	3	5		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	3-Jul-06	4.8	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	21-Aug-06	6.7	1	3		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2006	3-Jul-06		3	11		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2006	17-Jul-06		3	11		
N13 P/B LD	N13	Moffat's	Nearshore Undisturbed	2006	17-Jul-06		4	16		
S3 P/B	S3	Price's Point	Deep Water	2006	7-Aug-06	4.1	1	16		
S3 P/B	S3	Price's Point	Deep Water	2006	17-Jul-06	4.9	1	1		
S3 P/B	S3	Price's Point	Deep Water	2006	3-Jul-06	5.9	1	5		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
S3 P/B	S3	Price's Point	Deep Water	2006	21-Aug-06	6.5	3	3		
S3 P/B	S3	Price's Point	Deep Water	2006	1-Sep-06	8.5	1	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2006	1-Sep-06	4.2	1	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2006	7-Aug-06	6.0	1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2006	3-Jul-06	6.4	1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2006	17-Jul-06	7.7	1	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2006	21-Aug-06	10.2	1	8		x
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2006	21-Aug-06	10.2				x
E1 P/B	E1	Trading Bay	Deep Water	2006	7-Aug-06	3.3	1	8		
E1 P/B FD	E1	Trading Bay	Deep Water	2006	17-Jul-06	4.5				
E1 P/B	E1	Trading Bay	Deep Water	2006	3-Jul-06	5.4	1	5		
E1 P/B	E1	Trading Bay	Deep Water	2006	1-Sep-06	5.6	3	13		
E1 P/B	E1	Trading Bay	Deep Water	2006	17-Jul-06	7.3	1	1	bs	
E1 P/B	E1	Trading Bay	Deep Water	2006	21-Aug-06	11.0	3	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2006	21-Aug-06		5	13		
E1 P/B LD	E1	Trading Bay	Deep Water	2006	21-Aug-06		4	4		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2007	20-Aug-07	2.0	1	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2007	2-Jul-07	2.5	1	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2007	31-Aug-07	3.7	1	1		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2007	6-Aug-07	4.1	1	13		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2007	23-Jul-07	4.2	1	1		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2007	2-Jul-07		1	1		
S1 P/B LD	S1	Adamson's Island	Nearshore Undisturbed	2007	2-Jul-07		1	1		
B1 P/B	B1	Bigwin East	Deep Water	2007	20-Aug-07	2.9	1	1		
B1 P/B	B1	Bigwin East	Deep Water	2007	2-Jul-07	3.7	1	1		
B1 P/B	B1	Bigwin East	Deep Water	2007	23-Jul-07	4.8	1	1		
B1 P/B	B1	Bigwin East	Deep Water	2007	6-Aug-07	5.1	1	5		
B1 P/B	B1	Bigwin East	Deep Water	2007	31-Aug-07	6.1	1	3		
B1P FD	B1	Bigwin East	Deep Water	2007	23-Jul-07		1	3		
B1P LD	B1	Bigwin East	Deep Water	2007	23-Jul-07		4	56		
B3 P/B	B3	Bigwin North	Disturbed	2007	2-Jul-07	5.4	1	5		
B3 P/B	B3	Bigwin North	Disturbed	2007	31-Aug-07	5.6	3	28		
B3 P/B	B3	Bigwin North	Disturbed	2007	23-Jul-07	5.7	1	1		
B3 P/B	B3	Bigwin North	Disturbed	2007	20-Aug-07	8.3	1	8		
B3 P/B	B3	Bigwin North	Disturbed	2007	6-Aug-07	97.7	1	3		x
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2007	20-Aug-07	3.0	1	3		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2007	2-Jul-07	3.8	1	1		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2007	31-Aug-07	4.3	1	3		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2007	6-Aug-07	7.3	1	5		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2007	23-Jul-07	7.8	1	5		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2007	6-Aug-07		1	8		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2007	6-Aug-07		1	108		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2007	20-Aug-07		1	1		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2007	20-Aug-07		1	8		
N11 P/B	N11	Britannia	Disturbed	2007	2-Jul-07	3.5	3	5		
N11 P/B	N11	Britannia	Disturbed	2007	6-Aug-07	3.8	1	5		
N11 P/B	N11	Britannia	Disturbed	2007	31-Aug-07	5.1	1	3		
N11 P/B	N11	Britannia	Disturbed	2007	20-Aug-07	5.3	5	11		
N11 P/B	N11	Britannia	Disturbed	2007	23-Jul-07	5.8	1	3		
N11 P/B FD	N11	Britannia	Disturbed	2007	2-Jul-07		3	8		
N11 P/B LD	N11	Britannia	Disturbed	2007	2-Jul-07		1	4		
N11 P/B FD	N11	Britannia	Disturbed	2007	31-Aug-07		1	11		
N1 P/B FD	N1	Dwight Bay	Deep Water	2007	20-Aug-07	4.0				
N1 P/B	N1	Dwight Bay	Deep Water	2007	2-Jul-07	4.3	1	5		
N1 P/B	N1	Dwight Bay	Deep Water	2007	20-Aug-07	4.6	1	1		
N1 P/B	N1	Dwight Bay	Deep Water	2007	31-Aug-07	5.3	1	5		
N1 P/B	N1	Dwight Bay	Deep Water	2007	23-Jul-07	6.1	1	13		
N1 P/B	N1	Dwight Bay	Deep Water	2007	6-Aug-07	9.6	1	5		
N1 P/B FD	N1	Dwight Bay	Deep Water	2007	23-Jul-07		1	8		
N1 P/B LD	N1	Dwight Bay	Deep Water	2007	23-Jul-07		1	4		
N1 P/B FD	N1	Dwight Bay	Deep Water	2007	6-Aug-07		1	5		
N1 P/B LD	N1	Dwight Bay	Deep Water	2007	6-Aug-07		1	8		
B2 P/B	B2	Fairview	Deep Water	2007	20-Aug-07	2.4	1	5		
B2 P/B	B2	Fairview	Deep Water	2007	2-Jul-07	3.3	1	3		
B2 P/B	B2	Fairview	Deep Water	2007	6-Aug-07	4.1	1	5		
B2 P/B	B2	Fairview	Deep Water	2007	23-Jul-07	5.7	1	1		
B2 P/B	B2	Fairview	Deep Water	2007	31-Aug-07	12.5	1	3		x
B2 P/B FD	B2	Fairview	Deep Water	2007	6-Aug-07		1	1		
B2 P/B LD	B2	Fairview	Deep Water	2007	6-Aug-07		4	8		
N10 P/B	N10	Gull Rock	Deep Water	2007	2-Jul-07	4.1	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2007	20-Aug-07	4.1	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2007	31-Aug-07	4.6	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2007	6-Aug-07	4.9	1	5		
N10 P/B	N10	Gull Rock	Deep Water	2007	23-Jul-07	5.3	1	1		
N10 P/B FD	N10	Gull Rock	Deep Water	2007	20-Aug-07	5.4				
N10 P/B FD	N10	Gull Rock	Deep Water	2007	2-Jul-07		1	8		
N10 P/B LD	N10	Gull Rock	Deep Water	2007	2-Jul-07		1	8		
E13 P/B	E13	Haystack Bay	Deep Water	2007	20-Aug-07	2.6	1	1		
E13 P/B	E13	Haystack Bay	Deep Water	2007	2-Jul-07	4.0	1	3		
E13 P/B	E13	Haystack Bay	Deep Water	2007	23-Jul-07	4.3	1	5		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
E13 P/B	E13	Haystack Bay	Deep Water	2007	31-Aug-07	5.0	1	5		
E13 P/B	E13	Haystack Bay	Deep Water	2007	6-Aug-07	10.8	1	13		
E13 P/B FD	E13	Haystack Bay	Deep Water	2007	6-Aug-07	12.8				x
E 6 P/B	E6	Hollow River Lagoon	River	2007	2-Jul-07	3.6	3	263		
E 6 P/B	E6	Hollow River Lagoon	River	2007	20-Aug-07	5.1	25	79		
E 6 P/B	E6	Hollow River Lagoon	River	2007	23-Jul-07	5.7	25	79		
E 6 P/B	E6	Hollow River Lagoon	River	2007	6-Aug-07	5.7	39	110		
E 6 P/B	E6	Hollow River Lagoon	River	2007	31-Aug-07	6.5	8	52		
E 6 P/B FD	E6	Hollow River Lagoon	River	2007	6-Aug-07		39	108		
E 6 P/B LD	E6	Hollow River Lagoon	River	2007	6-Aug-07		42	600		
E 6 P/B FD	E6	Hollow River Lagoon	River	2007	20-Aug-07		30	98		
E 6 P/B LD	E6	Hollow River Lagoon	River	2007	20-Aug-07		26	172		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2007	20-Aug-07		3	25		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2007	31-Aug-07		3	11		
E18 P/B	E18	Hollow River mouth	River	2007	2-Jul-07	3.9	1	177		
E18 P/B	E18	Hollow River mouth	River	2007	20-Aug-07	3.9	25	30		
E18 P/B	E18	Hollow River mouth	River	2007	6-Aug-07	5.7	30	79		
E18 P/B	E18	Hollow River mouth	River	2007	31-Aug-07	5.7	5	43		
E18 P/B	E18	Hollow River mouth	River	2007	23-Jul-07	6.6	28	72		
E20 P/B	E20	Little Trading Bay	Deep Water	2007	2-Jul-07	4.8	1	25		
E20 P/B	E20	Little Trading Bay	Deep Water	2007	31-Aug-07	7.0	1	5		
E20 P/B	E20	Little Trading Bay	Deep Water	2007	6-Aug-07	7.6	3	8		
E20 P/B	E20	Little Trading Bay	Deep Water	2007	23-Jul-07	7.9	8	65		
E20 P/B	E20	Little Trading Bay	Deep Water	2007	20-Aug-07	7.9	1	8		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	2-Jul-07	2.7	1	1		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	20-Aug-07	2.7	3	11		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	23-Jul-07	3.8	1	1		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	31-Aug-07	4.2	1	3		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	6-Aug-07	6.0	3	5		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2007	23-Jul-07		1	1		
S2 P/B LD	S2	Menominee Bay	Nearshore Undisturbed	2007	23-Jul-07		4	60		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2007	20-Aug-07		5	108		
S2 P/B LD	S2	Menominee Bay	Nearshore Undisturbed	2007	20-Aug-07		8	116		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	20-Aug-07	2.7	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	31-Aug-07	3.7	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	2-Jul-07	3.8	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	23-Jul-07	5.0	3	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	6-Aug-07	15.1	1	11		x
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2007	2-Jul-07		1	5		
N13 P/B LD	N13	Moffat's	Nearshore Undisturbed	2007	2-Jul-07		1	4		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2007	2-Jul-07	3.9	1	16		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2007	23-Jul-07	7.2	1	3		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2007	20-Aug-07	12.9	3	8		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2007	31-Aug-07	16.1	1	1		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2007	6-Aug-07	16.9	1	11		
E25 P/B FD	E25	Narrows East	Nearshore Undisturbed	2007	23-Jul-07		1	3		
E25 P/B LD	E25	Narrows East	Nearshore Undisturbed	2007	23-Jul-07		1	1		
E25 P/B FD	E25	Narrows East	Nearshore Undisturbed	2007	31-Aug-07		1	5		
E26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2007	23-Jul-07	4.1				
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2007	31-Aug-07	4.4	1	8		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2007	2-Jul-07	4.5	1	65		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2007	20-Aug-07	5.7	1	1		
E26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2007	6-Aug-07	6.4	1	1		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2007	6-Aug-07	7.0	13	25		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2007	23-Jul-07	8.2	1	1	bs	
E26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2007	6-Aug-07		8	13		
N26 P/B	N26	Portage Bay RR	Nearshore Undisturbed	2007	6-Aug-07	5.2	1	13		
N26 P/B	N26	Portage Bay RR	Nearshore Undisturbed	2007	25-Jul-07	5.7				
N26 P/B	N26	Portage Bay RR	Nearshore Undisturbed	2007	20-Aug-07	7.0	1	11		
N26 P/B	N26	Portage Bay RR	Nearshore Undisturbed	2007	31-Aug-07	8.1	3	19		
N26 P/B	N26	Portage Bay RR	Nearshore Undisturbed	2007	2-Jul-07					
N27 P/B	N27	Portage Bay Wee Is.	Deep Water	2007	20-Aug-07	4.6	1	5		
N27 P/B	N27	Portage Bay Wee Is.	Deep Water	2007	6-Aug-07	5.2	1	3		
N27 P/B	N27	Portage Bay Wee Is.	Deep Water	2007	20-Aug-07	5.5				
N27 P/B	N27	Portage Bay Wee Is.	Deep Water	2007	25-Jul-07	6.1				
N27 P/B	N27	Portage Bay Wee Is.	Deep Water	2007	31-Aug-07	6.7	1	5		
S3 P/B	S3	Price's Point	Deep Water	2007	6-Aug-07	3.6	1	3		
S3 P/B	S3	Price's Point	Deep Water	2007	23-Jul-07	4.0	1	1		
S3 P/B	S3	Price's Point	Deep Water	2007	20-Aug-07	4.2	1	1		
S3 P/B	S3	Price's Point	Deep Water	2007	2-Jul-07	5.2	1	1		
S3 P/B	S3	Price's Point	Deep Water	2007	31-Aug-07	5.3	1	3		
S3 P/B FD	S3	Price's Point	Deep Water	2007	2-Jul-07		1	4		
S3 P/B LD	S3	Price's Point	Deep Water	2007	2-Jul-07		1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2007	2-Jul-07	3.4	1	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2007	20-Aug-07	4.6	1	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2007	23-Jul-07	4.9	1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2007	6-Aug-07	5.8	1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2007	31-Aug-07	6.2	1	1		
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2007	23-Jul-07		1	3		
E30 P/B LD	E30	Ten Mile Bay	Deep Water	2007	23-Jul-07		1	4		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
E1 P/B	E1	Trading Bay	Deep Water	2007	2-Jul-07	2.9	1	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2007	20-Aug-07	3.3				
E1 P/B	E1	Trading Bay	Deep Water	2007	20-Aug-07	3.8	1	1		
E1 P/B	E1	Trading Bay	Deep Water	2007	31-Aug-07	4.6	1	1		
E1 P/B	E1	Trading Bay	Deep Water	2007	23-Jul-07	6.1	1	16		
E1 P/B	E1	Trading Bay	Deep Water	2007	6-Aug-07	6.2	1	1		
E1 P/B FD	E1	Trading Bay	Deep Water	2007	6-Aug-07		1	8		
E1 P/B LD	E1	Trading Bay	Deep Water	2007	6-Aug-07		1	6		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2008	18-Aug-08	3.0	1	13		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2008	14-Jul-08	4.3	8	65		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2008	29-Aug-08	4.4	1	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2008	30-Jun-08	4.6	1	1		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2008	4-Aug-08	6.2	1	3		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2008	29-Aug-08		1	1		
B4 P/B	B4	Bigwin Bay	Disturbed	2008	29-Aug-08	4.9	3	13		
B4 P/B	B4	Bigwin Bay	Disturbed	2008	18-Aug-08	5.2	1	1		
B4 P/B	B4	Bigwin Bay	Disturbed	2008	4-Aug-08	6.4	11	87		
B1 P/B	B1	Bigwin East	Deep Water	2008	30-Jun-08	4.4	1	1		
B1P FD	B1	Bigwin East	Deep Water	2008	29-Aug-08	5.0				
B1 P/B	B1	Bigwin East	Deep Water	2008	29-Aug-08	5.4	1	3		
B1 P/B	B1	Bigwin East	Deep Water	2008	18-Aug-08	6.0	1	1		
B1 P/B	B1	Bigwin East	Deep Water	2008	4-Aug-08	7.4	1	16		
B1 P/B	B1	Bigwin East	Deep Water	2008	14-Jul-08	9.0	5	8		
B1P FD	B1	Bigwin East	Deep Water	2008	14-Jul-08		3	8		
B1P LD	B1	Bigwin East	Deep Water	2008	14-Jul-08		1	1		
B3 P/B	B3	Bigwin North	Disturbed	2008	30-Jun-08	3.9	1	28		
B3 P/B	B3	Bigwin North	Disturbed	2008	4-Aug-08	5.6	5	19		
B3 P/B	B3	Bigwin North	Disturbed	2008	29-Aug-08	6.0	3	5		
B3 P/B	B3	Bigwin North	Disturbed	2008	18-Aug-08	7.1	1	1		
B3 P/B	B3	Bigwin North	Disturbed	2008	14-Jul-08	8.0	8	30		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2008	30-Jun-08	4.6				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2008	29-Aug-08	4.7	1	1		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2008	4-Aug-08	5.0				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2008	14-Jul-08	5.8	28	43		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2008	4-Aug-08	5.8	1	11		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2008	30-Jun-08	5.9	1	5		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2008	18-Aug-08	5.9	1	1		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2008	4-Aug-08		3	8		
N24 P/B LD	N24	Boothby's	Nearshore Undisturbed	2008	4-Aug-08		4	12		
N11 P/B	N11	Britannia	Disturbed	2008	18-Aug-08	4.1	3	8		
N11 P/B	N11	Britannia	Disturbed	2008	30-Jun-08	4.2	11	19		
N11 P/B	N11	Britannia	Disturbed	2008	14-Jul-08	4.4	5	13		
N11 P/B	N11	Britannia	Disturbed	2008	29-Aug-08	6.2	1	1		
N11 P/B	N11	Britannia	Disturbed	2008	4-Aug-08	8.4	3	3		
N11 P/B FD	N11	Britannia	Disturbed	2008	30-Jun-08		8.0	16.0		
N11 P/B FD	N11	Britannia	Disturbed	2008	4-Aug-08		3.0	11.0		
N1 P/B	N1	Dwight Bay	Deep Water	2008	18-Aug-08	6.0	1	1		
N1 P/B	N1	Dwight Bay	Deep Water	2008	29-Aug-08	6.0	1	8		
N1 P/B	N1	Dwight Bay	Deep Water	2008	14-Jul-08	6.1	1	1		
N1 P/B	N1	Dwight Bay	Deep Water	2008	4-Aug-08	6.3	1	1		
N1 P/B	N1	Dwight Bay	Deep Water	2008	30-Jun-08		1	1		
N1 P/B FD	N1	Dwight Bay	Deep Water	2008	18-Aug-08		1	1		
N1 P/B LD	N1	Dwight Bay	Deep Water	2008	18-Aug-08		1	1		
B2 P/B	B2	Fairview	Deep Water	2008	30-Jun-08	3.7	1	1		
B2 P/B	B2	Fairview	Deep Water	2008	18-Aug-08	6.0	1	3		
B2 P/B	B2	Fairview	Deep Water	2008	29-Aug-08	6.3	1	11		
B2 P/B	B2	Fairview	Deep Water	2008	4-Aug-08	6.5	1	1		
B2 P/B	B2	Fairview	Deep Water	2008	14-Jul-08	6.8	3	5		
B2 P/B FD	B2	Fairview	Deep Water	2008	4-Aug-08	8.4				
B2 P/B FD	B2	Fairview	Deep Water	2008	30-Jun-08		1	1		
N10 P/B	N10	Gull Rock	Deep Water	2008	18-Aug-08	4.1	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2008	30-Jun-08	4.3	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2008	4-Aug-08	5.7	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2008	29-Aug-08	5.7	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2008	14-Jul-08		3	13		
N10 P/B FD	N10	Gull Rock	Deep Water	2008	18-Aug-08		1	1		
N10 P/B LD	N10	Gull Rock	Deep Water	2008	18-Aug-08		1	1		
E13 P/B	E13	Haystack Bay	Deep Water	2008	14-Jul-08	4.8	3	11		
E13 P/B	E13	Haystack Bay	Deep Water	2008	30-Jun-08	5.1	1	1		
E13 P/B	E13	Haystack Bay	Deep Water	2008	4-Aug-08	5.6	1	3		
E13 P/B	E13	Haystack Bay	Deep Water	2008	18-Aug-08	5.6	3	3		
E13 P/B FD	E13	Haystack Bay	Deep Water	2008	14-Jul-08		1	16		
E13 P/B LD	E13	Haystack Bay	Deep Water	2008	14-Jul-08		1	8		
E13 P/B FD	E13	Haystack Bay	Deep Water	2008	4-Aug-08		3	5		
E13 P/B LD	E13	Haystack Bay	Deep Water	2008	4-Aug-08		1	20		
E13 P/B	E13	Haystack Bay	Deep Water	2008	29-Aug-08		3	11		
E 6 P/B	E6	Hollow River Lagoon	River	2008	4-Aug-08	5.2	11	39		
E 6 P/B	E6	Hollow River Lagoon	River	2008	18-Aug-08	5.5	1	19		
E 6 P/B	E6	Hollow River Lagoon	River	2008	14-Jul-08	8.1	25	65		
E 6 P/B FD	E6	Hollow River Lagoon	River	2008	18-Aug-08		8	30		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
E 6 P/B LD	E6	Hollow River Lagoon	River	2008	18-Aug-08		8	48		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2008	18-Aug-08	5.3	5	25		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2008	4-Aug-08	6.5	19	39		
E 6A P/B	E6a	Hollow River lagoon-upstream	River	2008	14-Jul-08	24.7	39	98		R
E18 P/B	E18	Hollow River mouth	River	2008	4-Aug-08	5.5	33	62		
E18 P/B	E18	Hollow River mouth	River	2008	18-Aug-08	5.8	5	16		
E18 P/B	E18	Hollow River mouth	River	2008	14-Jul-08	10.1	50	90		R
E20 P/B	E20	Little Trading Bay	Deep Water	2008	18-Aug-08	6.5	1	3		
E20 P/B	E20	Little Trading Bay	Deep Water	2008	14-Jul-08	7.0	1	16		
E20 P/B	E20	Little Trading Bay	Deep Water	2008	30-Jun-08	7.4	1	59		
E20 P/B	E20	Little Trading Bay	Deep Water	2008	4-Aug-08	8.3	8	22		
E20 P/B	E20	Little Trading Bay	Deep Water	2008	29-Aug-08	9.4	3	62		
E20 P/B FD	E20	Little Trading Bay	Deep Water	2008	29-Aug-08		5	52		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2008	29-Aug-08	4.3	1	3		
S2 P/B LD	S2	Menominee Bay	Nearshore Undisturbed	2008	29-Aug-08	4.3				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2008	30-Jun-08	4.8	1	8		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2008	18-Aug-08	5.8	1	16		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2008	14-Jul-08	7.0	13	83		
S2 P/B LD	S2	Menominee Bay	Nearshore Undisturbed	2008	4-Aug-08	7.5				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2008	4-Aug-08	8.5	1	1		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2008	29-Aug-08		1	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2008	14-Jul-08	4.7	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2008	29-Aug-08	4.7	1	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2008	30-Jun-08	5.1	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2008	4-Aug-08	6.3	1	1		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2008	18-Aug-08		1	3		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2008	29-Aug-08		1	3		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2008	18-Aug-08	4.3	1	16		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2008	14-Jul-08	4.9	3	19		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2008	4-Aug-08	6.3	1	3		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2008	29-Aug-08	7.2	5	16		
E25 P/B	E25	Narrows East	Nearshore Undisturbed	2008	30-Jun-08		1	5		
E25 P/B FD	E25	Narrows East	Nearshore Undisturbed	2008	14-Jul-08		1	19		
E25 P/B FD	E25	Narrows East	Nearshore Undisturbed	2008	14-Jul-08		3	8		
E25 P/B LD	E25	Narrows East	Nearshore Undisturbed	2008	4-Aug-08		1	19		
E25 P/B LD	E25	Narrows East	Nearshore Undisturbed	2008	4-Aug-08		1	16		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2008	14-Jul-08	2.4	5	8		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2008	18-Aug-08	4.6	1	1		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2008	4-Aug-08	5.5	13	69		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2008	29-Aug-08	5.5	3	11		
E26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2008	18-Aug-08	5.9	1	1		
E26 P/B	E26	Narrows West	Nearshore Undisturbed	2008	30-Jun-08		3	8		
E26 P/B LD	E26	Narrows West	Nearshore Undisturbed	2008	18-Aug-08		1	24		
N30 P/B	N30	Oxtongue Delta	River	2008	18-Aug-08	5.0	1	1		
N30 P/B	N30	Oxtongue Delta	River	2008	4-Aug-08	5.9	3	8		
N30 P/B	N30	Oxtongue Delta	River	2008	29-Aug-08	9.7	5	11		
N 2P/B	N2	Oxtongue mouth	River	2008	29-Aug-08	6.6	25	46		
N 2P/B	N2	Oxtongue mouth	River	2008	18-Aug-08	6.9	16	33		
N 2P/B	N2	Oxtongue mouth	River	2008	4-Aug-08	8.3	30	52		
S3 P/B	S3	Price's Point	Deep Water	2008	30-Jun-08	3.6	1	1		
S3 P/B	S3	Price's Point	Deep Water	2008	14-Jul-08	3.6	3	16		
S3 P/B LD	S3	Price's Point	Deep Water	2008	30-Jun-08	3.9				
S3 P/B LD	S3	Price's Point	Deep Water	2008	18-Aug-08	4.9				
S3 P/B	S3	Price's Point	Deep Water	2008	18-Aug-08	5.0	1	1		
S3 P/B	S3	Price's Point	Deep Water	2008	4-Aug-08	5.1	1	3		
S3 P/B	S3	Price's Point	Deep Water	2008	29-Aug-08	6.0	1	1		
S3 P/B FD	S3	Price's Point	Deep Water	2008	14-Jul-08		1	11		
S3 P/B LD	S3	Price's Point	Deep Water	2008	14-Jul-08		1	4		
S3 P/B FD	S3	Price's Point	Deep Water	2008	4-Aug-08		1	1		
S3 P/B LD	S3	Price's Point	Deep Water	2008	4-Aug-08		1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2008	14-Jul-08	4.7	5	11		
E30 P/B	E30	Ten Mile Bay	Deep Water	2008	30-Jun-08	5.1	8	28		
E30 P/B	E30	Ten Mile Bay	Deep Water	2008	4-Aug-08	5.3	1	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2008	29-Aug-08	6.0	1	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2008	18-Aug-08	6.6	1	11		
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2008	14-Jul-08	6.9	3	11	bs	
E30 P/B LD	E30	Ten Mile Bay	Deep Water	2008	14-Jul-08		1	8		
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2008	18-Aug-08		1	19		
E30 P/B LD	E30	Ten Mile Bay	Deep Water	2008	18-Aug-08		1	16		
E1 P/B	E1	Trading Bay	Deep Water	2008	30-Jun-08	4.0	1	33		
E1 P/B	E1	Trading Bay	Deep Water	2008	4-Aug-08	4.8	3	5		
E1 P/B	E1	Trading Bay	Deep Water	2008	18-Aug-08	5.3	1	5		
E1 P/B	E1	Trading Bay	Deep Water	2008	14-Jul-08	5.8	3	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2008	18-Aug-08	5.8				
E1 P/B	E1	Trading Bay	Deep Water	2008	29-Aug-08	6.7	1	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2008	14-Jul-08		5	16		
E1 P/B FD	E1	Trading Bay	Deep Water	2008	4-Aug-08		1	8		
E1 P/B LD	E1	Trading Bay	Deep Water	2008	4-Aug-08		1	8		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2009	1-Aug-09	1.9	3	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2009	4-Sep-09	2.2	3	5		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2009	17-Aug-09	2.8	1	13		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2009	3-Jul-09	3.4	1	8		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2009	3-Jul-09	3.4				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2009	17-Jul-09	4.4	3	13		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2009	4-Sep-09		3	8		
B4 P/B	B4	Bigwin Bay	Disturbed	2009	4-Sep-09	2.1	5	13		
B4 P/B	B4	Bigwin Bay	Disturbed	2009	17-Aug-09	3.4	8	11		
B4 P/B	B4	Bigwin Bay	Disturbed	2009	1-Aug-09	3.9	1	11		
B4 P/B	B4	Bigwin Bay	Disturbed	2009	3-Jul-09	4.6	3	11		
B4 P/B	B4	Bigwin Bay	Disturbed	2009	17-Jul-09	6.8	3	16		
B1P	B1	Bigwin East	Deep Water	2009	1-Aug-09	2.9	1	16		
B1P	B1	Bigwin East	Deep Water	2009	4-Sep-09	3.2	1	1		
B1P	B1	Bigwin East	Deep Water	2009	3-Jul-09	4.2	1	3		
B1P FD	B1	Bigwin East	Deep Water	2009	3-Jul-09	4.3				
B1P	B1	Bigwin East	Deep Water	2009	17-Aug-09	4.5	3	3		
B1P	B1	Bigwin East	Deep Water	2009	17-Jul-09	5.8	3	8		
B1P FD	B1	Bigwin East	Deep Water	2009	1-Aug-09		1	11		
B1P FD	B1	Bigwin East	Deep Water	2009	17-Aug-09		1	5		
B3 P/B	B3	Bigwin North	Disturbed	2009	1-Aug-09	2.9	5	19		
B3 P/B	B3	Bigwin North	Disturbed	2009	3-Jul-09	4.5	5	28		
B3 P/B	B3	Bigwin North	Disturbed	2009	4-Sep-09	5.1	3	5		
B3 P/B	B3	Bigwin North	Disturbed	2009	17-Aug-09	5.4	3	11		
B3 P/B	B3	Bigwin North	Disturbed	2009	17-Jul-09	10.2	8	30		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2009	4-Sep-09	2.3	1	3		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2009	1-Aug-09	2.9	1	11		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2009	17-Aug-09	4.0	5	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2009	3-Jul-09	5.9	1	5		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2009	17-Jul-09	6.2	3	13		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2009	17-Jul-09		5	11		
N11 P/B	N11	Britannia	Disturbed	2009	1-Aug-09	2.0	3.0	5.0		
N11 P/B	N11	Britannia	Disturbed	2009	3-Jul-09	3.5	8.0	19.0		
N11 P/B	N11	Britannia	Disturbed	2009	17-Aug-09	3.5	3.0	8.0		
N11 P/B	N11	Britannia	Disturbed	2009	4-Sep-09	3.6	1.0	1.0		
N11 P/B	N11	Britannia	Disturbed	2009	17-Jul-09	5.3	1.0	13.0		
N11 P/B FD	N11	Britannia	Disturbed	2009	3-Jul-09		11.0	16.0		
N1 P/B FD	N1	Dwight Bay	Deep Water	2009	1-Aug-09	3.2	8	11		
N1 P/B	N1	Dwight Bay	Deep Water	2009	17-Aug-09	3.6	1	11		
N1 P/B FD	N1	Dwight Bay	Deep Water	2009	17-Aug-09	3.7				
N1 P/B	N1	Dwight Bay	Deep Water	2009	1-Aug-09	4.5	3	8		
N1 P/B FD	N1	Dwight Bay	Deep Water	2009	17-Jul-09	5.2		3		
N1 P/B	N1	Dwight Bay	Deep Water	2009	17-Jul-09	5.3	1	8		
N1 P/B	N1	Dwight Bay	Deep Water	2009	4-Sep-09	6.9	1	3		
N1 P/B	N1	Dwight Bay	Deep Water	2009	3-Jul-09		5	11		
B2 P/B	B2	Fairview	Deep Water	2009	4-Sep-09	3.5	1	11		
B2 P/B	B2	Fairview	Deep Water	2009	1-Aug-09	3.7	1	1		
B2 P/B	B2	Fairview	Deep Water	2009	3-Jul-09	4.9	3	3		
B2 P/B	B2	Fairview	Deep Water	2009	17-Aug-09	6.1	3	3		
B2 P/B	B2	Fairview	Deep Water	2009	17-Jul-09	12.3	3	3		x
B2 P/B FD	B2	Fairview	Deep Water	2009	1-Aug-09		3	3		
N10 P/B	N10	Gull Rock	Deep Water	2009	1-Aug-09	2.5	3	5		
N10 P/B FD	N10	Gull Rock	Deep Water	2009	1-Aug-09	2.9				
N10 P/B	N10	Gull Rock	Deep Water	2009	3-Jul-09	4.0	1	8		
N10 P/B	N10	Gull Rock	Deep Water	2009	17-Aug-09	4.6	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2009	4-Sep-09	4.8	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2009	17-Jul-09	5.7	3	3		
N10 P/B FD	N10	Gull Rock	Deep Water	2009	4-Sep-09		1	3		
E13 P/B	E13	Haystack Bay	Deep Water	2009	1-Aug-09	4.0	3	8		
E13 P/B	E13	Haystack Bay	Deep Water	2009	17-Aug-09	6.3	3	3		
E13 P/B	E13	Haystack Bay	Deep Water	2009	3-Jul-09	6.8	1	8		
E13 P/B	E13	Haystack Bay	Deep Water	2009	4-Sep-09	8.4	5	11		
E13 P/B	E13	Haystack Bay	Deep Water	2009	17-Jul-09	57.7	3	11		x
E13 P/B FD	E13	Haystack Bay	Deep Water	2009	3-Jul-09		1	5		
E 6 P/B	E6	Hollow River Lagoon	River	2009	3-Jul-09		8	11		
E 6 P/B	E6	Hollow River Lagoon	River	2009	17-Jul-09		16	39		
E 6 P/B	E6	Hollow River Lagoon	River	2009	1-Aug-09		11	28		
E 6 P/B	E6	Hollow River Lagoon	River	2009	17-Aug-09		8	43		
E 6 P/B	E6	Hollow River Lagoon	River	2009	4-Sep-09		3	16		
E 18 P/B	E18	Hollow River mouth	River	2009	3-Jul-09		5	39		
E 18 P/B	E18	Hollow River mouth	River	2009	17-Jul-09		11	90		
E 18 P/B	E18	Hollow River mouth	River	2009	1-Aug-09		8	62		
E 18 P/B	E18	Hollow River mouth	River	2009	17-Aug-09		16	19		
E 18 P/B	E18	Hollow River mouth	River	2009	4-Sep-09		3	28		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	1-Aug-09	1.9	3	5		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	4-Sep-09	2.1	1	11		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	17-Aug-09	2.9	1	16		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	3-Jul-09	3.9	5	8		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	17-Jul-09	4.9	8	19		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2009	3-Jul-09		3	8		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	4-Sep-09	2.6	1	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	3-Jul-09	4.4	5	8		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	17-Aug-09	4.5	1	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	1-Aug-09	5.5	1	19		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	17-Jul-09	6.9	3	5		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2009	17-Aug-09		1	3		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2009	3-Jul-09		3	16		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2009	17-Jul-09		5	8		
E 26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2009	17-Jul-09		8	8		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2009	1-Aug-09		3	11		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2009	17-Aug-09		8	11		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2009	4-Sep-09		3	11		
N30 P/B	N30	Oxtongue Delta	River	2009	4-Sep-09	2.9	5	11		
N30 P/B	N30	Oxtongue Delta	River	2009	1-Aug-09	4.1	3	8		
N30 P/B	N30	Oxtongue Delta	River	2009	17-Aug-09	4.8	3	5		
N30 P/B	N30	Oxtongue Delta	River	2009	3-Jul-09	5.7	3	11		
N30 P/B	N30	Oxtongue Delta	River	2009	17-Jul-09	6.3	5	11		
N 2P/B	N2	Oxtongue mouth	River	2009	4-Sep-09	6.4	25	46		
N 2P/B	N2	Oxtongue mouth	River	2009	1-Aug-09	6.8	8	30		
N 2P/B	N2	Oxtongue mouth	River	2009	17-Aug-09	6.9	11	33		
N 2P/B	N2	Oxtongue mouth	River	2009	17-Jul-09	8.5	11	13		
N 2P/B	N2	Oxtongue mouth	River	2009	3-Jul-09	9.4	5	22		
S3 P/B	S3	Price's Point	Deep Water	2009	1-Aug-09	2.3	1	3		
S3 P/B	S3	Price's Point	Deep Water	2009	4-Sep-09	2.6	1	1		
S3 P/B FD	S3	Price's Point	Deep Water	2009	4-Sep-09	2.7				
S3 P/B	S3	Price's Point	Deep Water	2009	17-Aug-09	6.7	3	3		
S3 P/B	S3	Price's Point	Deep Water	2009	17-Jul-09	7.4	1	16		
S3 P/B FD	S3	Price's Point	Deep Water	2009	3-Jul-09	9.2				
S3 P/B	S3	Price's Point	Deep Water	2009	3-Jul-09	9.5	3	5		
S3 P/B FD	S3	Price's Point	Deep Water	2009	17-Jul-09		3	19		
E30 P/B	E30	Ten Mile Bay	Deep Water	2009	1-Aug-09	3.7	3	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2009	4-Sep-09	4.0	3	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2009	3-Jul-09	4.6	1	28		
E30 P/B	E30	Ten Mile Bay	Deep Water	2009	17-Aug-09	5.1	3	11		
E30 P/B	E30	Ten Mile Bay	Deep Water	2009	17-Jul-09	6.6	1	11		
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2009	17-Aug-09		1	8		
E1 P/B	E1	Trading Bay	Deep Water	2009	1-Aug-09	3.0	3	3		
E1 P/B FD	E1	Trading Bay	Deep Water	2009	17-Aug-09	5.1				
E1 P/B	E1	Trading Bay	Deep Water	2009	17-Aug-09	5.3	1	5		
E1 P/B	E1	Trading Bay	Deep Water	2009	3-Jul-09	5.4	5	11		
E1 P/B	E1	Trading Bay	Deep Water	2009	17-Jul-09	5.4	3	3		
E1 P/B	E1	Trading Bay	Deep Water	2009	4-Sep-09	5.6	3	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2009	4-Sep-09		3	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2010	2-Aug-10	2.5				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2010	16-Aug-10	2.7				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2010	5-Jul-10	2.8				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2010	7-Sep-10	2.9				
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2010	7-Sep-10	3.0				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2010	19-Jul-10	3.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2010	7-Sep-10	2.7				
B4 P/B	B4	Bigwin Bay	Disturbed	2010	5-Jul-10	3.0				
B4 P/B	B4	Bigwin Bay	Disturbed	2010	16-Aug-10	3.0				
B4 P/B	B4	Bigwin Bay	Disturbed	2010	2-Aug-10	3.2				
B4 P/B	B4	Bigwin Bay	Disturbed	2010	19-Jul-10	6.0				
B1P	B1	Bigwin East	Deep Water	2010	2-Aug-10	4.6				
B1P FD	B1	Bigwin East	Deep Water	2010	5-Jul-10	4.8				
B1P	B1	Bigwin East	Deep Water	2010	19-Jul-10	4.8				
B1P FD	B1	Bigwin East	Deep Water	2010	19-Jul-10	4.8				
B1P	B1	Bigwin East	Deep Water	2010	5-Jul-10	5.6				
B1P	B1	Bigwin East	Deep Water	2010	7-Sep-10	6.4				
B1P	B1	Bigwin East	Deep Water	2010	16-Aug-10	7.6				
B3 P/B	B3	Bigwin North	Disturbed	2010	19-Jul-10	3.3				
B3 P/B	B3	Bigwin North	Disturbed	2010	5-Jul-10	3.6				
B3 P/B	B3	Bigwin North	Disturbed	2010	7-Sep-10	3.8				
B3 P/B	B3	Bigwin North	Disturbed	2010	2-Aug-10	5.1				
B3 P/B	B3	Bigwin North	Disturbed	2010	16-Aug-10	6.6				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2010	19-Jul-10	2.9				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2010	7-Sep-10	2.9				
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2010	7-Sep-10	2.9				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2010	5-Jul-10	3.3				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2010	2-Aug-10	6.4				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2010	16-Aug-10	7.4				
N11 P/B	N11	Britannia	Disturbed	2010	2-Aug-10	2.7				
N11 P/B	N11	Britannia	Disturbed	2010	5-Jul-10	2.9				
N11 P/B	N11	Britannia	Disturbed	2010	19-Jul-10	3.8				
N11 P/B	N11	Britannia	Disturbed	2010	16-Aug-10	4.6				
N11 P/B	N11	Britannia	Disturbed	2010	7-Sep-10	4.9				
N1 P/B	N1	Dwight Bay	Deep Water	2010	16-Aug-10	3.4				
N1 P/B	N1	Dwight Bay	Deep Water	2010	2-Aug-10	3.6				
N1 P/B FD	N1	Dwight Bay	Deep Water	2010	5-Jul-10	5.0				
N1 P/B	N1	Dwight Bay	Deep Water	2010	5-Jul-10	6.5				
N1 P/B	N1	Dwight Bay	Deep Water	2010	7-Sep-10	6.6				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N1 P/B	N1	Dwight Bay	Deep Water	2010	19-Jul-10	11.7				
B2 P/B F/D	B2	Fairview	Deep Water	2010	16-Aug-10	3.9				
B2 P/B	B2	Fairview	Deep Water	2010	16-Aug-10	4.2				
B2 P/B	B2	Fairview	Deep Water	2010	5-Jul-10	4.7				
B2 P/B	B2	Fairview	Deep Water	2010	19-Jul-10	5.4				
B2 P/B	B2	Fairview	Deep Water	2010	2-Aug-10	5.5				
B2 P/B	B2	Fairview	Deep Water	2010	7-Sep-10	6.4				
N10 P/B	N10	Gull Rock	Deep Water	2010	5-Jul-10	3.9				
N10 P/B	N10	Gull Rock	Deep Water	2010	19-Jul-10	4.4				
N10 P/B	N10	Gull Rock	Deep Water	2010	7-Sep-10	5.0				
N10 P/B	N10	Gull Rock	Deep Water	2010	2-Aug-10	8.6				
N10 P/B	N10	Gull Rock	Deep Water	2010	16-Aug-10					
E13 P/B	E13	Haystack Bay	Deep Water	2010	2-Aug-10	5.0				
E13 P/B	E13	Haystack Bay	Deep Water	2010	16-Aug-10	5.4				
E13 P/B	E13	Haystack Bay	Deep Water	2010	19-Jul-10	6.1				
E13 P/B	E13	Haystack Bay	Deep Water	2010	5-Jul-10	6.2				
E13 P/B	E13	Haystack Bay	Deep Water	2010	7-Sep-10	6.8				
E 18 P/B	E18	Hollow River mouth	River	2010	7-Sep-10	3.4				
E 18 P/B	E18	Hollow River mouth	River	2010	5-Jul-10	4.0				
E 18 P/B	E18	Hollow River mouth	River	2010	19-Jul-10	4.0				
E 18 P/B F/D	E18	Hollow River mouth	River	2010	2-Aug-10	5.2				
E 18 P/B	E18	Hollow River mouth	River	2010	16-Aug-10	5.4				
E 18 P/B	E18	Hollow River mouth	River	2010	2-Aug-10	5.7				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	16-Aug-10	1.9				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	19-Jul-10	2.0				
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2010	16-Aug-10	2.1				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	2-Aug-10	3.4				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	7-Sep-10	3.4				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	5-Jul-10	3.5				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	19-Jul-10	2.3				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	2-Aug-10	3.3				
N13 P/B F/D	N13	Moffat's	Nearshore Undisturbed	2010	7-Sep-10	3.3				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	5-Jul-10	4.2				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	16-Aug-10	4.7				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	7-Sep-10	5.1			bs	
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2010	16-Aug-10	3.2				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2010	7-Sep-10	3.4				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2010	5-Jul-10	4.2				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2010	19-Jul-10	4.9				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2010	2-Aug-10	5.8				
N30 P/B	N30	Oxtongue Delta	River	2010	16-Aug-10	3.1				
N30 P/B	N30	Oxtongue Delta	River	2010	7-Sep-10	3.5				
N30 P/B	N30	Oxtongue Delta	River	2010	19-Jul-10	4.0				
N30 P/B	N30	Oxtongue Delta	River	2010	5-Jul-10	4.5				
N30 P/B	N30	Oxtongue Delta	River	2010	2-Aug-10	4.7				
N 2P/B	N2	Oxtongue mouth	River	2010	2-Aug-10	6.8				
N 2P/B	N2	Oxtongue mouth	River	2010	7-Sep-10	8.0				
N 2P/B	N2	Oxtongue mouth	River	2010	5-Jul-10	8.1				
N 2P/B	N2	Oxtongue mouth	River	2010	16-Aug-10	10.4				
N 2P/B	N2	Oxtongue mouth	River	2010	19-Jul-10	13.8				R
S3 P/B	S3	Price's Point	Deep Water	2010	19-Jul-10	4.1				
S3 P/B	S3	Price's Point	Deep Water	2010	5-Jul-10	4.2				
S3 P/B	S3	Price's Point	Deep Water	2010	7-Sep-10	5.1				
S3 P/B	S3	Price's Point	Deep Water	2010	16-Aug-10	7.3				
S3 P/B	S3	Price's Point	Deep Water	2010	2-Aug-10	12.7				x
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2010	16-Aug-10	3.9				
E30 P/B	E30	Ten Mile Bay	Deep Water	2010	16-Aug-10	4.4				
E30 P/B	E30	Ten Mile Bay	Deep Water	2010	5-Jul-10	5.2				
E30 P/B	E30	Ten Mile Bay	Deep Water	2010	2-Aug-10	5.2				
E30 P/B	E30	Ten Mile Bay	Deep Water	2010	19-Jul-10	5.3				
E30 P/B	E30	Ten Mile Bay	Deep Water	2010	7-Sep-10	6.1				
E30 P/B F/D	E30	Ten Mile Bay	Deep Water	2010	7-Sep-10	12.9			bs	
E1 P/B	E1	Trading Bay	Deep Water	2010	5-Jul-10	3.4				
E1 P/B FD	E1	Trading Bay	Deep Water	2010	5-Jul-10	3.8				
E1 P/B	E1	Trading Bay	Deep Water	2010	2-Aug-10	4.3				
E1 P/B	E1	Trading Bay	Deep Water	2010	16-Aug-10	4.6				
E1 P/B	E1	Trading Bay	Deep Water	2010	19-Jul-10	6.6				
E1 P/B	E1	Trading Bay	Deep Water	2010	7-Sep-10	6.8				
S1 P/B FD b & p	S1	Adamson's Island	Nearshore Undisturbed	2011	15-Aug-11	2.9	3	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2011	15-Aug-11	3.5	3	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2011	2-Sep-11	3.6	1	1		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2011	4-Jul-11	4.9	3	5		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2011	1-Aug-11	4.9	3	3		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2011	18-Jul-11	15.1	1	8		x
B4 P/B	B4	Bigwin Bay	Disturbed	2011	18-Jul-11	3.7	8	19		
B4 P/B	B4	Bigwin Bay	Disturbed	2011	4-Jul-11	3.9	5	16		
B4 P/B	B4	Bigwin Bay	Disturbed	2011	2-Sep-11	3.9	13	62		
B4 P/B	B4	Bigwin Bay	Disturbed	2011	1-Aug-11	5.0	5	13		
B4 P/B	B4	Bigwin Bay	Disturbed	2011	15-Aug-11	6.2	13	43		
B4 P/B COAL lab	B4	Bigwin Bay	Disturbed	2011	15-Aug-11		20	55		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
B4 P/B COAL lab	B4	Bigwin Bay	Disturbed	2011	2-Sep-11		16	80+		
B1P	B1	Bigwin East	Deep Water	2011	18-Jul-11	3.1	1	3		
B1P	B1	Bigwin East	Deep Water	2011	2-Sep-11	4.7	1	3		
B1P	B1	Bigwin East	Deep Water	2011	14-Aug-11	4.8	1	5		
B1P	B1	Bigwin East	Deep Water	2011	4-Jul-11	5.1	1	5		
B1P FD phos	B1	Bigwin East	Deep Water	2011	4-Jul-11	5.3				
B1P	B1	Bigwin East	Deep Water	2011	1-Aug-11	6.7	1	3		
B1P COAL lab	B1	Bigwin East	Deep Water	2011	18-Jul-11		0	3		
B1P FD bacti	B1	Bigwin East	Deep Water	2011	18-Jul-11		1	5		
B1P COAL lab	B1	Bigwin East	Deep Water	2011	2-Sep-11		0	6		
B3 P/B	B3	Bigwin North	Disturbed	2011	18-Jul-11	2.6	5	11		
B3 P/B FD b & p	B3	Bigwin North	Disturbed	2011	2-Sep-11	3.7	1	5		
B3 P/B	B3	Bigwin North	Disturbed	2011	1-Aug-11	5.2	1	3		
B3 P/B	B3	Bigwin North	Disturbed	2011	14-Aug-11	5.4	8	11		
B3 P/B	B3	Bigwin North	Disturbed	2011	2-Sep-11	5.9	1	3	bs	
B3 P/B	B3	Bigwin North	Disturbed	2011	4-Jul-11	6.2	1	3		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2011	18-Jul-11	2.8	3	5		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2011	4-Jul-11	4.9	1	5		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2011	2-Sep-11	5.1	3	11		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2011	1-Aug-11	5.5	3	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2011	15-Aug-11	5.8	5	8		
N11 P/B	N11	Britannia	Disturbed	2011	18-Jul-11	2.9	3	3		
N10 P/B	N11	Britannia	Disturbed	2011	2-Sep-11	3.9	1	5		
N11 P/B	N11	Britannia	Disturbed	2011	15-Aug-11	4.5	1	8		
N11 P/B	N11	Britannia	Disturbed	2011	1-Aug-11	4.6	3	3		
N11 P/B	N11	Britannia	Disturbed	2011	4-Jul-11	4.9	3	5		
N11 P/B COAL lab	N11	Britannia	Disturbed	2011	15-Aug-11		0	11		
N11 P/B FD bacti	N11	Britannia	Disturbed	2011	15-Aug-11		1	8		
N11 P/B COAL lab	N11	Britannia	Disturbed	2011	2-Sep-11		0	14		
N1 P/B	N1	Dwight Bay	Deep Water	2011	2-Sep-11	4.6	1	3		
N1 P/B	N1	Dwight Bay	Deep Water	2011	18-Jul-11	5.2	1	3		
N1 P/B	N1	Dwight Bay	Deep Water	2011	4-Jul-11	5.3	3	5		
N1 P/B	N1	Dwight Bay	Deep Water	2011	1-Aug-11	5.3	1	3		
N1 P/B FD B & p	N1	Dwight Bay	Deep Water	2011	1-Aug-11	5.3	1	1		
N1 P/B	N1	Dwight Bay	Deep Water	2011	15-Aug-11	6.2	1	3		
N1 P/B COAL lab	N1	Dwight Bay	Deep Water	2011	4-Jul-11		2	5		
N1 P/B COAL lab	N1	Dwight Bay	Deep Water	2011	2-Sep-11		0	12		
N3 P/B	N3	Dwight Beach	Disturbed	2011	2-Sep-11	3.4	13	16		
N3 P/B FD phos	N3	Dwight Beach	Disturbed	2011	2-Sep-11	4.3				
N3 P/B	N3	Dwight Beach	Disturbed	2011	15-Aug-11	4.9	22	33		
N3 P/B FD phos	N3	Dwight Beach	Disturbed	2011	1-Aug-11	5.5				
N3 P/B	N3	Dwight Beach	Disturbed	2011	1-Aug-11	5.8	19	22		
N3 P/B	N3	Dwight Beach	Disturbed	2011	18-Jul-11	7.4	36	46		
N3 P/B	N3	Dwight Beach	Disturbed	2011	4-Jul-11	9.5	28	36		
N3 P/B COAL lab	N3	Dwight Beach	Disturbed	2011	18-Jul-11		40	47		
N3 P/B FD bacti	N3	Dwight Beach	Disturbed	2011	18-Jul-11		36	43		
B2 P/B	B2	Fairview	Deep Water	2011	18-Jul-11	4.0	1	1		
B2 P/B	B2	Fairview	Deep Water	2011	14-Aug-11	4.8	1	5		
B2 P/B	B2	Fairview	Deep Water	2011	2-Sep-11	4.8	1	3		
B2 P/B	B2	Fairview	Deep Water	2011	4-Jul-11	4.9	1	3		
B2 P/B	B2	Fairview	Deep Water	2011	1-Aug-11	6.1	1	1		
B2 P/B COAL lab	B2	Fairview	Deep Water	2011	4-Jul-11		0	3		
B2 P/B FD bacti	B2	Fairview	Deep Water	2011	4-Jul-11		1	3		
N10 P/B FD b & p	N10	Gull Rock	Deep Water	2011	1-Aug-11	4.9	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2011	18-Jul-11	5.0	3	3		
N10 P/B	N10	Gull Rock	Deep Water	2011	1-Aug-11	5.0	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2011	15-Aug-11	6.0	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2011	4-Jul-11	7.4	1	3		
N10 P/B COAL lab	N10	Gull Rock	Deep Water	2011	4-Jul-11		0	2		
N10 P/B FD bacti	N10	Gull Rock	Deep Water	2011	4-Jul-11		1	3		
N10 P/B COAL lab	N10	Gull Rock	Deep Water	2011	2-Sep-11		0	7		
E13 P/B	E13	Haystack Bay	Deep Water	2011	14-Aug-11	5.3	1	1		
E13 P/B	E13	Haystack Bay	Deep Water	2011	1-Aug-11	5.6	5	8		
E13 P/B	E13	Haystack Bay	Deep Water	2011	18-Jul-11	6.1	5	11		
E13 P/B	E13	Haystack Bay	Deep Water	2011	4-Jul-11	6.9	3	8		
E13 P/B	E13	Haystack Bay	Deep Water	2011	2-Sep-11	7.1	1	3		
E 18 P/B	E18	Hollow River mouth	River	2011	18-Jul-11	4.5	11	36		
E 18 P/B	E18	Hollow River mouth	River	2011	4-Jul-11	4.6	8	28		
E 18 P/B	E18	Hollow River mouth	River	2011	1-Aug-11	6.7	8	19		
E 18 P/B FD bacti	E18	Hollow River mouth	River	2011	1-Aug-11		11	16		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	18-Jul-11	3.9	3	5		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	1-Aug-11	4.4	5	11		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	15-Aug-11	5.0	1	3		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	4-Jul-11	5.1	8	11		
S2 P/B FD phos	S2	Menominee Bay	Nearshore Undisturbed	2011	2-Sep-11	5.5				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	2-Sep-11	7.1	8	11		
N11 P/B	N13	Moffat's	Nearshore Undisturbed	2011	2-Sep-11	2.9	1	13		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	2-Sep-11	3.3	3	11		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	18-Jul-11	3.6	5	16		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	1-Aug-11	4.4	3	8		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	4-Jul-11	5.6	3	8		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	15-Aug-11	6.2	1	11		
N13 P/B COAL lab	N13	Moffat's	Nearshore Undisturbed	2011	18-Jul-11		7	17		
N13 P/B FD bacti	N13	Moffat's	Nearshore Undisturbed	2011	18-Jul-11		7	11		
N13 P/B COAL lab	N13	Moffat's	Nearshore Undisturbed	2011	15-Aug-11		2	28		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2011	18-Jul-11	3.4	25	30		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2011	15-Aug-11	4.1	5	8		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2011	2-Sep-11	4.6	16	30		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2011	1-Aug-11	8.5	11	16		x
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2011	4-Jul-11	11.4	8	19		x
E 26 P/B COAL lab	E26	Narrows West	Nearshore Undisturbed	2011	18-Jul-11		32	66		
E 26 P/B COAL lab	E26	Narrows West	Nearshore Undisturbed	2011	2-Sep-11		18	35		
N30 P/B	N30	Oxtongue Delta	River	2011	2-Sep-11	3.1	3	5		
N30 P/B	N30	Oxtongue Delta	River	2011	14-Aug-11	3.7	3	3		
N30 P/B	N30	Oxtongue Delta	River	2011	18-Jul-11	4.5	8	11		
N30 P/B	N30	Oxtongue Delta	River	2011	1-Aug-11	5.2	5	8		
N30 P/B FD bacti	N30	Oxtongue Delta	River	2011	1-Aug-11	5.2	3	8		
N30 P/B	N30	Oxtongue Delta	River	2011	4-Jul-11	8.2	3	11		
N 2P/B	N2	Oxtongue mouth	River	2011	15-Aug-11	6.9	3	5		
N 2P/B	N2	Oxtongue mouth	River	2011	1-Aug-11	7.1	8	8		
N 2P/B	N2	Oxtongue mouth	River	2011	18-Jul-11	7.9	3	8		
N 2P/B	N2	Oxtongue mouth	River	2011	4-Jul-11	9.3	5	11		
N 2P/B	N2	Oxtongue mouth	River	2011	2-Sep-11		11	16		
B6 P/B	B6	Port Cunningham	Disturbed	2011	18-Jul-11	2.6	5	11		
B6 P/B	B6	Port Cunningham	Disturbed	2011	2-Sep-11	3.5	3	16		
B6 P/B	B6	Port Cunningham	Disturbed	2011	15-Aug-11	3.8	5	13		
B6 P/B	B6	Port Cunningham	Disturbed	2011	1-Aug-11	4.0	8	13		
B6 P/B	B6	Port Cunningham	Disturbed	2011	4-Jul-11	5.1	1	8		
B6 P/B COAL lab	B6	Port Cunningham	Disturbed	2011	4-Jul-11		1	9		
S3 P/B FD b & p	S3	Price's Point	Deep Water	2011	4-Jul-11	4.0	1	1		
S3 P/B	S3	Price's Point	Deep Water	2011	4-Jul-11	4.4	1	5		
S3 P/B	S3	Price's Point	Deep Water	2011	15-Aug-11	4.7	1	5		
S3 P/B	S3	Price's Point	Deep Water	2011	1-Aug-11	5.6	1	1		
S3 P/B	S3	Price's Point	Deep Water	2011	2-Sep-11	7.6	3	5		
S3 P/B	S3	Price's Point	Deep Water	2011	18-Jul-11	12.8	3	3		x
S3 P/B COAL lab	S3	Price's Point	Deep Water	2011	4-Jul-11		0	8		
S3 P/B	S3	Price's Point	Deep Water	2011	15-Aug-11		1	3		
S3 P/B COAL lab	S3	Price's Point	Deep Water	2011	15-Aug-11		0	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2011	18-Jul-11	4.5	3	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2011	2-Sep-11	4.9	1	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2011	15-Aug-11	5.1	1	1		
E30 P/B	E30	Ten Mile Bay	Deep Water	2011	1-Aug-11	5.2	3	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2011	4-Jul-11	5.7	3	5		
E30 P/B COAL lab	E30	Ten Mile Bay	Deep Water	2011	18-Jul-11		0	2		
E30 P/B FD bacti	E30	Ten Mile Bay	Deep Water	2011	18-Jul-11		1	3		
E1 P/B	E1	Trading Bay	Deep Water	2011	18-Jul-11	4.2	1	1		
E1 P/B	E1	Trading Bay	Deep Water	2011	4-Jul-11	5.1	3	5		
E1 P/B	E1	Trading Bay	Deep Water	2011	2-Sep-11	5.6	1	5		
E1 P/B	E1	Trading Bay	Deep Water	2011	2-Sep-11	5.7	1	8		
E1 P/B	E1	Trading Bay	Deep Water	2011	1-Aug-11	6.9	3	5		
E1 P/B	E1	Trading Bay	Deep Water	2011	15-Aug-11	7.1	1	8		
E1 P/B FD bacti	E1	Trading Bay	Deep Water	2011	15-Aug-11		1	8		
E1 P/B COAL lab	E1	Trading Bay	Deep Water	2011	15-Aug-11		2	8		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2012	23-Jul-12	3.7				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2012	4-Aug-12	3.7				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2012	1-Jul-12	4.0				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2012	20-Aug-12	4.1				
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2012	1-Jul-12	4.2				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2012	31-Aug-12	7.9				x
B4 P/B	B4	Bigwin Bay	Disturbed	2012	23-Jul-12	3.3				
B4 P/B	B4	Bigwin Bay	Disturbed	2012	1-Jul-12	3.4				
B4 P/B	B4	Bigwin Bay	Disturbed	2012	20-Aug-12	4.1				
B4 P/B	B4	Bigwin Bay	Disturbed	2012	31-Aug-12	7.0				
B4 P/B	B4	Bigwin Bay	Disturbed	2012	4-Aug-12					
B1P	B1	Bigwin East	Deep Water	2012	4-Aug-12	4.2				
B1P	B1	Bigwin East	Deep Water	2012	20-Aug-12	4.7				
B1P	B1	Bigwin East	Deep Water	2012	31-Aug-12	4.8				
B1P	B1	Bigwin East	Deep Water	2012	23-Jul-12	5.1				
B1P	B1	Bigwin East	Deep Water	2012	1-Jul-12	5.8				
B1P FD phos	B1	Bigwin East	Deep Water	2012	31-Aug-12	6.0				
B3 P/B	B3	Bigwin North	Disturbed	2012	31-Aug-12	4.2				
B3 P/B	B3	Bigwin North	Disturbed	2012	23-Jul-12	4.3				
B3 P/B	B3	Bigwin North	Disturbed	2012	1-Jul-12	4.4				
B3 P/B	B3	Bigwin North	Disturbed	2012	20-Aug-12	4.4				
B3 P/B FD	B3	Bigwin North	Disturbed	2012	20-Aug-12	5.4				
B3 P/B	B3	Bigwin North	Disturbed	2012	4-Aug-12	6.2				
N26 P/B	N24	Boothby's	Nearshore Undisturbed	2012	31-Aug-12	3.2				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2012	1-Jul-12	3.4				
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2012	4-Aug-12	3.6				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2012	23-Jul-12	3.7				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2012	4-Aug-12	3.7				
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2012	23-Jul-12	3.9				
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2012	20-Aug-12	5.2				
N11 P/B	N11	Britannia	Disturbed	2012	23-Jul-12	3.1				
N11 P/B	N11	Britannia	Disturbed	2012	20-Aug-12	4.1				
N11 P/B	N11	Britannia	Disturbed	2012	4-Aug-12	5.2				
N11 P/B	N11	Britannia	Disturbed	2012	31-Aug-12	5.3				
N11 P/B	N11	Britannia	Disturbed	2012	1-Jul-12	6.2				
N1 P/B	N1	Dwight Bay	Deep Water	2012	31-Aug-12	5.7				
N1 P/B FD	N1	Dwight Bay	Deep Water	2012	23-Jul-12	5.9				
N1 P/B	N1	Dwight Bay	Deep Water	2012	1-Jul-12	6.1				
N1 P/B	N1	Dwight Bay	Deep Water	2012	4-Aug-12	6.1				
N1 P/B	N1	Dwight Bay	Deep Water	2012	23-Jul-12	6.4				
N1 P/B	N1	Dwight Bay	Deep Water	2012	20-Aug-12	8.6				
N3 P/B	N3	Dwight Beach	Disturbed	2012	31-Aug-12	3.8				
N3 P/B	N3	Dwight Beach	Disturbed	2012	4-Aug-12	4.3				
N3 P/B FD phos	N3	Dwight Beach	Disturbed	2012	23-Jul-12	4.5				
N1 P/B	N3	Dwight Beach	Disturbed	2012	23-Jul-12	4.6				
N3 P/B	N3	Dwight Beach	Disturbed	2012	1-Jul-12	4.7				
N3 P/B	N3	Dwight Beach	Disturbed	2012	20-Aug-12	5.3				
B2 P/B	B2	Fairview	Deep Water	2012	31-Aug-12	4.0				
B2 P/B	B2	Fairview	Deep Water	2012	1-Jul-12	4.3				
B2 P/B	B2	Fairview	Deep Water	2012	4-Aug-12	5.0				
B2 P/B	B2	Fairview	Deep Water	2012	23-Jul-12	5.1				
B2 P/B	B2	Fairview	Deep Water	2012	20-Aug-12	5.1				
B2 P/B FD	B2	Fairview	Deep Water	2012	20-Aug-12	5.2				
B2 P/B FD	B2	Fairview	Deep Water	2012	4-Aug-12	5.3				
N10 P/B	N10	Gull Rock	Deep Water	2012	20-Aug-12	4.1				
N10 P/B	N10	Gull Rock	Deep Water	2012	1-Jul-12	4.4				
N10 P/B	N10	Gull Rock	Deep Water	2012	23-Jul-12	4.8				
N10 P/B	N10	Gull Rock	Deep Water	2012	31-Aug-12	5.3				
N10 P/B FD	N10	Gull Rock	Deep Water	2012	1-Jul-12	5.9				
N10 P/B	N10	Gull Rock	Deep Water	2012	4-Aug-12	6.3				
E13 P/B	E13	Haystack Bay	Deep Water	2012	23-Jul-12	3.8				
E13 P/B	E13	Haystack Bay	Deep Water	2012	20-Aug-12	3.9				
E13 P/B	E13	Haystack Bay	Deep Water	2012	1-Jul-12	5.2				
E13 P/B	E13	Haystack Bay	Deep Water	2012	4-Aug-12	5.8				
E13 P/B	E13	Haystack Bay	Deep Water	2012	31-Aug-12	22.4				x
E 18 P/B	E18	Hollow River mouth	River	2012	20-Aug-12	4.8				
E 18 P/B	E18	Hollow River mouth	River	2012	31-Aug-12	4.9				
E 18 P/B	E18	Hollow River mouth	River	2012	23-Jul-12	5.0				
E 18 P/B	E18	Hollow River mouth	River	2012	1-Jul-12	5.5				
E 18 P/B	E18	Hollow River mouth	River	2012	4-Aug-12					
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2012	1-Jul-12	3.0				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2012	4-Aug-12	3.4				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2012	31-Aug-12	3.6				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2012	23-Jul-12	3.9				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2012	1-Jul-12	4.2				
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2012	20-Aug-12	4.2				
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2012	23-Jul-12	3.1				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2012	23-Jul-12	3.3				
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2012	31-Aug-12	4.1				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2012	20-Aug-12	4.2				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2012	31-Aug-12	4.6				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2012	1-Jul-12	4.9				
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2012	4-Aug-12	5.7				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2012	20-Aug-12	3.8				
E 26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2012	20-Aug-12	3.8				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2012	31-Aug-12	4.5				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2012	1-Jul-12	4.6				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2012	23-Jul-12	4.9				
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2012	4-Aug-12					
N30 P/B	N30	Oxtongue Delta	River	2012	31-Aug-12	3.5				
N30 P/B	N30	Oxtongue Delta	River	2012	23-Jul-12	3.8				
N30 P/B FD	N30	Oxtongue Delta	River	2012	20-Aug-12	4.0				
N30 P/B	N30	Oxtongue Delta	River	2012	20-Aug-12	4.1				
N30 P/B	N30	Oxtongue Delta	River	2012	4-Aug-12	4.5				
N30 P/B	N30	Oxtongue Delta	River	2012	1-Jul-12	6.0				
N 2P/B	N2	Oxtongue mouth	River	2012	31-Aug-12	5.4				
N 2P/B	N2	Oxtongue mouth	River	2012	1-Jul-12	6.3				
N 2P/B	N2	Oxtongue mouth	River	2012	4-Aug-12	6.3				
N 2P/B	N2	Oxtongue mouth	River	2012	20-Aug-12	6.4				
N 2P/B	N2	Oxtongue mouth	River	2012	23-Jul-12	7.5				
B6 P/B	B6	Port Cunningham	Disturbed	2012	4-Aug-12	3.9				
B6 P/B	B6	Port Cunningham	Disturbed	2012	31-Aug-12	4.0				
B6 P/B	B6	Port Cunningham	Disturbed	2012	20-Aug-12	4.5				
B6 P/B	B6	Port Cunningham	Disturbed	2012	1-Jul-12	4.7				
B6 P/B	B6	Port Cunningham	Disturbed	2012	23-Jul-12	5.1				
N26 P/B	N26	Portage Bay	Deep Water	2012	1-Jul-12	6.3				
N26 P/B	N26	Portage Bay	Deep Water	2012	31-Aug-12	7.7				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N26 P/B	N26	Portage Bay	Deep Water	2012	4-Aug-12	11.6				
N26 P/B	N26	Portage Bay	Deep Water	2012	23-Jul-12	12.9				
N26 P/B	N26	Portage Bay	Deep Water	2012	20-Aug-12	61.3				x
S3 P/B	S3	Price's Point	Deep Water	2012	20-Aug-12	4.2				
S3 P/B	S3	Price's Point	Deep Water	2012	1-Jul-12	4.3				
S3 P/B	S3	Price's Point	Deep Water	2012	23-Jul-12	4.5				
S3 P/B	S3	Price's Point	Deep Water	2012	4-Aug-12	4.6				
S3 P/B	S3	Price's Point	Deep Water	2012	31-Aug-12	5.1				
E30 P/B	E30	Ten Mile Bay	Deep Water	2012	23-Jul-12	6.0				
E30 P/B	E30	Ten Mile Bay	Deep Water	2012	1-Jul-12	6.7				
E30 P/B	E30	Ten Mile Bay	Deep Water	2012	20-Aug-12	6.7				
E30 P/B	E30	Ten Mile Bay	Deep Water	2012	4-Aug-12	7.0				
E30 P/B FD	E30	Ten Mile Bay	Deep Water	2012	4-Aug-12	8.7				
E1 P/B FD	E1	Trading Bay	Deep Water	2012	23-Jul-12	3.9				
E1 P/B	E1	Trading Bay	Deep Water	2012	1-Jul-12	4.5				
E1 P/B	E1	Trading Bay	Deep Water	2012	23-Jul-12	4.5				
E1 P/B	E1	Trading Bay	Deep Water	2012	20-Aug-12	5.5				
E1 P/B	E1	Trading Bay	Deep Water	2012	4-Aug-12	5.6				
E1 P/B	E1	Trading Bay	Deep Water	2012	31-Aug-12	5.7				
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2013	28-Aug-13	2.4	1	1		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2013	1-Jul-13	3.1	3	8		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2013	21-Jul-13	5.1	11	16		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2013	5-Aug-13	5.4	5	11		
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	2013	18-Aug-13	9.9	3	5		x
S1 P/B lab	S1	Adamson's Island	Nearshore Undisturbed	2013	21-Jul-13		15	44		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2013	21-Jul-13		11	28		
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2013	28-Aug-13		1	5		
S1 P/B lab	S1	Adamson's Island	Nearshore Undisturbed	2013	28-Aug-13		1	8		
B4 P/B	B4	Bigwin Bay	Disturbed	2013	28-Aug-13	3.7	3	28		
B4 P/B	B4	Bigwin Bay	Disturbed	2013	5-Aug-13	4.2	1	1		
B4 P/B	B4	Bigwin Bay	Disturbed	2013	1-Jul-13	4.3	5	8		
B4 P/B	B4	Bigwin Bay	Disturbed	2013	21-Jul-13	5.0	3	8		
B4 P/B	B4	Bigwin Bay	Disturbed	2013	18-Aug-13	5.1	1	5		
B1P	B1	Bigwin East	Deep Water	2013	28-Aug-13	3.9	1	1		
B1P lab	B1	Bigwin East	Deep Water	2013	5-Aug-13	4.2	10	19		
	B1	Bigwin East	Deep Water	2013	1-Jul-13	4.3	1	1		
B1P/B FD	B1	Bigwin East	Deep Water	2013	21-Jul-13	5.1	8	11		
B1P	B1	Bigwin East	Deep Water	2013	21-Jul-13	5.6	3	8		
B1 P/B FD	B1	Bigwin East	Deep Water	2013	18-Aug-13	5.9	1	1		
B1P	B1	Bigwin East	Deep Water	2013	18-Aug-13	7.7	1	5		
B1jP/B lab	B1	Bigwin East	Deep Water	2013	18-Aug-13		0	3		
B3 P/B	B3	Bigwin North	Disturbed	2013	1-Jul-13	3.2				
B3 P/B	B3	Bigwin North	Disturbed	2013	5-Aug-13	4.7	5	11		
B3 P/B FD	B3	Bigwin North	Disturbed	2013	28-Aug-13	4.8	3	16		
B3 P/B	B3	Bigwin North	Disturbed	2013	18-Aug-13	5.7	1	8		
B3 P/B	B3	Bigwin North	Disturbed	2013	28-Aug-13	6.2	3	8		
B3 P/B	B3	Bigwin North	Disturbed	2013	21-Jul-13		3	17		
B3 P/B FD	B3	Bigwin North	Disturbed	2013	18-Aug-13		1	8		
B3 P/B lab	B3	Bigwin North	Disturbed	2013	18-Aug-13		2	12		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2013	5-Aug-13	3.6	5	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2013	5-Aug-13	3.7	1	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2013	1-Jul-13	3.9	3	28		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2013	1-Jul-13	4.3	5	8		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2013	28-Aug-13	5.2	1	11		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2013	21-Jul-13		8	11		
N24 P/B lab	N24	Boothby's	Nearshore Undisturbed	2013	21-Jul-13		10	19		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2013	21-Jul-13		8	16		
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2013	18-Aug-13		1	8		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2013	18-Aug-13		1	11		
N24 P/B lab	N24	Boothby's	Nearshore Undisturbed	2013	18-Aug-13		0	15		
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2013	28-Aug-13		1	8		
N24 P/B lab	N24	Boothby's	Nearshore Undisturbed	2013	28-Aug-13		2	11		
N11 P/B	N11	Britannia	Disturbed	2013	5-Aug-13	2.9	1	3		
N11 P/B	N11	Britannia	Disturbed	2013	21-Jul-13	5.3	1	1		
N11 P/B	N11	Britannia	Disturbed	2013	28-Aug-13	13.3	3	17		x
N11 P/B	N11	Britannia	Disturbed	2013	18-Aug-13	21.6	1	8		x
N11 P/B	N11	Britannia	Disturbed	2013	1-Jul-13		1	8		
N11 P/B FD	N11	Britannia	Disturbed	2013	18-Aug-13		1	5		
N11 P/B lab	N11	Britannia	Disturbed	2013	18-Aug-13		0	6		
N11 P/B FD	N11	Britannia	Disturbed	2013	28-Aug-13		1	11		
N11 P/B lab	N11	Britannia	Disturbed	2013	28-Aug-13		2	9		
N1 P/B	N1	Dwight Bay	Deep Water	2013	1-Jul-13	3.8	3	11		
N1 P/B FD	N1	Dwight Bay	Deep Water	2013	1-Jul-13	3.8	1	11		
N1 P/B FD	N1	Dwight Bay	Deep Water	2013	5-Aug-13	5.1	5	28		
N1 P/B	N1	Dwight Bay	Deep Water	2013	21-Jul-13	5.4	1	8		
N1 P/B	N1	Dwight Bay	Deep Water	2013	18-Aug-13	5.5	5	11		
N1 P/B FD	N1	Dwight Bay	Deep Water	2013	18-Aug-13	6.1	3	8		
N1 P/B	N1	Dwight Bay	Deep Water	2013	5-Aug-13	7.0	3	35		
N1 P/B lab	N1	Dwight Bay	Deep Water	2013	5-Aug-13		6	45		
N1 P/B	N1	Dwight Bay	Deep Water	2013	28-Aug-13		3	8		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N3 P/B	N3	Dwight Beach	Disturbed	2013	1-Jul-13	4.1	3	5		
N3 P/B	N3	Dwight Beach	Disturbed	2013	28-Aug-13	6.0	5	8		
N3 P/B	N3	Dwight Beach	Disturbed	2013	21-Jul-13	6.6	3	8		
N3 P/B	N3	Dwight Beach	Disturbed	2013	18-Aug-13	6.7	3	17		
N3 P/B	N3	Dwight Beach	Disturbed	2013	5-Aug-13	10.4	1	1		
N3 P/B FD	N3	Dwight Beach	Disturbed	2013	5-Aug-13		1	5		
N3 P/B lab	N3	Dwight Beach	Disturbed	2013	5-Aug-13		3	8		
B2 P/B FD	B2	Fairview	Deep Water	2013	1-Jul-13	3.6	1	3		
B2 P/B	B2	Fairview	Deep Water	2013	1-Jul-13	3.7	1	1		
B2 P/B	B2	Fairview	Deep Water	2013	28-Aug-13	4.0	1	1		
B2 P/B	B2	Fairview	Deep Water	2013	18-Aug-13	4.2	1	5		
B2 P/B FD	B2	Fairview	Deep Water	2013	28-Aug-13	4.2	1	3		
B2 P/B FD	B2	Fairview	Deep Water	2013	18-Aug-13	4.6	3	3		
B2 P/B	B2	Fairview	Deep Water	2013	21-Jul-13	5.1	3	3		
B2 P/B	B2	Fairview	Deep Water	2013	5-Aug-13	5.1	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2013	1-Jul-13	3.2	1	1		
N10 P/B	N10	Gull Rock	Deep Water	2013	28-Aug-13	3.4	1	3		
N10 P/B	N10	Gull Rock	Deep Water	2013	5-Aug-13	3.5	5	8		
N10 P/B FD	N10	Gull Rock	Deep Water	2013	21-Jul-13	3.8	11	17		
N10 P/B	N10	Gull Rock	Deep Water	2013	21-Jul-13	4.0	8	28		
N10 P/B	N10	Gull Rock	Deep Water	2013	18-Aug-13	5.7	1	3		
N10 P/B lab	N10	Gull Rock	Deep Water	2013	21-Jul-13		17	49		
N10 P/B FD	N10	Gull Rock	Deep Water	2013	18-Aug-13		1	1		
N10 P/B lab	N10	Gull Rock	Deep Water	2013	18-Aug-13		0	1		
N10 P/B FD	N10	Gull Rock	Deep Water	2013	28-Aug-13		1	8		
N10 P/B lab	N10	Gull Rock	Deep Water	2013	28-Aug-13		1	8		
E13 P/B FD	E13	Haystack Bay	Deep Water	2013	28-Aug-13	3.6	1	5		
E13 P/B	E13	Haystack Bay	Deep Water	2013	28-Aug-13	4.3	1	3		
E13 P/B	E13	Haystack Bay	Deep Water	2013	5-Aug-13	6.7	1	5		
E13 P/B	E13	Haystack Bay	Deep Water	2013	1-Jul-13	7.6	1	3		
E13 P/B	E13	Haystack Bay	Deep Water	2013	21-Jul-13	7.7	3	3		
E13 P/B	E13	Haystack Bay	Deep Water	2013	18-Aug-13	10.3	1	11		
E13 P/B FD	E13	Haystack Bay	Deep Water	2013	5-Aug-13		1	8		
E13 P/B lab	E13	Haystack Bay	Deep Water	2013	5-Aug-13		0	10		
E13 P/B FD	E13	Haystack Bay	Deep Water	2013	18-Aug-13		1	8		
E13 P/B lab	E13	Haystack Bay	Deep Water	2013	18-Aug-13		0	8		
E 18 P/B	E18	Hollow River mouth	River	2013	5-Aug-13	3.8	3	28		
E 18 P/B	E18	Hollow River mouth	River	2013	28-Aug-13	3.8	3	8		
E 18 P/B	E18	Hollow River mouth	River	2013	1-Jul-13	4.8	3	17		
E 18 P/B	E18	Hollow River mouth	River	2013	21-Jul-13		5	28		
E 18 P/B FD	E18	Hollow River mouth	River	2013	5-Aug-13		1	17		
E 18 P/B lab	E18	Hollow River mouth	River	2013	5-Aug-13		2	14		
E 18 P/B	E18	Hollow River mouth	River	2013	18-Aug-13		3	11		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	5-Aug-13	2.9	3	11		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	1-Jul-13	3.1	5	8		
S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2013	21-Jul-13	4.4	1	3		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	28-Aug-13	4.4	5	5		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	21-Jul-13	5.7	3	5		
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	18-Aug-13	5.9	1	3		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2013	28-Aug-13	3.6	3	17		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2013	1-Jul-13	3.9	3	8		
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2013	18-Aug-13	4.1	1	11		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2013	18-Aug-13	6.1	1	8	bs	
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2013	5-Aug-13	11.4	1	8		x
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2013	21-Jul-13		3	11		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2013	21-Jul-13		5	17		
N13 P/B lab	N13	Moffat's	Nearshore Undisturbed	2013	21-Jul-13		8	23		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2013	5-Aug-13		1	11		
N13 P/B lab	N13	Moffat's	Nearshore Undisturbed	2013	5-Aug-13		2	15		
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2013	28-Aug-13		3	36		
N13 P/B lab	N13	Moffat's	Nearshore Undisturbed	2013	28-Aug-13		4	25		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2013	1-Jul-13	3.6	5	8		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2013	5-Aug-13	4.5	28	35		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2013	18-Aug-13	5.3	11	17		
E 26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2013	18-Aug-13	5.4	11	28		
E 26 P/B	E26	Narrows West	Nearshore Undisturbed	2013	21-Jul-13		5	17		
E 26 P/B FD	E26	Narrows West	Nearshore Undisturbed	2013	5-Aug-13		18	35		
E 26 P/B lab	E26	Narrows West	Nearshore Undisturbed	2013	5-Aug-13		52	80		
N30 P/B	N30	Oxtongue Delta	River	2013	28-Aug-13	3.2	8	11		
N30 P/B	N30	Oxtongue Delta	River	2013	1-Jul-13	4.7	5	11		
N30 P/B	N30	Oxtongue Delta	River	2013	21-Jul-13	5.1	3	8		
N30 P/B	N30	Oxtongue Delta	River	2013	28-Aug-13	5.1	1	8		
N30 P/B FD	N30	Oxtongue Delta	River	2013	21-Jul-13	6.4	3	11		
N30 P/B	N30	Oxtongue Delta	River	2013	5-Aug-13	6.8	3	17		
N30 P/B	N30	Oxtongue Delta	River	2013	18-Aug-13	10.3	1	5		
N 2P/B	N2	Oxtongue mouth	River	2013	1-Jul-13	6.0	8	17		
N 2P/B	N2	Oxtongue mouth	River	2013	5-Aug-13	8.0	5	11		
N 2P/B	N2	Oxtongue mouth	River	2013	28-Aug-13	8.0	5	8		
N 2P/B	N2	Oxtongue mouth	River	2013	18-Aug-13	8.6	3	8		
N 2P/B	N2	Oxtongue mouth	River	2013	21-Jul-13	10.0	5	28		

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N26 P/B	N26	Portage Bay	Deep Water	2013	1-Jul-13	3.9	1	11		
N26 P/B	N26	Portage Bay	Deep Water	2013	21-Jul-13	5.3	3	8		
N26 P/B	N26	Portage Bay	Deep Water	2013	5-Aug-13	5.3	1	5		
N26 P/B	N26	Portage Bay	Deep Water	2013	28-Aug-13	6.4	3	11		
N26 P/B	N26	Portage Bay	Deep Water	2013	18-Aug-13	7.6	3	3		
S3 P/B FD	S3	Price's Point	Deep Water	2013	1-Jul-13	3.2	1	1		
S3 P/B	S3	Price's Point	Deep Water	2013	1-Jul-13	3.4	1	3		
S3 P/B	S3	Price's Point	Deep Water	2013	28-Aug-13	4.2	1	1		
S3 P/B FD	S3	Price's Point	Deep Water	2013	28-Aug-13	5.0	1	3		
S3 P/B FD	S3	Price's Point	Deep Water	2013	5-Aug-13	5.7	5	11		
S3 P/B	S3	Price's Point	Deep Water	2013	5-Aug-13	6.4	3	3		
S3 P/B	S3	Price's Point	Deep Water	2013	21-Jul-13	7.3	1	5		
S3 P/B	S3	Price's Point	Deep Water	2013	18-Aug-13	7.5	3	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2013	5-Aug-13	5.1	3	8		
E30 P/B	E30	Ten Mile Bay	Deep Water	2013	28-Aug-13	5.1	1	5		
E30 P/B	E30	Ten Mile Bay	Deep Water	2013	1-Jul-13	5.5	3	3		
E30 P/B	E30	Ten Mile Bay	Deep Water	2013	21-Jul-13	6.1	5	8		
E30 P/B	E30	Ten Mile Bay	Deep Water	2013	18-Aug-13	6.9	1	3		
E1 P/B FD	E1	Trading Bay	Deep Water	2013	1-Jul-13	2.2	8	11		
E1 P/B	E1	Trading Bay	Deep Water	2013	1-Jul-13	2.4	5	17		
E1 P/B	E1	Trading Bay	Deep Water	2013	5-Aug-13	2.5	3	8		
E1 P/B	E1	Trading Bay	Deep Water	2013	28-Aug-13	2.6	3	5		
E1 P/B FD	E1	Trading Bay	Deep Water	2013	5-Aug-13	2.8				
E1 P/B	E1	Trading Bay	Deep Water	2013	21-Jul-13					
E1 P/B	E1	Trading Bay	Deep Water	2013	18-Aug-13					
S1	S1	Adamson's Island	Nearshore Undisturbed	2014	3-Aug-14	2.8				
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2014	3-Aug-14	3.0				
S1	S1	Adamson's Island	Nearshore Undisturbed	2014	17-Aug-14	3.7				
S1	S1	Adamson's Island	Nearshore Undisturbed	2014	28-Aug-14	4.2				
S1	S1	Adamson's Island	Nearshore Undisturbed	2014	29-Jun-14	5.2				
S1	S1	Adamson's Island	Nearshore Undisturbed	2014	20-Jul-14	5.2				
B4	B4	Bigwin Bay	Disturbed	2014	3-Aug-14	3.3				
B4	B4	Bigwin Bay	Disturbed	2014	28-Aug-14	3.9				
B4	B4	Bigwin Bay	Disturbed	2014	17-Aug-14	4.7				
B4	B4	Bigwin Bay	Disturbed	2014	29-Jun-14	5.4				
B4	B4	Bigwin Bay	Disturbed	2014	20-Jul-14	10.1				x
B1 FD	B1	Bigwin East	Deep Water	2014	3-Aug-14	4.0				
B1	B1	Bigwin East	Deep Water	2014	3-Aug-14	4.5				
B1	B1	Bigwin East	Deep Water	2014	29-Jun-14	5.3				
B1	B1	Bigwin East	Deep Water	2014	28-Aug-14	5.7				
B1	B1	Bigwin East	Deep Water	2014	20-Jul-14	6.0				
B1 FD	B1	Bigwin East	Deep Water	2014	29-Jun-14	7.2				
B1	B1	Bigwin East	Deep Water	2014	17-Aug-14	8.6				
B1 FD	B1	Bigwin East	Deep Water	2014	20-Jul-14	9.5			bs	
B3 FD	B3	Bigwin North	Disturbed	2014	3-Aug-14	3.1				
B3	B3	Bigwin North	Disturbed	2014	3-Aug-14	3.4				
B3	B3	Bigwin North	Disturbed	2014	17-Aug-14	3.8				
B3 FD	B3	Bigwin North	Disturbed	2014	17-Aug-14	3.8				
B3	B3	Bigwin North	Disturbed	2014	28-Aug-14	3.8				
B3	B3	Bigwin North	Disturbed	2014	29-Jun-14	4.6				
B3	B3	Bigwin North	Disturbed	2014	20-Jul-14	7.7				
N24	N24	Boothby's	Nearshore Undisturbed	2014	28-Aug-14	3.7				
N24	N24	Boothby's	Nearshore Undisturbed	2014	3-Aug-14	4.2				
N24	N24	Boothby's	Nearshore Undisturbed	2014	17-Aug-14	5.2				
N24 FD	N24	Boothby's	Nearshore Undisturbed	2014	29-Jun-14	5.3				
N24	N24	Boothby's	Nearshore Undisturbed	2014	20-Jul-14	6.0				
N24	N24	Boothby's	Nearshore Undisturbed	2014	29-Jun-14	6.6				
N11	N11	Britannia	Disturbed	2014	28-Aug-14	3.9				
N11	N11	Britannia	Disturbed	2014	17-Aug-14	4.2				
N11	N11	Britannia	Disturbed	2014	29-Jun-14	5.0				
N11	N11	Britannia	Disturbed	2014	20-Jul-14	6.0				
N1	N1	Dwight Bay	Deep Water	2014	3-Aug-14	3.9				
N1	N1	Dwight Bay	Deep Water	2014	17-Aug-14	4.8				
N1	N1	Dwight Bay	Deep Water	2014	20-Jul-14	9.7				
N1	N1	Dwight Bay	Deep Water	2014	29-Jun-14					
N1	N1	Dwight Bay	Deep Water	2014	28-Aug-14					
B2 FD	B2	Fairview	Deep Water	2014	3-Aug-14	3.4				
B2 FD	B2	Fairview	Deep Water	2014	17-Aug-14	4.2				
B2	B2	Fairview	Deep Water	2014	17-Aug-14	4.7				
B2	B2	Fairview	Deep Water	2014	3-Aug-14	4.8				
B2	B2	Fairview	Deep Water	2014	28-Aug-14	4.8				
B2	B2	Fairview	Deep Water	2014	29-Jun-14	5.1				
B2	B2	Fairview	Deep Water	2014	20-Jul-14	5.1				
B2 FD	B2	Fairview	Deep Water	2014	28-Aug-14	5.4				
N10	N10	Gull Rock	Deep Water	2014	17-Aug-14	4.5				
N10	N10	Gull Rock	Deep Water	2014	3-Aug-14	4.7				
N10	N10	Gull Rock	Deep Water	2014	28-Aug-14	4.9				
N10	N10	Gull Rock	Deep Water	2014	20-Jul-14	5.3				
N10	N10	Gull Rock	Deep Water	2014	29-Jun-14	5.5				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N10 FD	N10	Gull Rock	Deep Water	2014	29-Jun-14	9.0			bs	
E13	E13	Haystack Bay	Deep Water	2014	17-Aug-14	4.2				
E13	E13	Haystack Bay	Deep Water	2014	28-Aug-14	4.4				
E13	E13	Haystack Bay	Deep Water	2014	3-Aug-14	4.7				
E13	E13	Haystack Bay	Deep Water	2014	29-Jun-14	8.5				
E13	E13	Haystack Bay	Deep Water	2014	20-Jul-14	9.2				
E18	E18	Hollow River mouth	River	2014	3-Aug-14	4.3				
E18	E18	Hollow River mouth	River	2014	20-Jul-14	4.7				
E18	E18	Hollow River mouth	River	2014	17-Aug-14	5.7				
E18	E18	Hollow River mouth	River	2014	29-Jun-14	6.2				
E18	E18	Hollow River mouth	River	2014	28-Aug-14	6.6				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	17-Aug-14	3.2				
S2 FD	S2	Menominee Bay	Nearshore Undisturbed	2014	17-Aug-14	3.2				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	29-Jun-14	4.5				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	28-Aug-14	4.6				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	28-Aug-14	4.6				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	20-Jul-14	5.6				
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	3-Aug-14	6.2				
N13	N13	Moffat's	Nearshore Undisturbed	2014	28-Aug-14	4.4				
N13	N13	Moffat's	Nearshore Undisturbed	2014	3-Aug-14	5.0				
N13	N13	Moffat's	Nearshore Undisturbed	2014	20-Jul-14	5.9				
N13	N13	Moffat's	Nearshore Undisturbed	2014	17-Aug-14	5.9				
N13	N13	Moffat's	Nearshore Undisturbed	2014	29-Jun-14	6.1				
N13 FD	N13	Moffat's	Nearshore Undisturbed	2014	28-Aug-14	6.9			bs	
E26	E26	Narrows West	Nearshore Undisturbed	2014	3-Aug-14	3.6				
E26	E26	Narrows West	Nearshore Undisturbed	2014	20-Jul-14	4.3				
E26	E26	Narrows West	Nearshore Undisturbed	2014	28-Aug-14	4.5				
E26	E26	Narrows West	Nearshore Undisturbed	2014	17-Aug-14	5.0				
E26 FD	E26	Narrows West	Nearshore Undisturbed	2014	28-Aug-14	5.2				
E26 FD	E26	Narrows West	Nearshore Undisturbed	2014	17-Aug-14	5.5				
E26	E26	Narrows West	Nearshore Undisturbed	2014	29-Jun-14	6.3				
N30	N30	Oxtongue Delta	River	2014	17-Aug-14	6.5				
N30	N30	Oxtongue Delta	River	2014	3-Aug-14	7.8				
N30	N30	Oxtongue Delta	River	2014	28-Aug-14	8.3				
N30 FD	N30	Oxtongue Delta	River	2014	28-Aug-14	8.3				
N30	N30	Oxtongue Delta	River	2014	20-Jul-14	9.1				
N30	N30	Oxtongue Delta	River	2014	29-Jun-14	10.9				
N2	N2	Oxtongue mouth	River	2014	17-Aug-14	8.0				
N2 FD	N2	Oxtongue mouth	River	2014	17-Aug-14	8.1				
N2	N2	Oxtongue mouth	River	2014	3-Aug-14	8.2				
N2 FD	N2	Oxtongue mouth	River	2014	3-Aug-14	8.4				
N2	N2	Oxtongue mouth	River	2014	28-Aug-14	9.2				
N2	N2	Oxtongue mouth	River	2014	20-Jul-14	9.4				
N2	N2	Oxtongue mouth	River	2014	29-Jun-14	76.8				R
N26	N26	Portage Bay	Deep Water	2014	28-Aug-14	4.6				
N26	N26	Portage Bay	Deep Water	2014	29-Jun-14	5.8				
N26	N26	Portage Bay	Deep Water	2014	3-Aug-14	5.8				
N26	N26	Portage Bay	Deep Water	2014	17-Aug-14	6.5				
N26	N26	Portage Bay	Deep Water	2014	20-Jul-14	8.8				
S3	S3	Price's Point	Deep Water	2014	17-Aug-14	3.4				
S3	S3	Price's Point	Deep Water	2014	3-Aug-14	3.7				
S3	S3	Price's Point	Deep Water	2014	28-Aug-14	4.7				
S3 FD	S3	Price's Point	Deep Water	2014	28-Aug-14	4.8				
S3	S3	Price's Point	Deep Water	2014	29-Jun-14	5.3				
S3	S3	Price's Point	Deep Water	2014	20-Jul-14	5.3				
E30	E30	Ten Mile Bay	Deep Water	2014	3-Aug-14	4.9				
E30	E30	Ten Mile Bay	Deep Water	2014	17-Aug-14	5.7				
E30	E30	Ten Mile Bay	Deep Water	2014	28-Aug-14	6.7				
E30	E30	Ten Mile Bay	Deep Water	2014	20-Jul-14	8.7				
E30	E30	Ten Mile Bay	Deep Water	2014	29-Jun-14	10.2				x
E30 FD	E30	Ten Mile Bay	Deep Water	2014	29-Jun-14	10.3				x
E1	E1	Trading Bay	Deep Water	2014	3-Aug-14	3.7				
E1	E1	Trading Bay	Deep Water	2014	17-Aug-14	3.8				
E1	E1	Trading Bay	Deep Water	2014	28-Aug-14	4.2				
E1	E1	Trading Bay	Deep Water	2014	29-Jun-14	4.4				
E1 FD	E1	Trading Bay	Deep Water	2014	17-Aug-14	4.6				
E1	E1	Trading Bay	Deep Water	2014	20-Jul-14	4.7				
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	4-Sep-15	2.1				
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2015	4-Sep-15	2.5				
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	23-Aug-15	2.6				
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	4-Aug-15	3.9				
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	28-Jun-15	4.1				
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	20-Jul-15	4.5				
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2015	28-Jun-15	4.6				
B5 FD	B4	Bigwin Bay	Disturbed	2015	23-Aug-15	2.1				
B5	B4	Bigwin Bay	Disturbed	2015	23-Aug-15	2.7				
B5	B4	Bigwin Bay	Disturbed	2015	4-Sep-15	4.6				
B5	B4	Bigwin Bay	Disturbed	2015	28-Jun-15	5.5				
B5	B4	Bigwin Bay	Disturbed	2015	20-Jul-15	6.7				
B5	B4	Bigwin Bay	Disturbed	2015	4-Aug-15	12.0				x

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
B1	B1	Bigwin East	Deep Water	2015	4-Aug-15	3.9				
B1	B1	Bigwin East	Deep Water	2015	23-Aug-15	4.1				
B1	B1	Bigwin East	Deep Water	2015	20-Jul-15	4.6				
B1	B1	Bigwin East	Deep Water	2015	4-Sep-15	5.5				
B1	B1	Bigwin East	Deep Water	2015	28-Jun-15	18.1				x
B3 FD	B3	Bigwin North	Disturbed	2015	4-Aug-15	4.0				
B3	B3	Bigwin North	Disturbed	2015	28-Jun-15	4.2				
B3	B3	Bigwin North	Disturbed	2015	23-Aug-15	4.5				
B3	B3	Bigwin North	Disturbed	2015	4-Sep-15	4.5				
B3	B3	Bigwin North	Disturbed	2015	20-Jul-15	8.1				
B3 FD	B3	Bigwin North	Disturbed	2015	4-Sep-15	8.7			bs	
B3	B3	Bigwin North	Disturbed	2015	4-Aug-15	19.3			bs	
N24 FD	N24	Boothby's	Nearshore Undisturbed	2015	23-Aug-15	2.1				
N24	N24	Boothby's	Nearshore Undisturbed	2015	4-Sep-15	2.6				
N24	N24	Boothby's	Nearshore Undisturbed	2015	20-Jul-15	4.1				
N24	N24	Boothby's	Nearshore Undisturbed	2015	4-Aug-15	4.5				
N24	N24	Boothby's	Nearshore Undisturbed	2015	28-Jun-15	5.0				
N24	N24	Boothby's	Nearshore Undisturbed	2015	23-Aug-15	5.0			bs	
N24 FD	N24	Boothby's	Nearshore Undisturbed	2015	20-Jul-15	7.4			bs	
N11	N11	Britannia	Disturbed	2015	4-Sep-15	2.6				
N11 FD	N11	Britannia	Disturbed	2015	4-Sep-15	2.7				
N11	N11	Britannia	Disturbed	2015	20-Jul-15	3.9				
N11	N11	Britannia	Disturbed	2015	28-Jun-15	4.6				
N11	N11	Britannia	Disturbed	2015	23-Aug-15	6.2				
N11	N11	Britannia	Disturbed	2015	4-Aug-15	6.9				
N1	N1	Dwight Bay	Deep Water	2015	23-Aug-15	3.1				
N1	N1	Dwight Bay	Deep Water	2015	20-Jul-15	4.3				
N1 FD	N1	Dwight Bay	Deep Water	2015	4-Sep-15	4.4				
N1	N1	Dwight Bay	Deep Water	2015	4-Aug-15	5.1				
N1	N1	Dwight Bay	Deep Water	2015	4-Sep-15	7.0			bs	
N1	N1	Dwight Bay	Deep Water	2015	28-Jun-15	8.1				
N1 FD	N1	Dwight Bay	Deep Water	2015	20-Jul-15	8.3			bs	
B2	B2	Fairview	Deep Water	2015	23-Aug-15	3.3				
B2	B2	Fairview	Deep Water	2015	4-Sep-15	3.3				
B2	B2	Fairview	Deep Water	2015	4-Aug-15	3.7				
B2	B2	Fairview	Deep Water	2015	20-Jul-15	4.8				
B2 FD	B2	Fairview	Deep Water	2015	23-Aug-15	5.4				
B2	B2	Fairview	Deep Water	2015	28-Jun-15	5.9				
N10	N10	Gull Rock	Deep Water	2015	4-Sep-15	2.5				
N10	N10	Gull Rock	Deep Water	2015	23-Aug-15	3.3				
N10 FD	N10	Gull Rock	Deep Water	2015	4-Aug-15	3.8				
N10	N10	Gull Rock	Deep Water	2015	4-Aug-15	3.9				
N10	N10	Gull Rock	Deep Water	2015	20-Jul-15	4.8				
N10	N10	Gull Rock	Deep Water	2015	20-Jul-15	5.1				
N10	N10	Gull Rock	Deep Water	2015	28-Jun-15	5.7				
E13	E13	Haystack Bay	Deep Water	2015	23-Aug-15	3.3				
E13	E13	Haystack Bay	Deep Water	2015	4-Aug-15	4.8				
E13	E13	Haystack Bay	Deep Water	2015	28-Jun-15	14.6				x
E13	E13	Haystack Bay	Deep Water	2015	4-Sep-15	15.7				x
E13 FD	E13	Haystack Bay	Deep Water	2015	4-Sep-15	20.5				x
E13	E13	Haystack Bay	Deep Water	2015	20-Jul-15					
E18	E18	Hollow River mouth	River	2015	4-Aug-15	5.5				
E18	E18	Hollow River mouth	River	2015	4-Aug-15	6.3				
E18	E18	Hollow River mouth	River	2015	4-Sep-15	7.5				
E18	E18	Hollow River mouth	River	2015	20-Jul-15	8.6				
E18	E18	Hollow River mouth	River	2015	28-Jun-15	16.3				R
E18	E18	Hollow River mouth	River	2015	23-Aug-15					
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	23-Aug-15	1.9				
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Sep-15	3.0				
S2 FD	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Aug-15	3.7				
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	20-Jul-15	4.5				
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Aug-15	4.5				
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	28-Jun-15	4.8				
N13 FD	N13	Moffat's	Nearshore Undisturbed	2015	23-Aug-15	1.8				
N13	N13	Moffat's	Nearshore Undisturbed	2015	4-Sep-15	3.1				
N13	N13	Moffat's	Nearshore Undisturbed	2015	23-Aug-15	3.9				
N13	N13	Moffat's	Nearshore Undisturbed	2015	20-Jul-15	4.1				
N13	N13	Moffat's	Nearshore Undisturbed	2015	4-Aug-15	4.1				
N13	N13	Moffat's	Nearshore Undisturbed	2015	28-Jun-15	4.9				
N13	N13	Moffat's	Nearshore Undisturbed	2015	20-Jul-15	7.3				
E25	E26	Narrows West	Nearshore Undisturbed	2015	28-Jun-15	3.4				
E26	E26	Narrows West	Nearshore Undisturbed	2015	20-Jul-15	4.5				
E26	E26	Narrows West	Nearshore Undisturbed	2015	4-Aug-15	4.9				
E26 FD	E26	Narrows West	Nearshore Undisturbed	2015	20-Jul-15	5.1				
E26	E26	Narrows West	Nearshore Undisturbed	2015	4-Sep-15	8.9				x
E26	E26	Narrows West	Nearshore Undisturbed	2015	23-Aug-15					
N30	N30	Oxtongue Delta	River	2015	23-Aug-15	2.4				
N30 FD	N30	Oxtongue Delta	River	2015	23-Aug-15	2.5				
N30 FD	N30	Oxtongue Delta	River	2015	4-Aug-15	4.9				
N30	N30	Oxtongue Delta	River	2015	4-Aug-15	5.1				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	E. coli (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
N30	N30	Oxtongue Delta	River	2015	20-Jul-15	7.0				
N30	N30	Oxtongue Delta	River	2015	28-Jun-15	7.1				
N30 FD	N30	Oxtongue Delta	River	2015	28-Jun-15	8.1				
N30	N30	Oxtongue Delta	River	2015	4-Sep-15	8.1				
N2	N2	Oxtongue mouth	River	2015	4-Aug-15	4.6				
N2	N2	Oxtongue mouth	River	2015	23-Aug-15	5.7				
N2 FD	N2	Oxtongue mouth	River	2015	23-Aug-15	6.1				
N2	N2	Oxtongue mouth	River	2015	28-Jun-15	7.4				
N2	N2	Oxtongue mouth	River	2015	20-Jul-15	7.5				
N2	N2	Oxtongue mouth	River	2015	4-Sep-15	7.7				
N26	N26	Portage Bay	Deep Water	2015	4-Sep-15	3.6				
N26	N26	Portage Bay	Deep Water	2015	23-Aug-15	4.5				
N26	N26	Portage Bay	Deep Water	2015	20-Jul-15	4.8				
N26	N26	Portage Bay	Deep Water	2015	4-Aug-15	4.9				
N26	N26	Portage Bay	Deep Water	2015	28-Jun-15	5.5				
S3	S3	Price's Point	Deep Water	2015	23-Aug-15	2.3				
S3	S3	Price's Point	Deep Water	2015	4-Sep-15	3.0				
S3	S3	Price's Point	Deep Water	2015	4-Aug-15	4.2				
S3	S3	Price's Point	Deep Water	2015	20-Jul-15	4.8				
S3 FD	S3	Price's Point	Deep Water	2015	20-Jul-15	5.3				
S3	S3	Price's Point	Deep Water	2015	28-Jun-15	5.4				
E30	E30	Ten Mile Bay	Deep Water	2015	23-Aug-15	4.3				
E30	E30	Ten Mile Bay	Deep Water	2015	4-Sep-15	4.6				
E30	E30	Ten Mile Bay	Deep Water	2015	28-Jun-15	4.8				
E30 FD	E30	Ten Mile Bay	Deep Water	2015	23-Aug-15	5.3				
E30	E30	Ten Mile Bay	Deep Water	2015	20-Jul-15	5.6				
E30	E30	Ten Mile Bay	Deep Water	2015	4-Aug-15	5.8				
E1	E1	Trading Bay	Deep Water	2015	4-Sep-15	4.7				
E1	E1	Trading Bay	Deep Water	2015	23-Aug-15	5.0				
E1	E1	Trading Bay	Deep Water	2015	20-Jul-15	8.2				
E1	E1	Trading Bay	Deep Water	2015	4-Aug-15	9.5				
E1	E1	Trading Bay	Deep Water	2015	28-Jun-15	10.6				
B1	B1	Bigwin East	Deep water	2016	1-Jul-16	5.1				
B1	B1	Bigwin East	Deep water	2016	18-Jul-16	2.9				
B1	B1	Bigwin East	Deep water	2016	1-Aug-16	4.5	3	5		
B1	B1	Bigwin East	Deep water	2016	14-Aug-16	5.0				
B1	B1	Bigwin East	Deep water	2016	1-Sep-16	4.0				
B1 FD	B1	Bigwin East	Deep water	2016	1-Sep-16	5.3				
B2	B2	Fairview	Deep water	2016	1-Jul-16	4.3				
B2 FD	B2	Fairview	Deep water	2016	1-Jul-16	3.3				
B2	B2	Fairview	Deep water	2016	18-Jul-16	3.6				
B2	B2	Fairview	Deep water	2016	1-Aug-16	4.7	0	5		
B2 FD	B2	Fairview	Deep water	2016	1-Aug-16		0	3		
B2	B2	Fairview	Deep water	2016	14-Aug-16	10.2			bs	
B2 FD	B2	Fairview	Deep water	2016	14-Aug-16	3.7				
B2	B2	Fairview	Deep water	2016	1-Sep-16	4.8				
B3	B3	Bigwin North	Disturbed	2016	1-Jul-16	3.9				
B3	B3	Bigwin North	Disturbed	2016	18-Jul-16	4.9				
B3	B3	Bigwin North	Disturbed	2016	1-Aug-16	9.4	5	13		
B3	B3	Bigwin North	Disturbed	2016	14-Aug-16	3.5				
B3 FD	B3	Bigwin North	Disturbed	2016	14-Aug-16	5.9			bs	
B3	B3	Bigwin North	Disturbed	2016	1-Sep-16	3.8				
B3 FD	B3	Bigwin North	Disturbed	2016	1-Sep-16	4.0				
B5	B5	Bigwin Bay	Disturbed	2016	1-Jul-16	3.7				
B5	B5	Bigwin Bay	Disturbed	2016	18-Jul-16	3.5				
B5	B5	Bigwin Bay	Disturbed	2016	1-Aug-16	5.1	5	16		
B5	B5	Bigwin Bay	Disturbed	2016	14-Aug-16	4.2				
B5	B5	Bigwin Bay	Disturbed	2016	1-Sep-16	4.9				
E1	E1	Trading Bay	Deep water	2016	1-Jul-16					
E1	E1	Trading Bay	Deep water	2016	18-Jul-16	8.8				
E1	E1	Trading Bay	Deep water	2016	1-Aug-16	6.6	3	8		
E1	E1	Trading Bay	Deep water	2016	14-Aug-16	5.4				
E1 F/D	E1	Trading Bay	Deep water	2016	14-Aug-16	5.0				
E1	E1	Trading Bay	Deep water	2016	1-Sep-16	15.8				x
E13	E13	Haystack Bay	Deep water	2016	1-Jul-16	7.2				
E13	E13	Haystack Bay	Deep water	2016	18-Jul-16	4.3				
E13 F/D	E13	Haystack Bay	Deep water	2016	18-Jul-16	4.1				
E13	E13	Haystack Bay	Deep water	2016	1-Aug-16	5.8	0	8		
E13	E13	Haystack Bay	Deep water	2016	14-Aug-16	5.5				
E18	E18	Hollow River mouth	River	2016	1-Jul-16					
E18	E18	Hollow River mouth	River	2016	18-Jul-16	13.3				
E18	E18	Hollow River mouth	River	2016	1-Aug-16	7.3	3	11		
E18	E18	Hollow River mouth	River	2016	14-Aug-16	25.7				
E18	E18	Hollow River mouth	River	2016	1-Sep-16	18.3				
E25	E25	Narrows West	Nearshore Undisturbed	2016	1-Jul-16					
E25	E25	Narrows West	Nearshore Undisturbed	2016	18-Jul-16	5.9				
E25 FD	E25	Narrows West	Nearshore Undisturbed	2016	18-Jul-16	12.3			bs	
E25	E25	Narrows West	Nearshore Undisturbed	2016	1-Aug-16	5.8	3	8		
E25	E25	Narrows West	Nearshore Undisturbed	2016	14-Aug-16	3.7				
E25	E25	Narrows West	Nearshore Undisturbed	2016	1-Sep-16	6.1				

Site Code	Site ID	Site Name	Site Type	Year	Date	Total Phosphorus (ug/L)	<i>E. coli</i> (cfu/100 mL)	Total Coliform (cfu/100 mL)	Bad Splits	Outliers 2016 5%
E30	E30	Ten Mile Bay	Deep water	2016	1-Jul-16					
E30	E30	Ten Mile Bay	Deep water	2016	18-Jul-16	15.0				x
E30	E30	Ten Mile Bay	Deep water	2016	1-Aug-16	7.3	0	8		
E30 FD	E30	Ten Mile Bay	Deep water	2016	1-Aug-16		3	8		
E30	E30	Ten Mile Bay	Deep water	2016	14-Aug-16	7.9				
E30	E30	Ten Mile Bay	Deep water	2016	1-Sep-16	7.0				
E30 FD	E30	Ten Mile Bay	Deep water	2016	1-Sep-16	6.1				
N1	N1	Dwight Bay	Deep water	2016	1-Jul-16	11.7				
N1 FD	N1	Dwight Bay	Deep water	2016	1-Jul-16	10.4				
N1	N1	Dwight Bay	Deep water	2016	18-Jul-16	12.4				
N1	N1	Dwight Bay	Deep water	2016	1-Aug-16	6.5	0	3		
N1	N1	Dwight Bay	Deep water	2016	14-Aug-16	7.3				
N1 FD	N1	Dwight Bay	Deep water	2016	14-Aug-16	11.2			bs	
N1	N1	Dwight Bay	Deep water	2016	1-Sep-16	7.3				
N2	N2	Oxtongue mouth	River	2016	1-Jul-16	5.6				
N2	N2	Oxtongue mouth	River	2016	18-Jul-16	11.9				
N2	N2	Oxtongue mouth	River	2016	1-Aug-16	6.2	3	13		
N2	N2	Oxtongue mouth	River	2016	14-Aug-16	5.6				
N2	N2	Oxtongue mouth	River	2016	1-Sep-16	6.7				
N10	N10	Gull Rock	Deep water	2016	1-Jul-16	3.8				
N10	N10	Gull Rock	Deep water	2016	18-Jul-16	8.5				
N10 FD	N10	Gull Rock	Deep water	2016	18-Jul-16	7.9				
N10	N10	Gull Rock	Deep water	2016	1-Aug-16	4.1	0	3		
N10	N10	Gull Rock	Deep water	2016	14-Aug-16	4.8				
N10	N10	Gull Rock	Deep water	2016	1-Sep-16					
N11	N11	Britannia	Disturbed	2016	1-Jul-16	3.1				
N11	N11	Britannia	Disturbed	2016	18-Jul-16	7.3				
N11	N11	Britannia	Disturbed	2016	1-Aug-16	5.9	3	5	bs	
N11 FD	N11	Britannia	Disturbed	2016	1-Aug-16	3.9				
N11	N11	Britannia	Disturbed	2016	14-Aug-16	3.9				
N11 FD	N11	Britannia	Disturbed	2016	14-Aug-16	3.8				
N11	N11	Britannia	Disturbed	2016	1-Sep-16	4.5				
N13	N13	Moffat's	Nearshore Undisturbed	2016	1-Jul-16	3.5				
N13	N13	Moffat's	Nearshore Undisturbed	2016	18-Jul-16	17.2				x
N13	N13	Moffat's	Nearshore Undisturbed	2016	1-Aug-16	4.5	0	5		
N13 FD	N13	Moffat's	Nearshore Undisturbed	2016	1-Aug-16		0	3		
N13	N13	Moffat's	Nearshore Undisturbed	2016	14-Aug-16	3.4				
N13 FD	N13	Moffat's	Nearshore Undisturbed	2016	14-Aug-16	3.3				
N13	N13	Moffat's	Nearshore Undisturbed	2016	1-Sep-16	3.8				
N24	N24	Boothby's	Nearshore Undisturbed	2016	1-Jul-16	3.3				
N24 FD	N24	Boothby's	Nearshore Undisturbed	2016	1-Jul-16	8.7			bs	
N24	N24	Boothby's	Nearshore Undisturbed	2016	18-Jul-16	7.3				
N24	N24	Boothby's	Nearshore Undisturbed	2016	1-Aug-16	4.7	3	8		
N24	N24	Boothby's	Nearshore Undisturbed	2016	14-Aug-16	2.7				
N24	N24	Boothby's	Nearshore Undisturbed	2016	1-Sep-16	8.3				
N26	N26	Portage Bay	Deep water	2016	1-Jul-16	0.6				s
N26	N26	Portage Bay	Deep water	2016	18-Jul-16	8.7				
N26	N26	Portage Bay	Deep water	2016	1-Aug-16	5.7	3	11		
N26 FD	N26	Portage Bay	Deep water	2016	1-Aug-16	6.6				
N26	N26	Portage Bay	Deep water	2016	14-Aug-16	5.6				
N26	N26	Portage Bay	Deep water	2016	1-Sep-16					
N30	N30	Oxtongue Delta	River	2016	1-Jul-16	5.5				
N30	N30	Oxtongue Delta	River	2016	18-Jul-16	13.2				
N30 FD	N30	Oxtongue Delta	River	2016	18-Jul-16	15.1				
N30	N30	Oxtongue Delta	River	2016	1-Aug-16	6.6	5	16		
N30	N30	Oxtongue Delta	River	2016	14-Aug-16	6.3				
N30	N30	Oxtongue Delta	River	2016	1-Sep-16	6.3				
N30 FD	N30	Oxtongue Delta	River	2016	1-Sep-16	6.4				
S1	S1	Adamson's Island	Nearshore Undisturbed	2016	1-Jul-16	4.9				
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2016	18-Jul-16	8.9				x
S1	S1	Adamson's Island	Nearshore Undisturbed	2016	1-Aug-16	4.5	3	8		
S1	S1	Adamson's Island	Nearshore Undisturbed	2016	14-Aug-16	4.0				
S1	S1	Adamson's Island	Nearshore Undisturbed	2016	1-Sep-16	3.7				
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2016	1-Sep-16	3.8				
S2	S2	Menominee Bay	Nearshore Undisturbed	2016	1-Jul-16	3.1				
S2 FD	S2	Menominee Bay	Nearshore Undisturbed	2016	1-Jul-16	4.8			bs	
S2	S2	Menominee Bay	Nearshore Undisturbed	2016	18-Jul-16	7.1				
S2	S2	Menominee Bay	Nearshore Undisturbed	2016	1-Aug-16	7.3	5	8		
S2	S2	Menominee Bay	Nearshore Undisturbed	2016	14-Aug-16	4.9				
S2 FD	S2	Menominee Bay	Nearshore Undisturbed	2016	14-Aug-16	5.6				
S2	S2	Menominee Bay	Nearshore Undisturbed	2016	1-Sep-16	12.0				
S3	S3	Price's Point	Deep water	2016	1-Jul-16	6.1				
S3	S3	Price's Point	Deep water	2016	18-Jul-16	7.6				
S3 FD	S3	Price's Point	Deep water	2016	18-Jul-16	9.3				
S3	S3	Price's Point	Deep water	2016	1-Aug-16	3.9	3	5		
S3 FD	S3	Price's Point	Deep water	2016	1-Aug-16	6.2	0	8	bs	
S3	S3	Price's Point	Deep water	2016	14-Aug-16	4.1				
S3	S3	Price's Point	Deep water	2016	1-Sep-16	5.9				