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Environmental Sciences Ltd.

Lake of Bays Water Quality Report 2021

Prepared for: Lake of Bays Association
Job #: J100013

December 2021

Final Report



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HESL Job #: J100013

Caroline Konarzewski
Environment Chair
Lake of Bays Association
PO Box 8
Baysville, ON P0B 1A0

Dear Ms. Konarzewski:

Re: Lake of Bays Water Quality Report 2021

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 2021.

As in previous years, total phosphorus and bacteria levels were well below applicable Provincial guidelines indicating excellent water quality in 2021. Statistically significant increases in total phosphorus that have been noted in the past were absent with the addition of the 2021 data despite higher-than-average precipitation. Quality control sampling in 2021 was significantly reduced which had a negative impact on our ability to critically assess field data collection. Given the recent transition in the program we recommend the continued collection of QA/QC samples for both total phosphorus and bacteria consistent with past data collection.

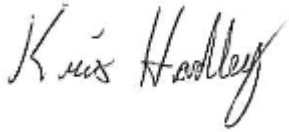
I thank you and the Lake of Bays Association for the continued opportunity to assist with this project.

Sincerely,
per: Hutchinson Environmental Sciences Ltd.

Kristopher Hadley, Ph.D.
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Signatures

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Table of Contents

Transmittal Letter

Signatures

1.	Introduction	5
2.	Methods	6
2.1	Sample Collection	6
2.2	Quality Control	9
2.2.1	<i>Bacteria</i>	9
2.2.2	<i>Total Phosphorus</i>	9
2.3	Data Analysis	10
2.3.1	<i>Bacteria</i>	10
2.3.2	<i>Total Phosphorus</i>	10
3.	2021 Monitoring Results.....	10
3.1	Quality Control	10
3.1.1	<i>Bacteria</i>	10
3.1.2	<i>Total Phosphorus</i>	10
3.1.3	<i>Outliers</i>	12
3.2	<i>Bacteria</i>	14
3.3	2021 Total Phosphorus Concentrations	15
4.	Long-term Phosphorus Patterns.....	20
5.	Summary.....	27
6.	References.....	28

List of Figures

Figure 1.	Map of Lake of Bays and LOBA monitoring sites.....	8
Figure 2.	Total phosphorus field duplicates in Lake of Bays, 2021.	11
Figure 3.	Total phosphorus concentrations in Lake of Bays 2021, Deep Water sites.....	17
Figure 4.	Total phosphorus concentrations in Lake of Bays 2021, Nearshore Undisturbed sites.....	18
Figure 5.	Total phosphorus concentrations in Lake of Bays 2021, Disturbed sites.....	18
Figure 6.	Total phosphorus concentrations in Lake of Bays 2021, River sites.....	19
Figure 7.	Average total phosphorus concentrations in Lake of Bays 2021 by Site Type.	19
Figure 8.	Long-term (2002-2021) Mean Summer Euphotic Zone Total Phosphorus (TP) by Site Type. .	24
Figure 9.	Long-term Mean Summer Total Phosphorus in Deep Water areas of Lake of Bays.	24
Figure 10.	Long-term Total Phosphorus Concentrations at the Trading Bay Station	Error! Bookmark not defined.
Figure 11.	Annual Summary of Summer Total Phosphorus Concentrations at All Nearshore Disturbed, Undisturbed and Deep Water Sites and Precipitation (Beatrice Climate Station; 6110607) in Lake of Bays	26
Figure 12.	Mean Summer Euphotic Zone Total Phosphorus at Haystack Bay and Deep Water Sites of Lake of Bays and Total Summer precipitation at Beatrice (2002-2021) Climate Station.	Error! Bookmark not defined.



List of Tables

Table 1. 2021 Sampling Sites and Dates.....	7
Table 2. Summary of Bad Splits between Total Phosphorus Field Duplicates in Lake of Bays, 2005-2021	11
Table 3. Outliers in the LOBA Dataset (2002-2021), Rosner's Test ($p < 0.01$)	12
Table 4. Summer E. coli and Total Coliform Concentration in Surface Water Collected by Coliplate Technique, 2021	15
Table 5. Total Phosphorus Concentrations ($\mu\text{g/L}$) in Lake of Bays, 2021	16
Table 6. Number of Total Phosphorus Samples Collected by the Lake of Bays Monitoring Program (2002- 2021)	21
Table 7. Mean Summer Total Phosphorus Concentrations in Lake of Bays (2002-2021)	22

Appendices

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

Appendix B. LOBA Total Phosphorus and Bacteria Data



1. Introduction

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

LOBA has been monitoring spring turnover phosphorus levels as part of the Ministry of Environment, Conservation and Parks Lake Partner Program but the independent monitoring program began in 1970 to monitor bacteria levels in the lake during the ice-free season. In 1972, LOBA became a MoE Self-Help Program participant collecting Secchi depth measurements and water samples for Chlorophyll *a* analysis. In 1978 the program transitioned to analysing Total Phosphorus. This project was successful, deemed valuable and LOBA expanded the area of study in the summer of 2001 to include near-shore sites adjacent to developed and undeveloped properties, and areas influenced by wetlands and rivers. In 2002, the program was again expanded to include monitoring of total phosphorus concentrations in near-shore areas and in the Hollow and Oxtongue rivers and river deltas (deep water sites were already being monitored). Site selection has changed as our understanding of water quality conditions in Lake of Bays has increased and, since 2009, sampling has focused on deep water sites, nearshore disturbed and undisturbed locations, and inflowing rivers. In 2020, the Covid-19 pandemic suspended the data collection program, however the program was able to return to operation in 2021.

In July 2020 an algae bloom was reported and confirmed by the MECP on Ten Mile Bay. Water quality in Ten Mile Bay does not suggest changes in phosphorus concentrations have occurred in Ten Mile Bay, however we are lacking data from 2020 to confirm the conditions during or prior to the bloom. Following the report of the blooms, HESL and LOBA coordinated to gather additional information beyond the MECP sampling, however the bloom could not be located by LOBA residents and therefore may have been a small-scale localized bloom that quickly dissipated. To our knowledge no blooms on Lake of Bays were reported in 2021.

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, from streams and overland flow, and to a lesser degree through groundwater. Human sources to recreational lakes include storm water runoff and erosion from altered land uses, fertilizers on manicured lawns and faulty septic systems. 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 coldwater fish habitat through a decrease in deep-water oxygen concentrations.

Previous monitoring reports have suggested that a reduction in bacteria sampling frequency was warranted; beginning in 2016, it was recommended that bacteria sampling be conducted only in the mid-summer each year at the nearshore sites. Every five years the collection of bacteria samples on all sampling dates was recommended. The reduced sampling frequency will continue to allow for the assessment of long-term trends while maintaining familiarity with bacteria sampling techniques. In 2021, bacteria were sampled on



August 2nd, 2021; 2018 was the last time bacteria was sampled at all sites and therefore the next occasion is tentatively scheduled for 2023.

The program continues to demonstrate that Lake of Bays is a clear water lake with low phosphorus and bacteria levels with 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 2021 and discuss them in the context of long-term water quality data collected by the LOBA and local precipitation records.

2. Methods

Volunteers, coordinated by the LOBA Environment Committee, collected samples for analysis of total phosphorus on three occasions during the summer of 2021 (July 5, August 2 and 27) and on August 2 for bacteria (*E. coli* and total coliforms). The sampling and analytical methods in 2021 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 23 sites in Lake of Bays to include deep, open water locations ('Deep Water' sites, n=9), nearshore sites adjacent to developed areas ('Disturbed' sites, n=5), undeveloped shorelines ('Nearshore Undisturbed' sites, n=5), and both river (Oxtongue and Hollow rivers) and river-influenced (Oxtongue Delta) sites ('River' sites, n=4) (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. Six field duplicate samples for bacteria and 15 additional duplicates for laboratory analysis were collected. In addition, seven 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 filtered syringe 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 sampling containers with acid preservative, stored in a cool place and submitted for analysis to ALS Environmental Laboratory.



Table 1. 2021 Sampling Sites and Dates

Site Name	Total Phosphorus Sampling			Bacteria Sampling
	05-Jul	02-Aug	27-Aug	06-Aug
Deep Water Sites				
Bigwin East	1	1	1	1
Dwight Bay	1	1	1	1
Fairview	1	1	1	1
Gull Rock	1	1	1	1
Haystack Bay	1	1	1	1
Portage Bay	1	1	1	1
Price Point	1	1	1	1
Ten Mile Bay	1	1	1	1
Trading Bay	1	1	1	1
Disturbed Sites				
Bigwin Bay	2	1	1	1
Bigwin North	2	1	1	1
Britannia	1	1	1	1
Dwight Beach	1	1	1	1
Portage Bay Docks	1	1	1	1
Nearshore Undisturbed				
Langmaid Island	1	1	1	1
Boothby's	1	1	1	1
Narrows West	1	1	1	1
Menominee Bay	1	1	1	1
Moffat's	2	1	1	1
Portage Bay Docks	1	1	1	1
River Sites				
Hollow River mouth*	1	1	1	1
Hollow River Lagoon	1	1	1	1
Oxtongue Delta	1	1	1	1
Oxtongue River mouth*	1	1	1	1

Notes: 1 = single sample collected, 2 = field duplicate samples collected *Sampled in the mouth of the rivers just upstream of their discharge to the lake.





- Sampling Stations
- Watercourses
- Waterbodies

0 1 2 4 km

Scale = 1:125,000



Figure 1

Lake of Bays
Sampling Stations

2.2 Quality Control

2.2.1 Bacteria

Field duplicate bacteria concentrations were not collected during the 2021 field data collection. We recommend resuming the collection of QA/QC data for bacteria in 2022 to assess variability in the results due to sampling and analysis by the Coliplate method and allow for the assessment of program sampling integrity.

2.2.2 Total Phosphorus

2.2.2.1 *Field Duplicates*

Duplicate samples were collected for 3 of the 69 samples, this represents a significant reduction in the number of QA/QC samples collected which was not anticipated. Typically, water quality monitoring standard protocols involve collecting duplicate samples equivalent to ~10% of the sampling effort. In this case that would result in approximately 7 QA/QC samples and would be consistent with the data collection over the history of the sampling program. 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 dataset, 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, 1983) was performed in the R statistical Software Environment V. 3.3.3, using the "rosnerTest" function of the "EnvStats" package (Millard, 2013), 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 (as detailed in Section 3.1.3) but will be re-evaluated each year as additional data are collected, as outliers may, over time, indicate a change to representative conditions.

2.2.2.3 *Detection Limits*

Laboratory detection limits changed in 2018 (0.1 to 3 µg/L) as the result of an unavoidable laboratory change from Trent University at the Dorset Environmental Science Centre to ALS Environmental. Values below detection were substituted with the full detection limit to make the most conservative estimate of total phosphorus concentrations in the samples collected. In 2021, 39 of the 72 (54%) samples collected were below the detection limit.



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). The former benchmark for total coliform was 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. This type of assessment is not possible under the current program design.

2.3.2 Total Phosphorus

Mean total phosphorus concentrations were calculated for each site and site type for the 2021 monitoring period following the assessment of bad splits between duplicate samples and outliers.

Total phosphorus (TP) results were evaluated against the interim PWQO for phosphorus, which suggests average ice-free period TP concentrations should not exceed 20 µg/L in order to avoid nuisance algal growth and that maintaining TP concentrations at or below 10 µg/L provides protection against aesthetic deterioration (MOE 1994). Furthermore, excessive macrophyte growth in rivers and streams should be reduced below 30 µg/L of TP (MOEE, 1994).

Mann Kendall Trend analysis was performed using the “mk.test” and “sens.slope” functions of the “Trend” package in R (Pohlert, 2017) to assess any long-term changes in total phosphorus concentrations over time (2002-2021) for each site.

3. 2021 Monitoring Results

3.1 Quality Control

3.1.1 Bacteria

No bacteria QA/QC samples were collected during the 2021 campaign. It is recommended that sampling in 2022 include duplicate samples for bacteria to assess the integrity of the sampling program.

3.1.2 Total Phosphorus

3.1.2.1 Field Duplicates

In 2021, all three of the field duplicates collected were bad splits (i.e., >5 µg/L difference or >35% difference between sample pairs) (Figure 2; Table 2). By contrast, the average annual proportion of bad splits in samples since 2005, when duplicate sampling began, is 18%. The increased occurrence of bad splits in 2021 was likely a result of a marked decrease in the overall number of duplicates sampled (3 in 2021 vs 14 sites in 2018 and 22 in pre-2017 sampling years). Two of the three bad splits were near the detection limit (3 µg/L) where measurement error at the lab would be expected to increase. Continued diligent compliance



to and review of sampling protocols are necessary to ensure the integrity of the data, and we recommend an increase in QA/QC samples collected back to a minimum of 10% of the overall sample size.

Figure 2. Total phosphorus field duplicates in Lake of Bays, 2021.

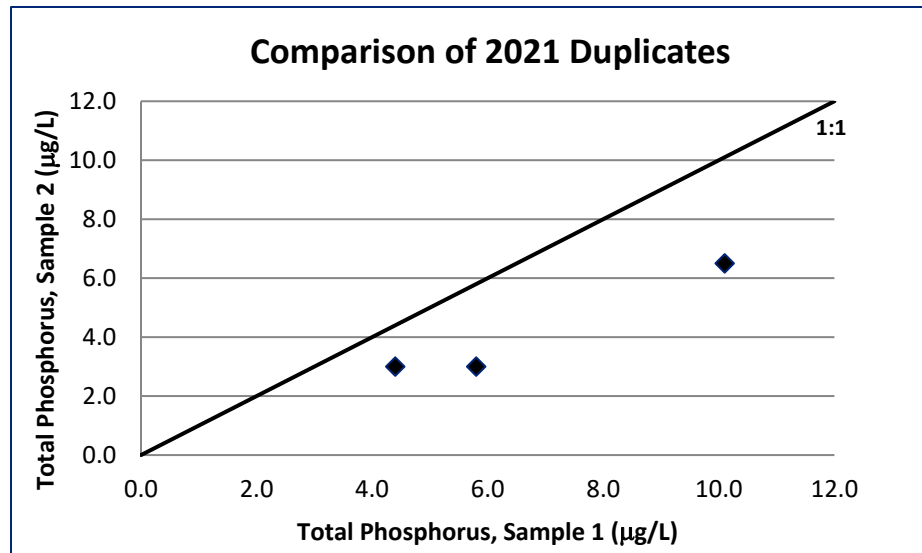


Table 2. Summary of Bad Splits between Total Phosphorus Field Duplicates in Lake of Bays, 2005-2021

Site	Date	TP1 (µg/L)	TP2 (µg/L)
Langmaid Island	1-Sep-06	7.7	4.1
	1-Sep-17	11.2	4.6
Bigwin Bay	5-Jul-21	4.4	3.3
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
	5-Jul-21	10.1	6.5
Boothby's	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
	5-Aug-19	4.1	11.1



Lake of Bays Water Quality Report 2021

Site	Date	TP1 (µg/L)	TP2 (µg/L)
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
	5-Aug-19	7.6	3.4
	5-Jul-21	5.8	3
	23-Jul-07	8.2	4.1
Narrows West	18-Jul-16	12.3	5.9
	3-Jul-17	12.7	6.2
	21-Aug-17	29.5	6.1
	30-Aug-19	4.5	3
	30-Aug-19	20.7	3
Portage Bay Docks	1-Aug-16	6.2	3.9
	23-Jul-17	8.5	5.4
Price Point	14-Jul-08	4.7	6.9
	7-Sep-10	6.1	12.9
Ten Mile Bay	17-Jul-06	7.3	4.5
	21-Aug-17	11.1	6.1
Trading Bay			

Note: Values in grey shaded cells were considered to be contaminated and were excluded from further analyses.

3.1.3 Outliers

A total of 49 samples were identified as outliers in the LOBA dataset (excluding River sites) using the Rosner's Test, none of which occurred in the 2021 monitoring year (Table 3). Bad splits (Section 3.1.2) in 2021 were not sampled frequently enough to make a reasonable estimate of the rate of sampling contamination. A lack of outliers suggest that the field sampling at LOBA is being performed carefully and is yielding high quality data, however collection of additional QA/QC samples in 2022 is recommended to verify that assumption.

Table 3. Outliers in the LOBA Dataset (2002-2021), Rosner's Test ($p < 0.01$)

Lake	Date	Total Phosphorus (µg/L)
Langmaid Island	18-Jul-11	15.1
	31-Aug-12	7.9
	18-Aug-13	9.9
	18-Jul-16	8.9
Bigwin Bay	15-Jul-02	9.6
	20-Jul-14	10.1
	4-Aug-15	12.0



Lake of Bays Water Quality Report 2021

Bigwin East	28-Jun-15	18.1
	1-Jul-19	47.8
Bigwin North	23-Aug-04	27.7
	6-Aug-07	97.7
Britannia	1-Sep-03	12.6
	1-Sep-05	9.4
	18-Aug-13	21.6
	28-Aug-13	13.3
Dwight Bay	23-Jul-17	14.3
	1-Sep-17	15.4
Fairview	31-Aug-07	12.5
	17-Jul-09	12.3
	23-Jul-17	10.4
Gull Rock	14-Jul-03	16.9
Haystack Bay	6-Sep-04	74.0
	7-Aug-06	40.3
	1-Sep-06	14.1
	17-Jul-09	57.7
	31-Aug-12	22.4
	28-Jun-15	14.6
	4-Sep-15	18.1
Menominee Bay	4-Jul-05	11.0
	1-Sep-16	12.0
Moffat's	5-Aug-02	36.7
	6-Aug-07	15.1
	5-Aug-13	11.4
	18-Jul-16	17.2
Narrows West	4-Jul-11	11.4
	1-Aug-11	8.5
	4-Sep-15	8.9
	7-Aug-17	8.6
Portage Bay	20-Aug-12	61.3
Price Point	2-Aug-10	12.7
	18-Jul-11	12.8
	2-Jul-18	102.0
	6-Aug-18	12.3
	1-Jul-19	12.1
Ten Mile Bay	18-Jul-16	15.0



Lake of Bays Water Quality Report 2021

Trading Bay	19-Aug-02	17.7
	19-Jul-04	12.3
	1-Sep-16	15.8
	5-Aug-19	19.5

With the addition of the 2021 data, two previously identified outliers were added back to the data set for statistical analyses, both in Ten Mile Bay. Outliers were removed from all analyses in this report but will be reassessed each year as additional data are added to the dataset.

3.2 Bacteria

E.coli counts in Lake of Bays on August 2nd were low (2-3 cfu/100 mL) at all Deep Water sites, with the exception of Portage Bay (Table 4). *E. coli* concentrations were elevated at Portage Bay relative to other Deep Water sites (20 cfu/100 mL), but still well below the provincial guideline and lower than recorded in 2019 (33 cfu/100 mL). Higher total coliform counts observed in the river-influenced (12 - 30 cfu/100mL) and nearshore sites (14 - 30 cfu/100mL) are to be expected given increased exposure to bacteria sources from wildlife and human activity, lower dilution and less time for assimilation or attenuation in comparison to the offshore Deep Water sites. Absolute bacteria counts were below the PWQO of 100 cfu/100 mL for *E. coli* and benchmark value of 1,000 cfu/100 mL for total coliform at all sampling sites (Table 4).



Table 4. Summer *E. coli* and Total Coliform Concentration in Surface Water Collected by Coliplate Technique, 2021

Site	<i>E. coli</i> (cfu/100 mL)	Total Coliform (cfu/100 mL)
Deep water		
Bigwin East	2	5
Dwight Bay	2	3
Fairview	3	14
Gull Rock	2	10
Haystack Bay	3	10
Price Point	2	4
Ten Mile Bay	3	25
Trading Bay	3	7
Portage Bay	20	35
Disturbed		
Bigwin Bay	10	16
Bigwin North	6	15
Britannia		
Dwight Beach	10	30
Portage Bay Docks	6	14
Nearshore Undisturbed		
Langmaid Island	2	6
Boothby's	3	9
Menominee Bay	1	2
Moffat's		
Narrows West	6	16
River		
Hollow River Mouth	7	13
Hollow River Lagoon	20	30
Oxtongue Delta	3	12
Oxtongue River	5	20

3.3 2021 Total Phosphorus Concentrations

Samples collected during the 2021 monitoring campaign were characterized by low phosphorus concentrations typical in oligotrophic, clear-water lakes on the Precambrian Shield. The summer total phosphorus concentrations of the Deep Water, Disturbed, Nearshore Undisturbed and River sites ranged from 3.0 to 8.2 µg/L, with an overall mean concentration of 3.9 µg/L (Table 5). Mean annual phosphorus concentrations for each group for sampling sites were similar: Deep Water (3.8 µg/L), Disturbed (4.2 µg/L), Nearshore Undisturbed (4.0 µg/L) and River (3.7 µg/L). Mean summer total phosphorus concentration was less than the interim PWQO for phosphorus of 10 µg/L for all sites, suggesting a low risk of aesthetic deterioration due to nuisance aquatic plant growth (MOEE, 1994). These values are similar to mean spring overturn concentrations of 4.3-6.9 µg/L measured in seven locations in Lake of Bays by the District of Muskoka's Program, which targets only deep-water sites, however DMM data are only posted for 2019 but



will be updated to include additional data in future reports. (<http://www.muskokawaterweb.ca/lake-data/muskoka-data/lake-data-sheets/lake-of-bays>).

Total phosphorus concentrations at the Deep Water, and Nearshore Undisturbed sites remained stable at most sampling locations throughout the summer, with some variability at Fairview, Haystack Bay and Gull Rock likely as a result of local factors (e.g., storm events; Figure 3, Figure 4, Figure 7). We found no consistent pattern in total phosphorus concentrations for Disturbed or River sites (Figure 5, Figure 6, Figure 7).

There was no significant difference (Mann-Whitney test; $p > 0.05$) in phosphorus concentration between the Nearshore Undisturbed (mean TP = 4.0 µg/L) and Disturbed (mean TP = 4.2 µg/L) sites suggesting that shoreline disturbance has had little impact on summer phosphorus concentrations.

Table 5. Total Phosphorus Concentrations (µg/L) in Lake of Bays, 2021

Site ID	Site Name	1-Jul	5-Aug	30-Aug	AVG	SD
Deep water (mean)		4.2	3.7	3.4	3.8	1.3
B1	Bigwin East	3.0	3.5	3.0	3.2	0.3
N1	Dwight Bay	3.0	3.0	3.0	3.0	0.0
B2	Fairview	8.2	3.0	3.0	4.7	3.0
N10	Gull Rock	3.0	3.0	6.9	4.3	2.3
E13	Haystack Bay	7.3	3.0	3.0	4.4	2.5
N26	Portage Bay	3.0	3.0	3.0	3.0	0.0
S3	Price Point	3.9	7.1	3.0	4.7	2.2
E30	Ten Mile Bay	3.0	3.9	3.0	3.3	0.5
E1	Trading Bay	3.0	4.2	3.0	3.4	0.7
Disturbed (mean)		4.6	5.0	3.0	4.2	1.5
B3	Bigwin Bay	3.0	5.2	3.0	4.2	1.1
B4	Bigwin North	6.5	6.5	3.0	6.5	3.6
N11	Britannia	3.8	7.2	3.0	4.7	2.2
	Dwight Beach	6.6	3.0	3.2	4.3	2.0
	Portage Bay Docks	3.3	3.0	3.0	3.1	0.2
Nearshore Undisturbed (mean)		4.0	4.7	3.2	4.0	1.3
S1	Langmaid Island	5.2	5.4	3.0	4.5	1.3
N24	Boothby's	3.0	6.2	3.0	4.1	1.8
S2	Menominee Bay	3.0	5.3	3.0	3.8	1.3
N13	Moffat's	3.0	3.8	3.9	4.5	1.1
E26	Narrows West	5.9	3.0	3.0	4.0	1.7
River (mean)		3.9	3.7	3.8	3.7	0.7
E18	Hollow River Lagoon	3.0	5.0	3.8	3.9	1.0
	Hollow River Mouth	3.7	3.7	4.2	3.9	0.3



Lake of Bays Water Quality Report 2021

N2	Oxtongue Delta	3.0	3.0	3.0	3.0	0.0
N30	Oxtongue Mouth	5.7	3.0	4.2	4.1	1.5
All sites					3.9	1.2
All sites excluding River sites					3.9	1.4

An additional site at Portage Bay (i.e., N26 – Portage Bay), initially sampled in 2012 to address concerns over potential water quality degradation following construction activities, has been maintained as a part of the LOBA sampling program. Mean total phosphorus concentration in Portage Bay have declined from 8.1 µg/L to 3.0 µg/L from 2013 to 2021, representing a consistent and sustained decline from elevated concentrations observed in 2012 (mean TP = 9.6 µg/L) that were coincident with construction activities. Based on these results, ongoing sampling at Portage Bay to monitor long-term construction effects appears unnecessary. Ongoing sampling at the Portage Bay site will be discussed with the LOBA to determine if there is an interest or benefit in maintaining the sampling station.

Figure 3. Total phosphorus concentrations in Lake of Bays 2021, Deep Water sites.

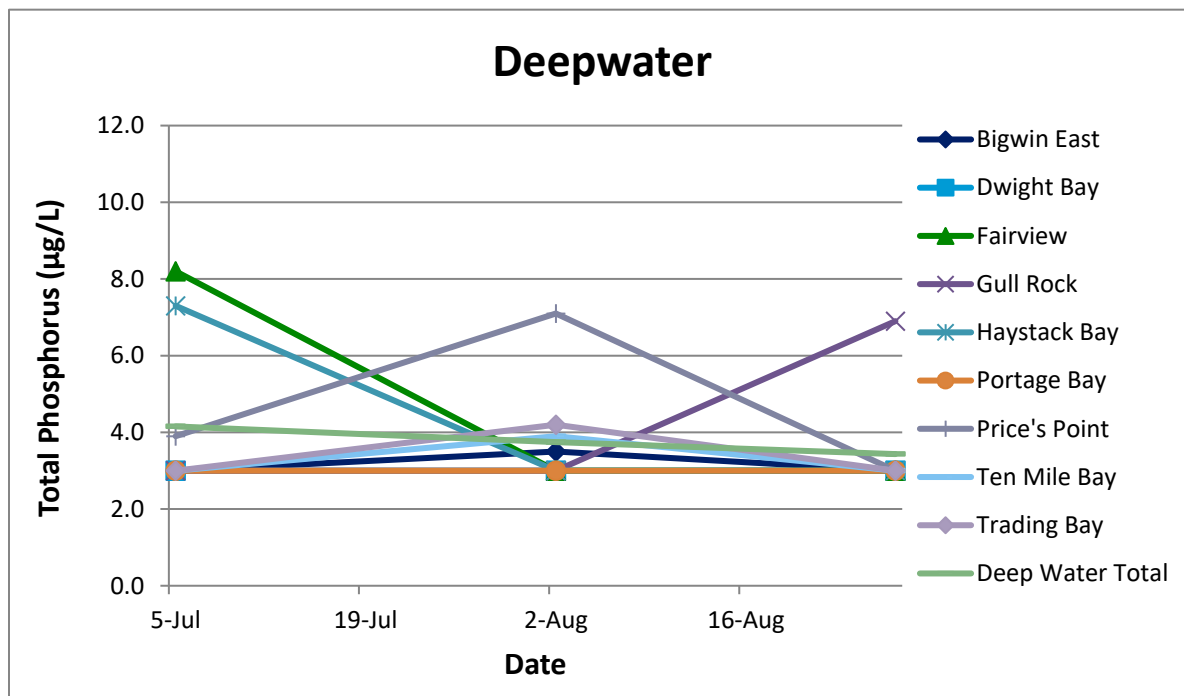


Figure 4. Total phosphorus concentrations in Lake of Bays 2021, Nearshore Undisturbed sites.

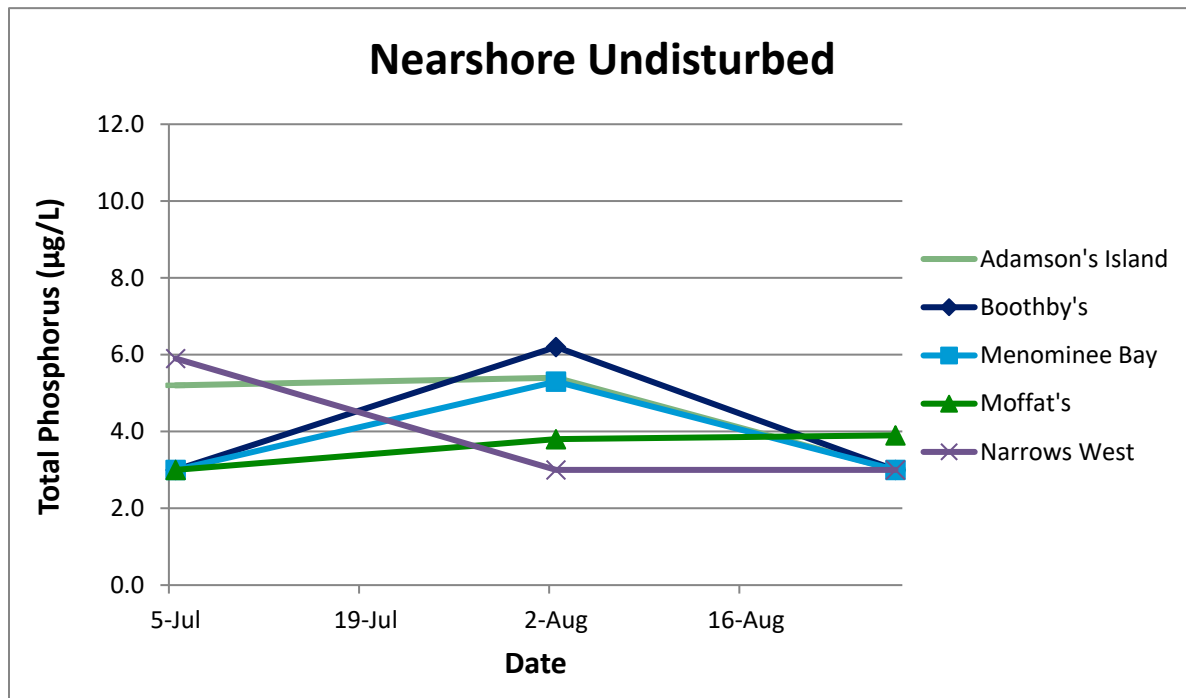


Figure 5. Total phosphorus concentrations in Lake of Bays 2021, Disturbed sites.

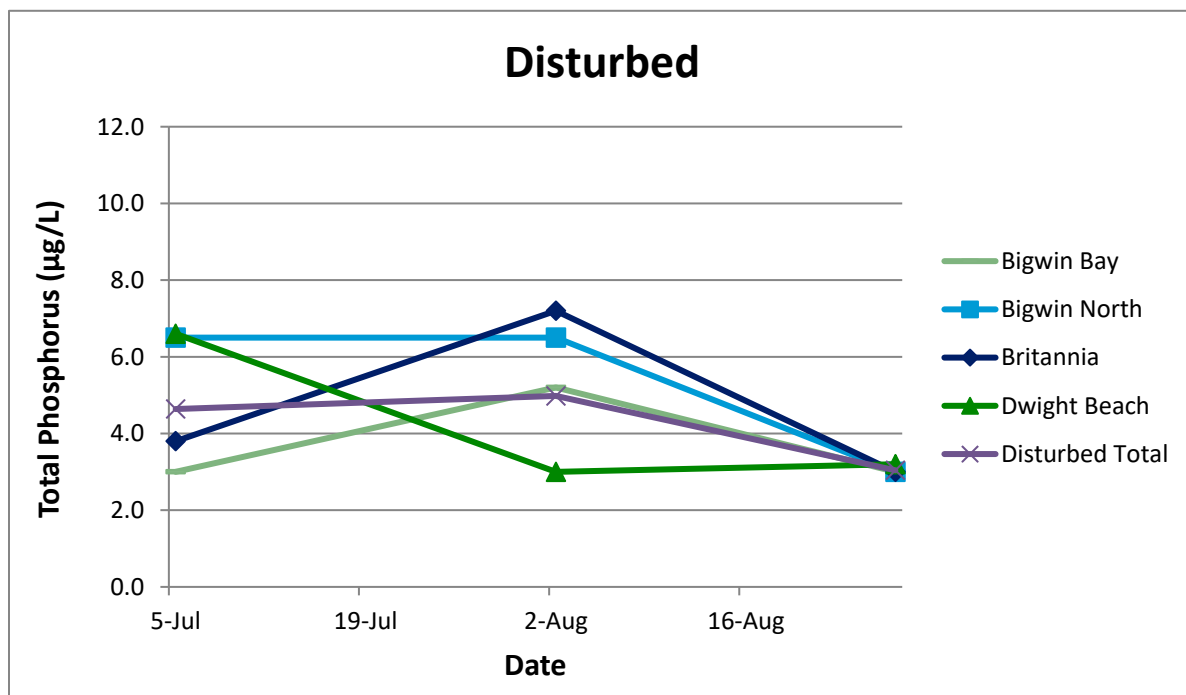


Figure 6. Total phosphorus concentrations in Lake of Bays 2021, River sites.

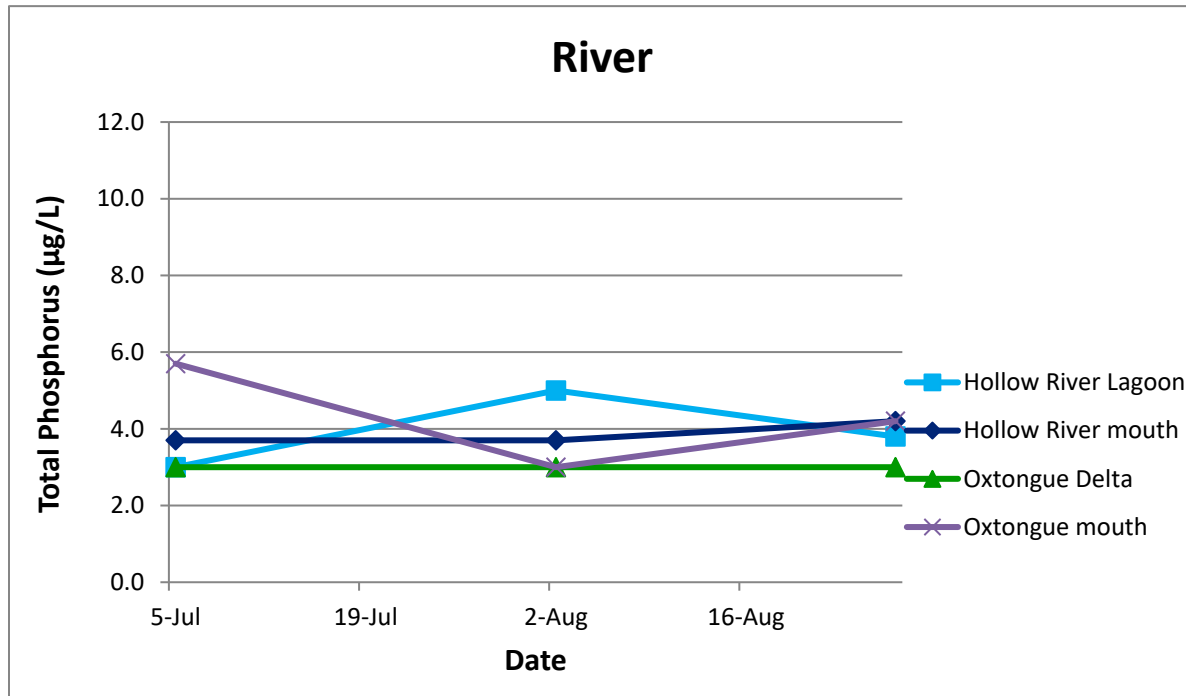
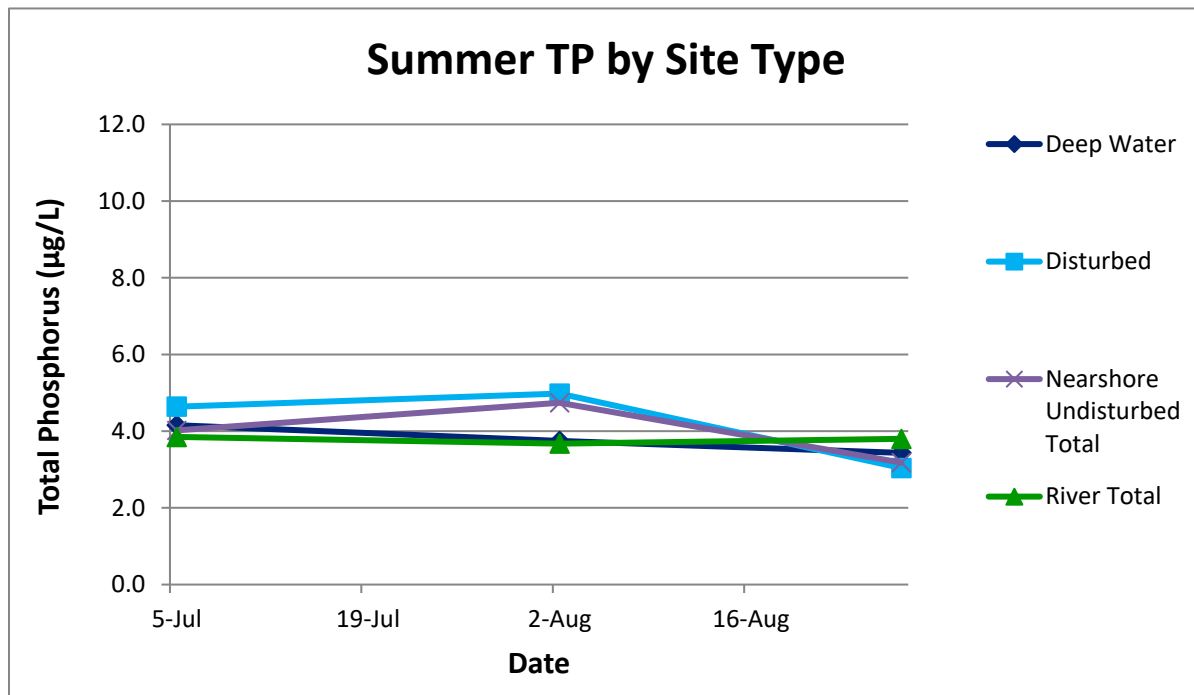


Figure 7. Average total phosphorus concentrations in Lake of Bays 2021 by Site Type.



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



4. Long-term Phosphorus Patterns

The Lake of Bays Water Quality Monitoring Program has collected data over the summer season for 19 years at 12-21 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 1,752 samples collected by the end of the 2021 program (Table 6). The large number of sites monitored, and samples collected under the program since 2002 provide for a robust data set for assessing long-term trends and inter-annual variability in total phosphorus concentration in Lake of Bays. The complete LOBA monitoring program data set since 2002 is provided in Appendix B.

Mean summer total phosphorus concentrations increased slightly in 2021 compared to 2019 in the Disturbed (mean TP = 4.6 µg/L vs 3.4 µg/L) and Nearshore Undisturbed sites (mean TP = 4.0 µg/L vs 3.3 µg/L) but decreased slightly at the Deep Water sites (mean TP = 3.8 µg/L vs 3.9 µg/L) (Table 7, Figure 8) relative to 2019 values. In the past, River sites have been more variable with generally higher concentrations than lake stations, however in 2021 total phosphorus concentrations ranged from 3.0 to 5.7 µg/L, and mean TP (3.7 µg/L) was similar to the mean TP at Deep Water sites (3.8 µg/L). Monitoring of sites in the summer during ideal weather conditions and periods of sustained low flow likely limits the ability to capture the full range of total phosphorus concentrations at the LOBA River stations. Targeted sampling following rain events could be included in the future if characterizing the range in variability of nutrient concentrations is identified as a priority. Elevated TP at the River stations is not uncommon in the dataset and therefore we recommend the addition of total suspended solids sampling at river stations to the program to determine if river total phosphorus is associated with high sediment loads and runoff in the river or if it is the result of sample contamination. The addition of suspended solids sampling to the 2022 program will be discussed with the program administrator and Environment Committee.

A statistically significant increasing trend in mean summer total phosphorus concentration of the Deep Water sites was last identified in 2017. Considering all data collected since 2002, there are no significant trends in total phosphorus concentrations in the Deep Water sites of Lake of Bays between 2002 and 2021 (Figure 9; Mann Kendall Trend Test: $p > 0.05$, Sen's Slope = 0.05). Interestingly, 2021 marked the first year since 2017 with above average total summer precipitation (200.3 mm in 2019; 348 mm in 2021), however no marked changes in total phosphorus concentrations were noted (Figure 8).

Assessment of total phosphorus concentrations at each individual monitoring station did not identify any significant increasing trends. Significant increasing trends in TP at Trading Bay were identified in 2019, however, with the addition of the 2021 data, there is no longer a statistically significant increase in TP over time in Trading Bay. Nonetheless, further data collection will determine if the steady decreases in phosphorus concentrations observed since 2015 will continue.



Table 6. Number of Total Phosphorus Samples Collected by the Lake of Bays Monitoring Program (2002-2021)

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
2017	54	11	29	19	113
2018	29	7	15	8	59
2019	33	10	22	10	75
2021	27	9	18	9	63
Total # of Samples	826	270	432	224	1752



Table 7. Mean Summer Total Phosphorus Concentrations in Lake of Bays (2002-2021)

Site	Total Phosphorus (µg/L)																			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021	AVG.
Deep Water	4.0	4.0	4.7	4.4	6.0	4.9	5.6	4.9	5.5	5.4	5.7	5.2	5.6	4.9	5.9	6.7	4.2	3.9	3.8	5.0
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	6.6	4.1	3.1	3.2	4.7
Dwight Bay	4.6	3.6	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	8.3	3.7	3.4	3.0	5.5
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	5.7	3.6	3.3	4.7	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	5.7	3.9	3.7	4.3	4.7
Haystack Bay	4.2	4.4	4.6		6.8	5.5	5.3	6.4	5.9	6.2	4.7	7.3	6.2	4.1	5.7	8.2	3.5	4.4	4.4	5.4
Portage Bay											9.6	5.7	6.3	4.7	5.3	8.1	7.3	3.9	3.0	6.0
Price 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	5.3	3.9	4.2	4.7	4.8
Ten Mile Bay					6.9	5.0	5.5	4.8	5.2	5.1	6.8	5.7	7.3	5.1	7.3	6.4	3.8	3.5	3.3	5.4
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	6.3	4.9	6.7	3.4	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	5.6	4.0	3.4	4.6	4.6
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	5.4	3.4	3.9	3.7	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	6.0	3.7	3.4	5.3	5.0
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	5.5	4.7	3.1	4.7	4.4
Nearshore Undisturbed	4.1	3.5	4.2	4.6	5.1	4.3	5.2	3.8	3.6	4.6	4.1	4.2	4.9	3.8	4.9	5.6	3.7	3.3	4.0	4.3
Langmaid 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	4.8	3.7	3.0	4.5	4.0
Boothby's				8.3	5.8	5.2	5.4	4.3	4.6	4.8	3.9	4.3	5.0	3.7	5.3	6.0	4.0	3.3	4.1	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	5.7	5.7	3.7	3.5	3.8	4.2
Moffat's	4.1	3.5	4.2	3.9	4.9	3.8	5.2	4.8	3.6	4.6	4.5	4.2	5.5	4.1	3.8	5.5	3.6	3.1	3.6	4.2
Narrows West						5.1	4.7		4.3	4.0	4.5	4.5	4.9	4.4	5.4	6.0	3.6	3.5	4.0	4.5

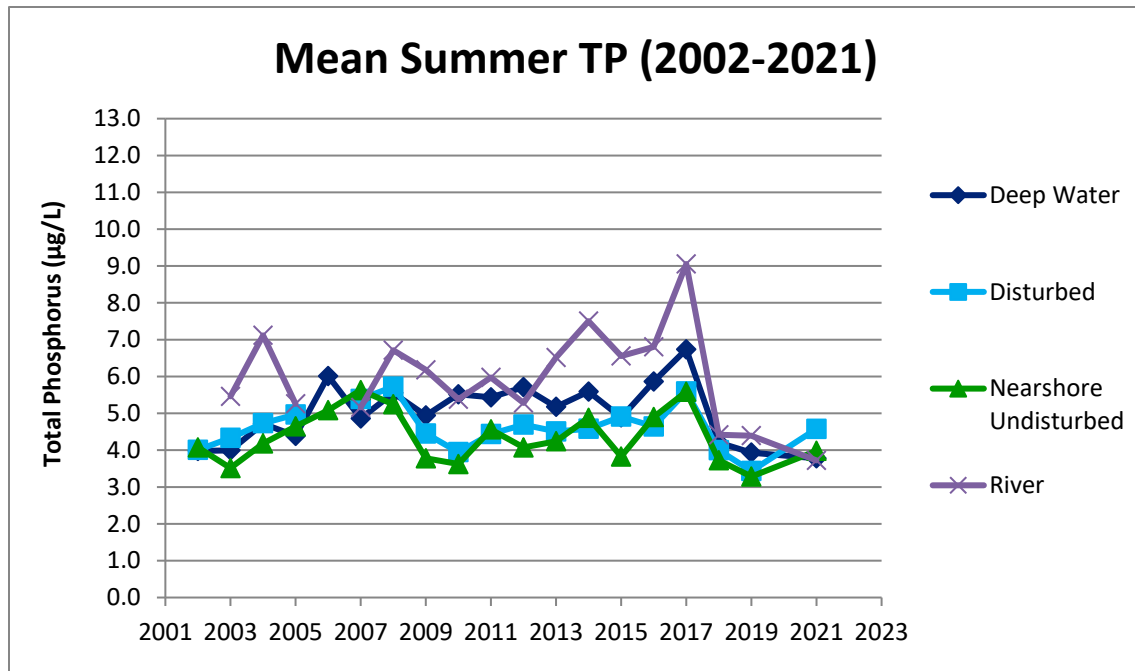


Site	Total Phosphorus (µg/L)																			
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2021	AVG.
River		5.5	7.1	5.3		5.2	6.7	6.2	5.4	6.0	5.3	6.5	7.5	6.6	6.8	9.1	4.4	4.4	3.7	6.0
Hollow River mouth		5.5	6.6	4.4		5.2	5.7		4.5	5.3	5.1	4.1	5.5	7.3	7.3	9.4	4.7	4.4	3.9	5.5
Oxtongue Delta							6.9	4.8	4.0	4.9	4.4	6.3	8.5	6.0	6.2	8.9	3.0	3.5	3.0	5.4
Oxtongue mouth			7.4	5.9			7.3	7.6	8.3	7.8	6.4	8.1	8.7	6.6	7.2	8.9	6.3	5.7	4.3	7.1

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

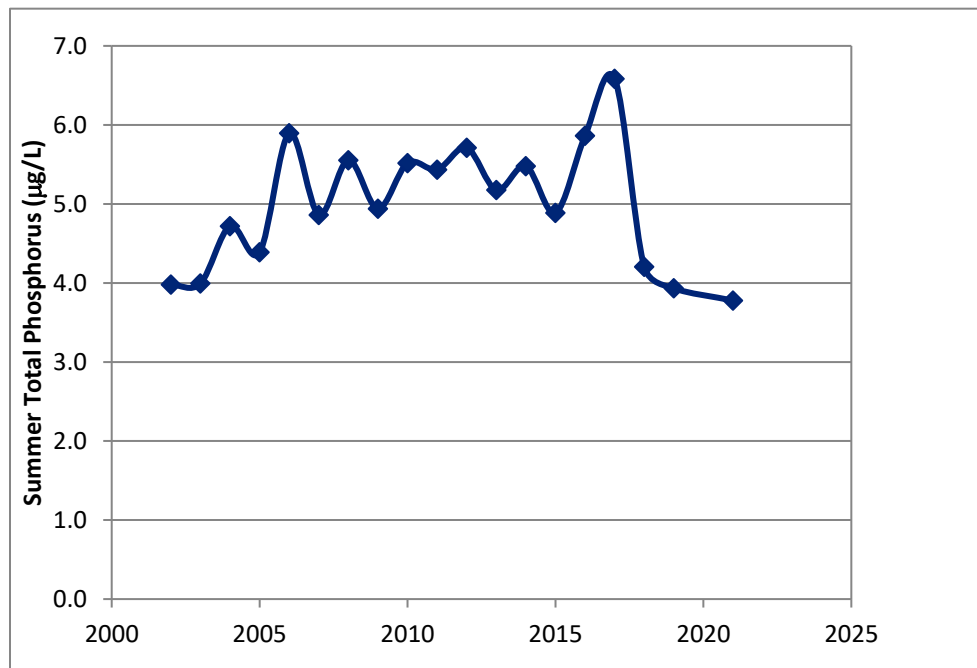


Figure 8. Long-term (2002-2021) Mean Summer Euphotic Zone Total Phosphorus (TP) by Site Type.



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

Figure 9. Long-term Mean Summer Total Phosphorus in Deep Water areas of Lake of Bays.



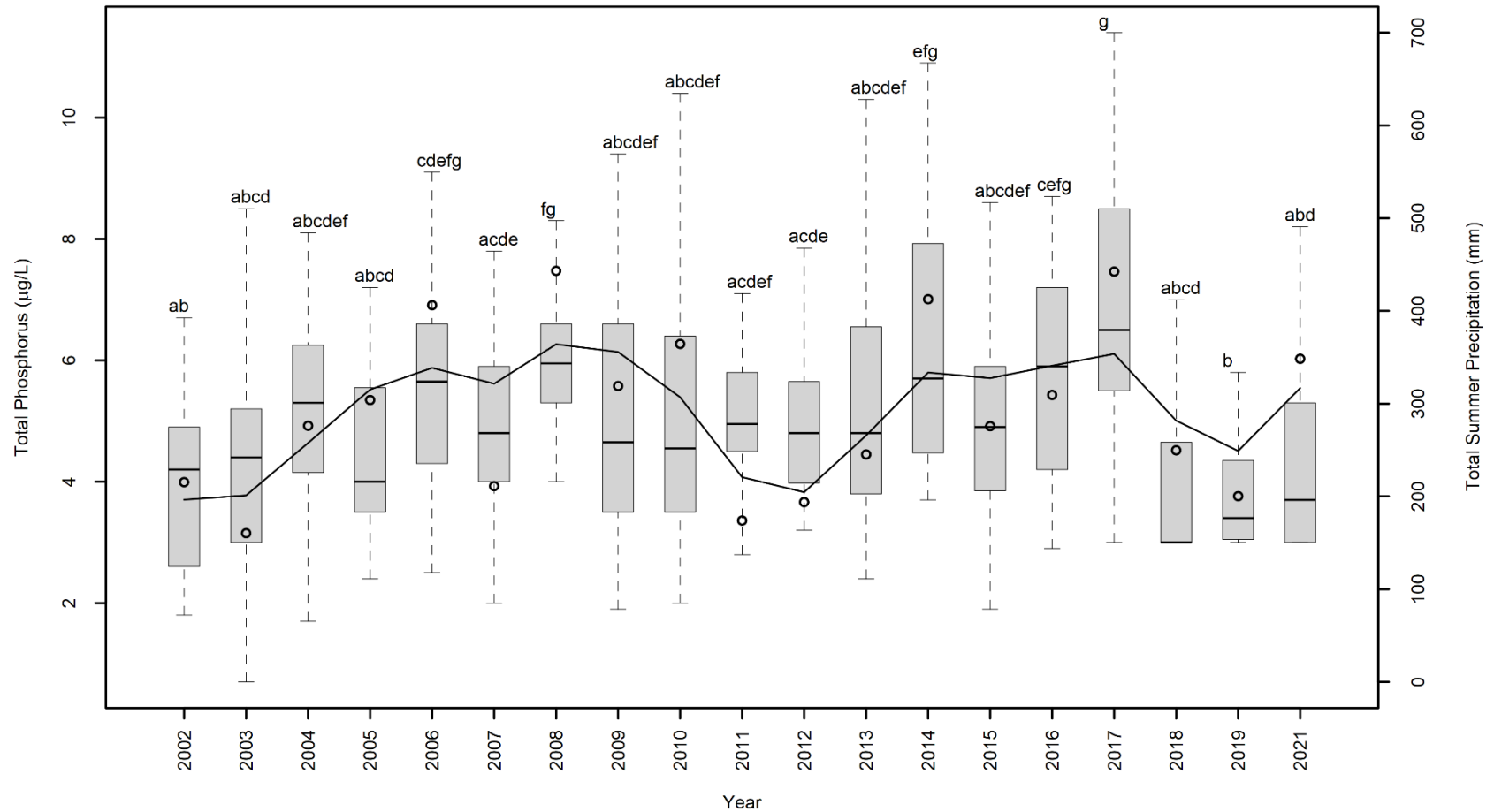
Note: LOBA sites exclude Little Trading Bay (2005-2008) and Portage Bay (Special Study).

Long-term monitoring has shown that increasing trends in total phosphorus have occurred in some Muskoka lakes monitored by the Dorset Environmental Science Centre (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 so regional (e.g., climate change, long range atmospheric deposition) and local factors other than development may be influencing lakes in the Muskoka area, including Lake of Bays. The District of Muskoka (DMM) has monitored spring total phosphorus at deep water sites in Lake of Bays since 2001 and has observed no increase which substantiates the findings presented herein.

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. Long-term data collected in Lake of Bays, coupled with climate data from Beatrice Climate Station, suggests that inter-annual variability in precipitation may exert a significant influence on the total phosphorus concentration in the lake (Figure 10). In general, total phosphorus concentrations tended to decrease in drier years over the period of record. Total phosphorus concentrations in 2021 increased slightly at nearshore stations, likely as a result of higher precipitation but concentrations were statistically similar to those recorded in most years since the program began (i.e., 2002-2007, 2009-2013, 2015, 2018 and 2019) and significantly lower than concentrations recorded during high precipitation years (i.e., 2008, 2014, 2016, and 2017; Figure 10, similarity indicated by the letters “a” “b”, “d”).

In summary, summer total phosphorus concentration in Lake of Bays exhibits significant inter-annual variability, which based on long-term TP and precipitation data appears to be driven by natural processes related to precipitation. The Lake of Bays Association water quality monitoring program continues to provide a robust long-term data set to evaluate changes over time.

Figure 10. Annual Summary of Summer Total Phosphorus Concentrations at All Nearshore Disturbed, Undisturbed and Deep Water Sites and Precipitation (Beatrice Climate Station; 6110607) in Lake of Bays



Open Circles = Sum of Total Summer Precipitation; Line = Spline Smoothed Precipitation; Boxplots = Total Phosphorus Concentrations. Letters indicate years which are statistically similar

5. Summary

The total phosphorus and bacteria data collected by the LOBA in 2021 indicated low nutrients and bacteria concentrations at all sampling sites in Lake of Bays. The main results of data analyses from 2021 are as follows:

1. Reduced QA/QC sampling in 2021 negatively impacted our ability to assess the integrity of the program, we recommend an increase in QA/QC samples collected back to a minimum of 10% of the overall sample size for water quality data in 2021.
2. Deep Water sites did not exhibit a significant increasing trend in total phosphorus concentration.
3. Significant long-term trends in total phosphorus previously detected in the lake at Trading Bay, no longer exhibited a positive trend with the addition of 2021 data. As a result, no significant trends in phosphorus concentration were noted in the individual site data on Lake of Bays.
4. Bacteria levels collected by the Coliplate technique were below the PWQO for recreational use at all sites.
5. Total phosphorus concentrations (mean TP = 3.9 µg/L) continue to be characteristic of lakes with low primary productivity and meet the highest Provincial standards for protection of nuisance aquatic plant growth due to phosphorus of <10 µg/L at all sites.
6. 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 remains true in 2021.
7. As in previous monitoring, no significant difference in phosphorus concentration between the Deep Water, Disturbed and Nearshore Undisturbed sites were found, suggesting that shoreline disturbance is having little impact on summer phosphorus concentrations.
8. Our analysis suggests that changes in total phosphorus concentrations in the lake are the result of regional precipitation and not likely a result of development pressure.
9. We recommend the addition of total suspended solids sampling at River stations to help us better understand the influence of total suspended solids on total phosphorus concentrations.

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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	TP BD L	Total Phosphorus (ug/L)	<i>E. coli</i> BD L	<i>E. coli</i> (cfu/100 mL)	Total Coliforms Above DL=A, Below DL=B	Total Coliform (cfu/100 mL)	Heterotrophic	Bad Splits	Outliers 2021
B4 P/B	B4	Bigwin Bay	Disturbed	2002	1-Jul-02		3.1							
B4 P/B	B4	Bigwin Bay	Disturbed	2002	15-Jul-02		9.6							x
B4 P/B	B4	Bigwin Bay	Disturbed	2002	5-Aug-02		5.4							
B4 P/B	B4	Bigwin Bay	Disturbed	2002	19-Aug-02		3.1							
B4 P/B	B4	Bigwin Bay	Disturbed	2002	2-Sep-02		2.9							
B1P	B1	Bigwin East	Deep Water	2002	1-Jul-02		4.4							
B1P	B1	Bigwin East	Deep Water	2002	15-Jul-02		5.8							
B1P	B1	Bigwin East	Deep Water	2002	5-Aug-02		4.3							
B1P	B1	Bigwin East	Deep Water	2002	19-Aug-02		3.7							
B1P	B1	Bigwin East	Deep Water	2002	2-Sep-02		2.7							
B3 P/B	B3	Bigwin North	Disturbed	2002	26-May-02				0.5		3			
B3 P/B	B3	Bigwin North	Disturbed	2002	1-Jul-02		8.8		52		94			
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	19-Aug-02		2.7		0.5		43			
B3 P/B	B3	Bigwin North	Disturbed	2002	2-Sep-02		2.3		0.5		33			

B3 P/B	B3	Bigwin North	Disturbed	200 2	29-Sep- 02				0.5		39			
N11 P/B	N1 1	Britannia	Disturbed	200 2	1-Jul-02		3.3							
N11 P/B	N1 1	Britannia	Disturbed	200 2	15-Jul- 02		4.7							
N11 P/B	N1 1	Britannia	Disturbed	200 2	5-Aug- 02		3.8							
N11 P/B	N1 1	Britannia	Disturbed	200 2	19-Aug- 02		2.7							
N11 P/B	N1 1	Britannia	Disturbed	200 2	2-Sep- 02		2.0							
N1 P	N1	Dwight Bay	Deep Water	200 2	1-Jul-02		6.7							
N1 P	N1	Dwight Bay	Deep Water	200 2	15-Jul- 02		5.7							
N1 P	N1	Dwight Bay	Deep Water	200 2	5-Aug- 02		4.8							
N1 P	N1	Dwight Bay	Deep Water	200 2	19-Aug- 02		3.8							
N1 P	N1	Dwight Bay	Deep Water	200 2	2-Sep- 02		1.8							
B2 P/B	B2	Fairview	Deep Water	200 2	1-Jul-02		2.2							
B2 P/B	B2	Fairview	Deep Water	200 2	15-Jul- 02		2.3							
B2 P/B	B2	Fairview	Deep Water	200 2	5-Aug- 02		4.2							
B2 P/B	B2	Fairview	Deep Water	200 2	19-Aug- 02		3.3							
B2 P/B	B2	Fairview	Deep Water	200 2	2-Sep- 02		2.1							
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	26-May- 02				0.5		0.5			
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	1-Jul-02		4.6		3		25			
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	15-Jul- 02		4.9							

N10 P/B	N1 0	Gull Rock	Deep Water	200 2	5-Aug- 02		4.3		5		52			
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	19-Aug- 02		3.8		0.5		30			
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	2-Sep- 02		2.4		0.5		33			
N10 P/B	N1 0	Gull Rock	Deep Water	200 2	28-Sep- 02				0.5		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 2	1-Jul-02		3.5							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 2	15-Jul- 02		6.1							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 2	5-Aug- 02		4.9							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 2	19-Aug- 02		4.1							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 2	2-Sep- 02		2.5							
E 6 P/B	E6	Hollow River Lagoon	River	200 2	26-May- 02				3		43			
E 6 P/B	E6	Hollow River Lagoon	River	200 2	1-Jul-02				13		166			
E 6 P/B	E6	Hollow River Lagoon	River	200 2	15-Jul- 02				11		188			
E 6 P/B FD	E6	Hollow River Lagoon	River	200 2	15-Jul- 02				16		256			
E 6 P/B	E6	Hollow River Lagoon	River	200 2	5-Aug- 02				8		1174			
E 6 P/B	E6	Hollow River Lagoon	River	200 2	19-Aug- 02				22		587			
E 6 P/B	E6	Hollow River Lagoon	River	200 2	2-Sep- 02				0.5		2424			

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	26-May- 02				0.5		0.5			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	1-Jul-02		5.6		0.5		11.0			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	15-Jul- 02		5.1		0.5		33.0			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	5-Aug- 02		36.7		0.5		123.0			x
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	19-Aug- 02		3.8		0.5		55.0			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	2-Sep- 02		1.8		0.5		55.0			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 2	29-Sep- 02				0.5		8.0			
E1 P/B	E1	Trading Bay	Deep Water	200 2	26-May- 02				0.5		3			
E1 P/B	E1	Trading Bay	Deep Water	200 2	1-Jul-02		4.6		0.5		11			
E1 P/B	E1	Trading Bay	Deep Water	200 2	15-Jul- 02		4.2		0.5		3			
E1 P/B	E1	Trading Bay	Deep Water	200 2	5-Aug- 02		5.9		0.5		5			
E1 P/B	E1	Trading Bay	Deep Water	200 2	19-Aug- 02		17.7		0.5		13			x
E1 P/B	E1	Trading Bay	Deep Water	200 2	2-Sep- 02		1.8		0.5		8			

E1 P/B	E1	Trading Bay	Deep Water	200 2	29-Sep- 02				0.5		59			
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	8-Jun-03		4.9							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	30-Jun- 03		3.5							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	14-Jul- 03		5.1							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	4-Aug- 03		4.8							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	18-Aug- 03		7.3							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	1-Sep- 03		2.1							
B4 P/B	B4	Bigwin Bay	Disturbed	200 3	28-Sep- 03		5.4							
B1P	B1	Bigwin East	Deep Water	200 3	8-Jun-03									
B1P	B1	Bigwin East	Deep Water	200 3	30-Jun- 03		4.6							
B1P	B1	Bigwin East	Deep Water	200 3	14-Jul- 03		5.5							
B1P	B1	Bigwin East	Deep Water	200 3	4-Aug- 03		4.1							
B1P	B1	Bigwin East	Deep Water	200 3	18-Aug- 03		5.2							
B1P	B1	Bigwin East	Deep Water	200 3	1-Sep- 03		2.9							
B1P	B1	Bigwin East	Deep Water	200 3	28-Sep- 03		2.7							
B3 P/B	B3	Bigwin North	Disturbed	200 3	8-Jun-03		4.5							
B3 P/B	B3	Bigwin North	Disturbed	200 3	30-Jun- 03		4.0		1		8			
B3 P/B	B3	Bigwin North	Disturbed	200 3	14-Jul- 03		5.3		1		33			
B3 P/B	B3	Bigwin North	Disturbed	200 3	4-Aug- 03		4.4		1		19			

B3 P/B	B3	Bigwin North	Disturbed	200 3	4-Aug- 03		4.5		1		19			
B3 P/B	B3	Bigwin North	Disturbed	200 3	14-Aug- 03		2.7		1		43			
B3 P/B	B3	Bigwin North	Disturbed	200 3	1-Sep- 03		3.3		3		87			
B3 P/B	B3	Bigwin North	Disturbed	200 3	28-Sep- 03		2.7		1		11			
N11 P/B	N1 1	Britannia	Disturbed	200 3	8-Jun-03		4.8							
N11 P/B	N1 1	Britannia	Disturbed	200 3	30-Jun- 03		5.6							
N11 P/B	N1 1	Britannia	Disturbed	200 3	14-Jul- 03		3.6							
N11 P/B	N1 1	Britannia	Disturbed	200 3	4-Aug- 03		3.8							
N11 P/B	N1 1	Britannia	Disturbed	200 3	14-Aug- 03		5.3							
N11 P/B	N1 1	Britannia	Disturbed	200 3	1-Sep- 03		12.6							x
N11 P/B	N1 1	Britannia	Disturbed	200 3	28-Sep- 03		3.5							
N1 P	N1	Dwight Bay	Deep Water	200 3	8-Jun-03									
N1 P	N1	Dwight Bay	Deep Water	200 3	30-Jun- 03		5.4							
N1 P	N1	Dwight Bay	Deep Water	200 3	14-Jul- 03		0.7							
N1 P	N1	Dwight Bay	Deep Water	200 3	4-Aug- 03		2.0							
N1 P	N1	Dwight Bay	Deep Water	200 3	18-Aug- 03		5.0							
N1 P	N1	Dwight Bay	Deep Water	200 3	1-Sep- 03		5.6							
N1 P	N1	Dwight Bay	Deep Water	200 3	28-Sep- 03		3.1							
B2 P/B	B2	Fairview	Deep Water	200 3	8-Jun-03		4.4							

B2 P/B	B2	Fairview	Deep Water	200 3	30-Jun- 03		4.0							
B2 P/B	B2	Fairview	Deep Water	200 3	14-Jul- 03		4.2							
B2 P/B	B2	Fairview	Deep Water	200 3	4-Aug- 03		4.2							
B2 P/B	B2	Fairview	Deep Water	200 3	18-Aug- 03		3.2							
B2 P/B	B2	Fairview	Deep Water	200 3	1-Sep- 03		2.4							
B2 P/B	B2	Fairview	Deep Water	200 3	28-Sep- 03		2.6							
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	8-Jun-03		5.0							
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	30-Jun- 03		4.8		19		30			
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	14-Jul- 03		16.9		1		5			x
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	4-Aug- 03		6.1		1		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	18-Aug- 03		4.4		5		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	1-Sep- 03		2.1		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 3	28-Sep- 03		2.7		1		13			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	8-Jun-03		4.8							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	30-Jun- 03		5.2							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	14-Jul- 03		5.9							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	4-Aug- 03		4.9							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	14-Aug- 03		4.2							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	1-Sep- 03		3.0							

E13 P/B	E1 3	Haystack Bay	Deep Water	200 3	28-Sep- 03		2.7							
E 6 P/B	E6	Hollow River Lagoon	River	200 3	30-Jun- 03		11.4		25		240			
E 6 P/B	E6	Hollow River Lagoon	River	200 3	14-Jul- 03		8.5		11		388			
E 6 P/B	E6	Hollow River Lagoon	River	200 3	4-Aug- 03		7.7		25		619			
E 6 P/B LD	E6	Hollow River Lagoon	River	200 3	4-Aug- 03				24		76			
E 6 P/B	E6	Hollow River Lagoon	River	200 3	14-Aug- 03		5.2		3		469			
E 6 P/B	E6	Hollow River Lagoon	River	200 3	1-Sep- 03		5.2							
E 6 P/B	E6	Hollow River Lagoon	River	200 3	28-Sep- 03		5.1							
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 3	30-Jun- 03		7.3		30		177			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 3	14-Jul- 03		6.5		102		534			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 3	4-Aug- 03		6.4		403		619			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 3	14-Aug- 03		4.4		30		271			

E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 3	1-Sep- 03		4.4						
E18 P/B	E1 8	Hollow River mouth	River	200 3	30-Jun- 03		7.4		30		166		
E18 P/B	E1 8	Hollow River mouth	River	200 3	14-Jul- 03		6.2		46		307		
E18 P/B	E1 8	Hollow River mouth	River	200 3	4-Aug- 03		5.1		94		489		
E18 P/B	E1 8	Hollow River mouth	River	200 3	14-Aug- 03		4.3		52		226		
E18 P/B	E1 8	Hollow River mouth	River	200 3	1-Sep- 03		4.3						
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 3	8-Jun-03		5.2						
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 3	30-Jun- 03		4.0		1.0		1.0		
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 3	14-Jul- 03		4.9		1.0		11.0		
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 3	4-Aug- 03		3.5		1.0		7.0		
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 3	14-Aug- 03		2.9		3.0		5.0		

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 3	1-Sep- 03		1.8		1.0		16.0			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 3	28-Sep- 03		2.3		1.0		5.0			
E1 P/B	E1	Trading Bay	Deep Water	200 3	8-Jun-03									
E1 P/B	E1	Trading Bay	Deep Water	200 3	30-Jun- 03		4.3		3		8			
E1 P/B	E1	Trading Bay	Deep Water	200 3	14-Jul- 03		4.9		1		3			
E1 P/B	E1	Trading Bay	Deep Water	200 3	4-Aug- 03		6.9		1		1			
E1 P/B	E1	Trading Bay	Deep Water	200 3	18-Aug- 03		2.9		1		5			
E1 P/B	E1	Trading Bay	Deep Water	200 3	1-Sep- 03		2.4		1		1			
E1 P/B	E1	Trading Bay	Deep Water	200 3	28-Sep- 03		2.8		1		3			
B4 P/B	B4	Bigwin Bay	Disturbed	200 4	5-Jul-04		3.6							
B4 P/B	B4	Bigwin Bay	Disturbed	200 4	19-Jul- 04		6.6							
B4 P/B	B4	Bigwin Bay	Disturbed	200 4	2-Aug- 04		4.9							
B4 P/B	B4	Bigwin Bay	Disturbed	200 4	23-Aug- 04									
B4 P/B	B4	Bigwin Bay	Disturbed	200 4	6-Sep- 04		4.3							
B1P	B1	Bigwin East	Deep Water	200 4	5-Jul-04		2.7							
B1P	B1	Bigwin East	Deep Water	200 4	19-Jul- 04		5.3							
B1P	B1	Bigwin East	Deep Water	200 4	2-Aug- 04		4.2							

B1P	B1	Bigwin East	Deep Water	2004	23-Aug-04		5.1						
B1P	B1	Bigwin East	Deep Water	2004	6-Sep-04		3.6						
B3 P/B	B3	Bigwin North	Disturbed	2004	5-Jul-04		3.4		8		141		
B3 P/B	B3	Bigwin North	Disturbed	2004	19-Jul-04		7.7		5		280		
B3 P/B	B3	Bigwin North	Disturbed	2004	2-Aug-04		5.1		16		72		
B3 P/B	B3	Bigwin North	Disturbed	2004	23-Aug-04		27.7		1		65		x
B3 P/B	B3	Bigwin North	Disturbed	2004	6-Sep-04		5.1		3		83		
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	19-Jul-04		5.1						
N11 P/B	N11	Britannia	Disturbed	2004	2-Aug-04		4.6						
N11 P/B	N11	Britannia	Disturbed	2004	23-Aug-04		3.6						
N11 P/B	N11	Britannia	Disturbed	2004	6-Sep-04								
N1 P	N1	Dwight Bay	Deep Water	2004	19-Jul-04		7.7						
N1 P	N1	Dwight Bay	Deep Water	2004	2-Aug-04		6.3						
N1 P	N1	Dwight Bay	Deep Water	2004	23-Aug-04		4.4						
N1 P	N1	Dwight Bay	Deep Water	2004	6-Sep-04								

B2 P/B	B2	Fairview	Deep Water	200 4	5-Jul-04		1.7						
B2 P/B	B2	Fairview	Deep Water	200 4	19-Jul-04		4.8						
B2 P/B	B2	Fairview	Deep Water	200 4	2-Aug-04		5.3						
B2 P/B	B2	Fairview	Deep Water	200 4	23-Aug-04		4.4						
B2 P/B	B2	Fairview	Deep Water	200 4	6-Sep-04		3.9						
N10 P/B	N1 0	Gull Rock	Deep Water	200 4	5-Jul-04		6.2		1		52		
N10 P/B	N1 0	Gull Rock	Deep Water	200 4	19-Jul-04		5.0		1		11		
N10 P/B	N1 0	Gull Rock	Deep Water	200 4	2-Aug-04		5.4		1		11		
N10 P/B	N1 0	Gull Rock	Deep Water	200 4	23-Aug-04		4.7		1		8		
N10 P/B	N1 0	Gull Rock	Deep Water	200 4	6-Sep-04		4.1						
E13 P/B	E1 3	Haystack Bay	Deep Water	200 4	5-Jul-04		2.4						
E13 P/B	E1 3	Haystack Bay	Deep Water	200 4	19-Jul-04		5.9						
E13 P/B	E1 3	Haystack Bay	Deep Water	200 4	2-Aug-04		5.9						
E13 P/B	E1 3	Haystack Bay	Deep Water	200 4	23-Aug-04		4.3						
E13 P/B	E1 3	Haystack Bay	Deep Water	200 4	6-Sep-04		74						x
E18 P/B	E1 8	Hollow River mouth	River	200 4	5-Jul-04		6.0		141		694		
E18 P/B	E1 8	Hollow River mouth	River	200 4	19-Jul-04		25.1		33		166		R
E18 P/B	E1 8	Hollow River mouth	River	200 4	2-Aug-04		7.1		62		1038		

E18 P/B FD	E1 8	Hollow River mouth	River	200 4	2-Aug- 04				119		1174			
E18 P/B LD	E1 8	Hollow River mouth	River	200 4	2-Aug- 04				38		80			
E18 P/B	E1 8	Hollow River mouth	River	200 4	23-Aug- 04				52		132			
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	5-Jul-04		2.8		8.0		19.0			
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	19-Jul- 04		5.8		1.0		13.0			
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	2-Aug- 04		4.3		1.0		28.0			
N13 P/B FD	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	2-Aug- 04				3.0		13.0			
N13 P/B LD	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	2-Aug- 04				1.0		8.0			
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	23-Aug- 04		3.3		3.0		33.0			
N13 P/B FD	N1 3	Moffat's	Nearshor e Undisturb ed	200 4	23-Aug- 04				1.0		33.0			
N13 P/B	N1 3	Moffat's	Nearshor e	200 4	6-Sep- 04		4.7		1.0		127.0			

			Undisturb ed											
N 2P/B	N2	Oxtongue mouth	River	200 4	5-Jul-04									
N 2P/B	N2	Oxtongue mouth	River	200 4	19-Jul- 04		7.9		16		156			
N 2P/B	N2	Oxtongue mouth	River	200 4	2-Aug- 04		8.1		46		350			
N 2P/B	N2	Oxtongue mouth	River	200 4	23-Aug- 04		7.1		1		69			
N 2P/B	N2	Oxtongue mouth	River	200 4	6-Sep- 04		6.5		1		206			
E1 P/B	E1	Trading Bay	Deep Water	200 4	5-Jul-04		1.9		3		19			
E1 P/B	E1	Trading Bay	Deep Water	200 4	19-Jul- 04		12.3		3		16			x
E1 P/B	E1	Trading Bay	Deep Water	200 4	2-Aug- 04		7.8		3		22			
E1 P/B	E1	Trading Bay	Deep Water	200 4	23-Aug- 04		5.8							
E1 P/B	E1	Trading Bay	Deep Water	200 4	6-Sep- 04		3.9		1		22			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 5	4-Jul-05		6.5		3		8			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 5	18-Jul- 05		4.3		1		5			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 5	1-Aug- 05				1		11			
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 5	1-Aug- 05				1		8			

S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	200 5	14-Aug- 05				1		5			
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	200 5	1-Sep- 05		3.7		1		3			
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	200 5	1-Sep- 05				1		8			
S1 P/B LD	S1	Adamson's Island	Nearshore Undisturbed	200 5	1-Sep- 05				1		4			
B1P	B1	Bigwin East	Deep Water	200 5	4-Jul-05		2.8							
B1P	B1	Bigwin East	Deep Water	200 5	18-Jul- 05		4.8							
B1P	B1	Bigwin East	Deep Water	200 5	1-Aug- 05		3.7							
B1P	B1	Bigwin East	Deep Water	200 5	14-Aug- 05		4.8							
B1P	B1	Bigwin East	Deep Water	200 5	1-Sep- 05		3.8							
B3 P/B	B3	Bigwin North	Disturbed	200 5	4-Jul-05		3.9		5		33			
B3 P/B	B3	Bigwin North	Disturbed	200 5	18-Jul- 05		9.3		8		25			
B3 P/B	B3	Bigwin North	Disturbed	200 5	1-Aug- 05		3.5		3		49			
B3 P/B	B3	Bigwin North	Disturbed	200 5	14-Aug- 05				5		46			
B3 P/B	B3	Bigwin North	Disturbed	200 5	1-Sep- 05		3.9		8		28			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 5	4-Jul-05				3		8			

N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 5	4-Jul-05				3		11			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 5	18-Jul-05		6.2		3		11			
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 5	18-Jul-05				5		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 5	1-Aug-05				3		16			
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 5	1-Aug-05				5		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 5	14-Aug-05		10.3		1		1			
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 5	14-Aug-05				3		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 5	1-Sep-05				1		8			
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 5	1-Sep-05				1		13			
N11 P/B	N1 1	Britannia	Disturbed	200 5	4-Jul-05									
N11 P/B	N1 1	Britannia	Disturbed	200 5	18-Jul-05		2.1							

N11 P/B	N1 1	Britannia	Disturbed	200 5	18-Jul- 05		4.7							
N11 P/B	N1 1	Britannia	Disturbed	200 5	1-Aug- 05									
N11 P/B	N1 1	Britannia	Disturbed	200 5	14-Aug- 05		5.8							
N11 P/B	N1 1	Britannia	Disturbed	200 5	1-Sep- 05		9.4							x
N1 P	N1	Dwight Bay	Deep Water	200 5	18-Jul- 05		6.1							
N1 P	N1	Dwight Bay	Deep Water	200 5	1-Aug- 05		3.3							
N1 P	N1	Dwight Bay	Deep Water	200 5	14-Aug- 05		5.9							
N1 P	N1	Dwight Bay	Deep Water	200 5	1-Sep- 05		3.4							
B2 P/B	B2	Fairview	Deep Water	200 5	4-Jul-05									
B2 P/B	B2	Fairview	Deep Water	200 5	18-Jul- 05		7.2							
B2 P/B	B2	Fairview	Deep Water	200 5	1-Aug- 05		3.5							
B2 P/B	B2	Fairview	Deep Water	200 5	14-Aug- 05		4.0							
B2 P/B	B2	Fairview	Deep Water	200 5	1-Sep- 05		4.2							
N10 P/B	N1 0	Gull Rock	Deep Water	200 5	4-Jul-05		4.1		5		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 5	18-Jul- 05		5.0		1		5			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 5	18-Jul- 05				3		8			
N10 P/B LD	N1 0	Gull Rock	Deep Water	200 5	18-Jul- 05				1		3			
N10 P/B	N1 0	Gull Rock	Deep Water	200 5	1-Aug- 05		2.7		3		8			

N10 P/B	N1 0	Gull Rock	Deep Water	200 5	14-Aug- 05		5.6		1		3			
N10 P/B	N1 0	Gull Rock	Deep Water	200 5	1-Sep- 05		4.4		1		3			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 5	1-Sep- 05				1		1			
N10 P/B LD	N1 0	Gull Rock	Deep Water	200 5	1-Sep- 05				1		1			
E18 P/B	E1 8	Hollow River mouth	River	200 5	4-Jul-05		11.0		16		72			R
E18 P/B	E1 8	Hollow River mouth	River	200 5	18-Jul- 05		6.3		11		102			
E18 P/B	E1 8	Hollow River mouth	River	200 5	1-Aug- 05		3.0		8		59			
E18 P/B	E1 8	Hollow River mouth	River	200 5	14-Aug- 05				28		182			
E18 P/B	E1 8	Hollow River mouth	River	200 5	1-Sep- 05		3.8		19		114			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 5	4-Jul-05		5.9		8		28			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 5	18-Jul- 05		5.8		5		11			
E20 P/B FD	E2 0	Little Trading Bay	Deep Water	200 5	18-Jul- 05				3		8			
E20 P/B LD	E2 0	Little Trading Bay	Deep Water	200 5	18-Jul- 05				1		4			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 5	1-Aug- 05		5.2		3		19			

E20 P/B	E2 0	Little Trading Bay	Deep Water	200 5	14-Aug- 05				1		33			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 5	1-Sep- 05		4.8		3		33			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	4-Jul-05		11.0		1		5			x
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	18-Jul- 05		2.4		1		3			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	1-Aug- 05				1		16			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	14-Aug- 05		3.9		1		8			
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	14-Aug- 05				1		11			
S2 P/B LD	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	14-Aug- 05				1		12			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 5	1-Sep- 05		2.9		1		5			
N13 P/B FD	N1 3	Moffat's	Nearshor e Undisturb ed	200 5	4-Jul-05		4.0							
N13 P/B	N1 3	Moffat's	Nearshor e	200 5	4-Jul-05		5.7		3		16			

			Undisturbed											
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 5	18-Jul- 05		2.8		5		39			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	200 5	18-Jul- 05				3		30			
N13 P/B LD	N1 3	Moffat's	Nearshore Undisturbed	200 5	18-Jul- 05				1		56			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 5	1-Aug- 05				3		43			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	200 5	1-Aug- 05				5		28			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 5	14-Aug- 05		4.4		3		19			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	200 5	14-Aug- 05				3		22			
N13 P/B LD	N1 3	Moffat's	Nearshore Undisturbed	200 5	14-Aug- 05				1		8			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 5	1-Sep- 05		3.5		8		22			

N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	200 5	1-Sep- 05				8		28			
N 2P/B	N2	Oxtongue mouth	River	200 5	4-Jul-05									
N 2P/B	N2	Oxtongue mouth	River	200 5	18-Jul- 05		7.2		28		132			
N 2P/B	N2	Oxtongue mouth	River	200 5	1-Aug- 05		4.2							
N 2P/B	N2	Oxtongue mouth	River	200 5	14-Aug- 05		6.2		52		87			
N 2P/B	N2	Oxtongue mouth	River	200 5	1-Sep- 05		6.1							
S3 P/B	S3	Price's Point	Deep Water	200 5	4-Jul-05				1		11			
S3 P/B	S3	Price's Point	Deep Water	200 5	18-Jul- 05		3.7		1		8			
S3 P/B	S3	Price's Point	Deep Water	200 5	1-Aug- 05				1		5			
S3 P/B	S3	Price's Point	Deep Water	200 5	14-Aug- 05		2.4		1		11			
S3 P/B FD	S3	Price's Point	Deep Water	200 5	14-Aug- 05				1		3			
S3 P/B LD	S3	Price's Point	Deep Water	200 5	14-Aug- 05				1		1			
S3 P/B	S3	Price's Point	Deep Water	200 5	1-Sep- 05		4.1		1		8			
S3 P/B FD	S3	Price's Point	Deep Water	200 5	1-Sep- 05				1		5			
S3 P/B LD	S3	Price's Point	Deep Water	200 5	1-Sep- 05				1		1			
E1 P/B	E1	Trading Bay	Deep Water	200 5	4-Jul-05		6.7		5		8			

E1 P/B	E1	Trading Bay	Deep Water	200 5	18-Jul- 05		4.9		8		16			
E1 P/B	E1	Trading Bay	Deep Water	200 5	1-Aug- 05		2.6		5		11			
E1 P/B	E1	Trading Bay	Deep Water	200 5	14-Aug- 05				5		16			
E1 P/B	E1	Trading Bay	Deep Water	200 5	1-Sep- 05		6.0		3		8			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	3-Jul-06		3.7		1		43			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	17-Jul- 06		5.1		1		3			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	7-Aug- 06		5.6		1		5			
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	7-Aug- 06				1		25			
S1 P/B LD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	7-Aug- 06				1		17			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	21-Aug- 06		5.2		3		5			
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	1-Sep- 06		4.1							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 6	1-Sep- 06		7.7		5		16		bs	

B1P	B1	Bigwin East	Deep Water	2006	3-Jul-06		6.1		1		1			
B1P	B1	Bigwin East	Deep Water	2006	17-Jul-06		6.3		3		5			
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			
B1P	B1	Bigwin East	Deep Water	2006	7-Aug-06		3.3		1		8			
B1P FD	B1	Bigwin East	Deep Water	2006	7-Aug-06		4.3							
B1P	B1	Bigwin East	Deep Water	2006	21-Aug-06		6.1		3		15			
B1P FD	B1	Bigwin East	Deep Water	2006	21-Aug-06		7.4							
B1P	B1	Bigwin East	Deep Water	2006	1-Sep-06		4.1		3		8			
B1P FD	B1	Bigwin East	Deep Water	2006	1-Sep-06		5.4		1		3			
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	3-Jul-06		3.9		1		1			
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2006	3-Jul-06				1		1			
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	17-Jul-06		7.7		1		1			
N24 P/B	N24	Boothby's	Nearshore Undisturbed	2006	7-Aug-06		5.7		1		33			
N24 P/B FD	N24	Boothby's	Nearshore Undisturbed	2006	7-Aug-06				3		22			

N24 P/B LD	N2 4	Boothby's	Nearshore Undisturbed	200 6	7-Aug- 06				1		54			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 6	21-Aug- 06		5.7		1		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 6	1-Sep- 06				3		3			
N1 P	N1	Dwight Bay	Deep Water	200 6	3-Jul-06		5.0		1		1			
N1 P	N1	Dwight Bay	Deep Water	200 6	17-Jul- 06		4.5		8		8			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 6	17-Jul- 06		4.5							
N1 P	N1	Dwight Bay	Deep Water	200 6	21-Aug- 06		6.7		1		1			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 6	21-Aug- 06				3		3			
N1 P/B LD	N1	Dwight Bay	Deep Water	200 6	21-Aug- 06				4		8			
N1 P	N1	Dwight Bay	Deep Water	200 6	1-Sep- 06		9.2		3		13			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 6	1-Sep- 06		31.9						bs	
B2 P/B	B2	Fairview	Deep Water	200 6	3-Jul-06		4.7		5		5			
B2 P/B	B2	Fairview	Deep Water	200 6	17-Jul- 06		6.3		1		1			
B2 P/B	B2	Fairview	Deep Water	200 6	7-Aug- 06		4.3		3		8			
B2P FD	B2	Fairview	Deep Water	200 6	7-Aug- 06		7.5		3		3		bs	

B2P LD	B2	Fairview	Deep Water	200 6	7-Aug- 06				4		12			
B2 P/B	B2	Fairview	Deep Water	200 6	21-Aug- 06		6.7		1		5			
B2P FD	B2	Fairview	Deep Water	200 6	21-Aug- 06		7.5							
B2 P/B	B2	Fairview	Deep Water	200 6	1-Sep- 06		4.1		1		5			
N10 P/B	N1 0	Gull Rock	Deep Water	200 6	3-Jul-06		4.7		1		3			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 6	3-Jul-06				3		5			
N10 P/B	N1 0	Gull Rock	Deep Water	200 6	17-Jul- 06		4.2		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 6	8-Aug- 06		4.3		1		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 6	21-Aug- 06		6.7		5		13			
N10 P/B	N1 0	Gull Rock	Deep Water	200 6	1-Sep- 06		8.3		1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 6	3-Jul-06		5.6		3		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 6	17-Jul- 06		5.7		3		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 6	7-Aug- 06		40.3		1		5			x
E13 P/B	E1 3	Haystack Bay	Deep Water	200 6	21-Aug- 06		9.1		3		3			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	200 6	21-Aug- 06				5		11			
E13 P/B LD	E1 3	Haystack Bay	Deep Water	200 6	21-Aug- 06				4		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 6	1-Sep- 06		14.1		3		5			x

E20 P/B	E2 0	Little Trading Bay	Deep Water	200 6	3-Jul-06		11.9		3		13			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 6	17-Jul-06		6.1		5		19			
E20 P/B FD	E2 0	Little Trading Bay	Deep Water	200 6	17-Jul-06				5		19			
E20 P/B LD	E2 0	Little Trading Bay	Deep Water	200 6	17-Jul-06				4		20			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 6	8-Aug-06		4.4		3		19			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 6	21-Aug-06		6.5							
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 6	1-Sep-06		10.3		3		11			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 6	3-Jul-06		4.8		1		1			
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 6	3-Jul-06				3		3			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 6	17-Jul-06		3.9		1		8			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 6	7-Aug-06		2.8		3		19			
S2 P/B	S2	Menomin ee Bay	Nearshor e	200 6	21-Aug-06		5.6		3		3			

			Undisturbed											
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	
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	3-Jul-06		4.8		1		1			
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2006	3-Jul-06				3		11			
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2006	17-Jul-06		4.3		5		13			
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			
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	21-Aug-06		6.7		1		3			

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 6	1-Sep- 06		4.7		3		5			
S3 P/B	S3	Price's Point	Deep Water	200 6	3-Jul-06		5.9		1		5			
S3 P/B	S3	Price's Point	Deep Water	200 6	17-Jul- 06		4.9		1		1			
S3 P/B	S3	Price's Point	Deep Water	200 6	7-Aug- 06		4.1		1		16			
S3 P/B	S3	Price's Point	Deep Water	200 6	21-Aug- 06		6.5		3		3			
S3 P/B	S3	Price's Point	Deep Water	200 6	1-Sep- 06		8.5		1		5			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 6	3-Jul-06		6.4		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 6	17-Jul- 06		7.7		1		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 6	7-Aug- 06		6.0		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 6	21-Aug- 06		10.2		1		8			
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	200 6	21-Aug- 06		10.2							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 6	1-Sep- 06		4.2		1		5			
E1 P/B	E1	Trading Bay	Deep Water	200 6	3-Jul-06		5.4		1		5			
E1 P/B	E1	Trading Bay	Deep Water	200 6	17-Jul- 06		7.3		1		1		bs	
E1 P/B FD	E1	Trading Bay	Deep Water	200 6	17-Jul- 06		4.5							
E1 P/B	E1	Trading Bay	Deep Water	200 6	7-Aug- 06		3.3		1		8			
E1 P/B	E1	Trading Bay	Deep Water	200 6	21-Aug- 06		11.0		3		5			

E1 P/B FD	E1	Trading Bay	Deep Water	200 6	21-Aug- 06				5		13			
E1 P/B LD	E1	Trading Bay	Deep Water	200 6	21-Aug- 06				4		4			
E1 P/B	E1	Trading Bay	Deep Water	200 6	1-Sep- 06		5.6		3		13			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	2-Jul-07		2.5		1		5			
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	2-Jul-07				1		1			
S1 P/B LD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	2-Jul-07				1		1			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	23-Jul- 07		4.2		1		1			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	6-Aug- 07		4.1		1		13			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	20-Aug- 07		2.0		1		3			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 7	31-Aug- 07		3.7		1		1			
B1 P/B	B1	Bigwin East	Deep Water	200 7	2-Jul-07		3.7		1		1			
B1 P/B	B1	Bigwin East	Deep Water	200 7	23-Jul- 07		4.8		1		1			

B1P FD	B1	Bigwin East	Deep Water	200 7	23-Jul- 07				1		3			
B1P LD	B1	Bigwin East	Deep Water	200 7	23-Jul- 07				4		56			
B1 P/B	B1	Bigwin East	Deep Water	200 7	6-Aug- 07		5.1		1		5			
B1 P/B	B1	Bigwin East	Deep Water	200 7	20-Aug- 07		2.9		1		1			
B1 P/B	B1	Bigwin East	Deep Water	200 7	31-Aug- 07		6.1		1		3			
B3 P/B	B3	Bigwin North	Disturbed	200 7	2-Jul-07		5.4		1		5			
B3 P/B	B3	Bigwin North	Disturbed	200 7	23-Jul- 07		5.7		1		1			
B3 P/B	B3	Bigwin North	Disturbed	200 7	6-Aug- 07		97.7		1		3			x
B3 P/B	B3	Bigwin North	Disturbed	200 7	20-Aug- 07		8.3		1		8			
B3 P/B	B3	Bigwin North	Disturbed	200 7	31-Aug- 07		5.6		3		28			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 7	2-Jul-07		3.8		1		1			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 7	23-Jul- 07		7.8		1		5			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 7	6-Aug- 07		7.3		1		5			
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	200 7	6-Aug- 07				1		8			
N24 P/B LD	N2 4	Boothby's	Nearshor e Undisturb ed	200 7	6-Aug- 07				1		108			

N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 7	20-Aug- 07		3.0		1		3			
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	200 7	20-Aug- 07				1		1			
N24 P/B LD	N2 4	Boothby's	Nearshore Undisturbed	200 7	20-Aug- 07				1		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 7	31-Aug- 07		4.3		1		3			
N11 P/B	N1 1	Britannia	Disturbed	200 7	2-Jul-07		3.5		3		5			
N11 P/B FD	N1 1	Britannia	Disturbed	200 7	2-Jul-07				3		8			
N11 P/B LD	N1 1	Britannia	Disturbed	200 7	2-Jul-07				1		4			
N11 P/B	N1 1	Britannia	Disturbed	200 7	23-Jul- 07		5.8		1		3			
N11 P/B	N1 1	Britannia	Disturbed	200 7	6-Aug- 07		3.8		1		5			
N11 P/B	N1 1	Britannia	Disturbed	200 7	20-Aug- 07		5.3		5		11			
N11 P/B	N1 1	Britannia	Disturbed	200 7	31-Aug- 07		5.1		1		3			
N11 P/B FD	N1 1	Britannia	Disturbed	200 7	31-Aug- 07				1		11			
N1 P/B	N1	Dwight Bay	Deep Water	200 7	2-Jul-07		4.3		1		5			
N1 P/B	N1	Dwight Bay	Deep Water	200 7	23-Jul- 07		6.1		1		13			

N1 P/B FD	N1	Dwight Bay	Deep Water	200 7	23-Jul- 07				1		8			
N1 P/B LD	N1	Dwight Bay	Deep Water	200 7	23-Jul- 07				1		4			
N1 P/B	N1	Dwight Bay	Deep Water	200 7	6-Aug- 07		9.6		1		5			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 7	6-Aug- 07				1		5			
N1 P/B LD	N1	Dwight Bay	Deep Water	200 7	6-Aug- 07				1		8			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 7	20-Aug- 07		4.0							
N1 P/B	N1	Dwight Bay	Deep Water	200 7	20-Aug- 07		4.6		1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 7	31-Aug- 07		5.3		1		5			
B2 P/B	B2	Fairview	Deep Water	200 7	2-Jul-07		3.3		1		3			
B2 P/B	B2	Fairview	Deep Water	200 7	23-Jul- 07		5.7		1		1			
B2 P/B	B2	Fairview	Deep Water	200 7	6-Aug- 07		4.1		1		5			
B2 P/B FD	B2	Fairview	Deep Water	200 7	6-Aug- 07				1		1			
B2 P/B LD	B2	Fairview	Deep Water	200 7	6-Aug- 07				4		8			
B2 P/B	B2	Fairview	Deep Water	200 7	20-Aug- 07		2.4		1		5			
B2 P/B	B2	Fairview	Deep Water	200 7	31-Aug- 07		12.5		1		3			x
N10 P/B	N1 0	Gull Rock	Deep Water	200 7	2-Jul-07		4.1		1		1			

N10 P/B FD	N1 0	Gull Rock	Deep Water	200 7	2-Jul-07				1		8			
N10 P/B LD	N1 0	Gull Rock	Deep Water	200 7	2-Jul-07				1		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 7	23-Jul- 07		5.3		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 7	6-Aug- 07		4.9		1		5			
N10 P/B	N1 0	Gull Rock	Deep Water	200 7	20-Aug- 07		4.1		1		1			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 7	20-Aug- 07		5.4							
N10 P/B	N1 0	Gull Rock	Deep Water	200 7	31-Aug- 07		4.6		1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 7	2-Jul-07		4.0		1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 7	23-Jul- 07		4.3		1		5			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 7	6-Aug- 07		10.8		1		13			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	200 7	6-Aug- 07		12.8							
E13 P/B	E1 3	Haystack Bay	Deep Water	200 7	20-Aug- 07		2.6		1		1			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 7	31-Aug- 07		5.0		1		5			
E 6 P/B	E6	Hollow River Lagoon	River	200 7	2-Jul-07		3.6		3		263			
E 6 P/B	E6	Hollow River Lagoon	River	200 7	23-Jul- 07		5.7		25		79			
E 6 P/B	E6	Hollow River Lagoon	River	200 7	6-Aug- 07		5.7		39		110			

E 6 P/B FD	E6	Hollow River Lagoon	River	200 7	6-Aug- 07				39		108			
E 6 P/B LD	E6	Hollow River Lagoon	River	200 7	6-Aug- 07				42		600			
E 6 P/B	E6	Hollow River Lagoon	River	200 7	20-Aug- 07		5.1		25		79			
E 6 P/B FD	E6	Hollow River Lagoon	River	200 7	20-Aug- 07				30		98			
E 6 P/B LD	E6	Hollow River Lagoon	River	200 7	20-Aug- 07				26		172			
E 6 P/B	E6	Hollow River Lagoon	River	200 7	31-Aug- 07		6.5		8		52			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 7	20-Aug- 07				3		25			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 7	31-Aug- 07				3		11			
E18 P/B	E1 8	Hollow River mouth	River	200 7	2-Jul-07		3.9		1		177			
E18 P/B	E1 8	Hollow River mouth	River	200 7	23-Jul- 07		6.6		28		72			
E18 P/B	E1 8	Hollow River mouth	River	200 7	6-Aug- 07		5.7		30		79			
E18 P/B	E1 8	Hollow River mouth	River	200 7	20-Aug- 07		3.9		25		30			

E18 P/B	E1 8	Hollow River mouth	River	200 7	31-Aug- 07		5.7		5		43			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 7	2-Jul-07		4.8		1		25			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 7	23-Jul- 07		7.9		8		65			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 7	6-Aug- 07		7.6		3		8			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 7	20-Aug- 07		7.9		1		8			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 7	31-Aug- 07		7.0		1		5			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 7	2-Jul-07		2.7		1		1			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 7	23-Jul- 07		3.8		1		1			
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 7	23-Jul- 07				1		1			
S2 P/B LD	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 7	23-Jul- 07				4		60			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 7	6-Aug- 07		6.0		3		5			

S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	20-Aug-07		2.7		3		11			
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			
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2007	31-Aug-07		4.2		1		3			
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2007	2-Jul-07		3.8		1		1			
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			
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	N13	Moffat's	Nearshore Undisturbed	2007	20-Aug-07		2.7		1		1			

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 7	31-Aug- 07		3.7		1		1			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 7	2-Jul-07		3.9		1		16			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 7	23-Jul- 07		7.2		1		3			
E25 P/B FD	E2 5	Narrows East	Nearshore Undisturbed	200 7	23-Jul- 07				1		3			
E25 P/B LD	E2 5	Narrows East	Nearshore Undisturbed	200 7	23-Jul- 07				1		1			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 7	6-Aug- 07		16.9		1		11			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 7	20-Aug- 07		12.9		3		8			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 7	31-Aug- 07		16.1		1		1			
E25 P/B FD	E2 5	Narrows East	Nearshore Undisturbed	200 7	31-Aug- 07				1		5			
E26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 7	2-Jul-07		4.5		1		65			

E26 P/B FD	E2 6	Narrows West	Nearshore Undisturbed	200 7	23-Jul- 07		4.1						
E26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 7	23-Jul- 07		8.2		1		1		bs
E26 P/B FD	E2 6	Narrows West	Nearshore Undisturbed	200 7	6-Aug- 07		6.4		1		1		
E26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 7	6-Aug- 07		7.0		13		25		
E26 P/B FD	E2 6	Narrows West	Nearshore Undisturbed	200 7	6-Aug- 07				8		13		
E26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 7	20-Aug- 07		5.7		1		1		
E26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 7	31-Aug- 07		4.4		1		8		
N26 P/B	N2 6	Portage Bay RR	Nearshore Undisturbed	200 7	2-Jul-07								
N26 P/B	N2 6	Portage Bay RR	Nearshore Undisturbed	200 7	25-Jul- 07		5.7						
N26 P/B	N2 6	Portage Bay RR	Nearshore Undisturbed	200 7	6-Aug- 07		5.2		1		13		

N26 P/B	N2 6	Portage Bay RR	Nearshor e Undisturb ed	200 7	20-Aug- 07		7.0		1		11			
N26 P/B	N2 6	Portage Bay RR	Nearshor e Undisturb ed	200 7	31-Aug- 07		8.1		3		19			
N27 P/B	N2 7	Portage Bay Wee Is.	Deep Water	200 7	25-Jul- 07		6.1							
N27 P/B	N2 7	Portage Bay Wee Is.	Deep Water	200 7	6-Aug- 07		5.2		1		3			
N27 P/B	N2 7	Portage Bay Wee Is.	Deep Water	200 7	20-Aug- 07		4.6		1		5			
N27 P/B	N2 7	Portage Bay Wee Is.	Deep Water	200 7	20-Aug- 07		5.5							
N27 P/B	N2 7	Portage Bay Wee Is.	Deep Water	200 7	31-Aug- 07		6.7		1		5			
S3 P/B	S3	Price's Point	Deep Water	200 7	2-Jul-07		5.2		1		1			
S3 P/B FD	S3	Price's Point	Deep Water	200 7	2-Jul-07				1		4			
S3 P/B LD	S3	Price's Point	Deep Water	200 7	2-Jul-07				1		1			
S3 P/B	S3	Price's Point	Deep Water	200 7	23-Jul- 07		4.0		1		1			
S3 P/B	S3	Price's Point	Deep Water	200 7	6-Aug- 07		3.6		1		3			
S3 P/B	S3	Price's Point	Deep Water	200 7	20-Aug- 07		4.2		1		1			
S3 P/B	S3	Price's Point	Deep Water	200 7	31-Aug- 07		5.3		1		3			

E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 7	2-Jul-07		3.4		1		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 7	23-Jul-07		4.9		1		1			
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	200 7	23-Jul-07				1		3			
E30 P/B LD	E3 0	Ten Mile Bay	Deep Water	200 7	23-Jul-07				1		4			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 7	6-Aug-07		5.8		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 7	20-Aug-07		4.6		1		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 7	31-Aug-07		6.2		1		1			
E1 P/B	E1	Trading Bay	Deep Water	200 7	2-Jul-07		2.9		1		5			
E1 P/B	E1	Trading Bay	Deep Water	200 7	23-Jul-07		6.1		1		16			
E1 P/B	E1	Trading Bay	Deep Water	200 7	6-Aug-07		6.2		1		1			
E1 P/B FD	E1	Trading Bay	Deep Water	200 7	6-Aug-07				1		8			
E1 P/B LD	E1	Trading Bay	Deep Water	200 7	6-Aug-07				1		6			
E1 P/B	E1	Trading Bay	Deep Water	200 7	20-Aug-07		3.8		1		1			
E1 P/B FD	E1	Trading Bay	Deep Water	200 7	20-Aug-07		3.3							
E1 P/B	E1	Trading Bay	Deep Water	200 7	31-Aug-07		4.6		1		1			
S1 P/B	S1	Adamson's Island	Nearshore Undisturbed	200 8	30-Jun-08		4.6		1		1			

S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 8	14-Jul- 08		4.3		8		65			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 8	4-Aug- 08		6.2		1		3			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 8	18-Aug- 08		3.0		1		13			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	200 8	29-Aug- 08		4.4		1		3			
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	200 8	29-Aug- 08				1		1			
B4 P/B	B4	Bigwin Bay	Disturbed	200 8	4-Aug- 08		6.4		11		87			
B4 P/B	B4	Bigwin Bay	Disturbed	200 8	18-Aug- 08		5.2		1		1			
B4 P/B	B4	Bigwin Bay	Disturbed	200 8	29-Aug- 08		4.9		3		13			
B1 P/B	B1	Bigwin East	Deep Water	200 8	30-Jun- 08		4.4		1		1			
B1 P/B	B1	Bigwin East	Deep Water	200 8	14-Jul- 08		9.0		5		8			
B1P FD	B1	Bigwin East	Deep Water	200 8	14-Jul- 08				3		8			
B1P LD	B1	Bigwin East	Deep Water	200 8	14-Jul- 08				1		1			
B1 P/B	B1	Bigwin East	Deep Water	200 8	4-Aug- 08		7.4		1		16			
B1 P/B	B1	Bigwin East	Deep Water	200 8	18-Aug- 08		6.0		1		1			
B1P FD	B1	Bigwin East	Deep Water	200 8	29-Aug- 08		5.0							

B1 P/B	B1	Bigwin East	Deep Water	200 8	29-Aug- 08		5.4		1		3			
B3 P/B	B3	Bigwin North	Disturbed	200 8	30-Jun- 08		3.9		1		28			
B3 P/B	B3	Bigwin North	Disturbed	200 8	14-Jul- 08		8.0		8		30			
B3 P/B	B3	Bigwin North	Disturbed	200 8	4-Aug- 08		5.6		5		19			
B3 P/B	B3	Bigwin North	Disturbed	200 8	18-Aug- 08		7.1		1		1			
B3 P/B	B3	Bigwin North	Disturbed	200 8	29-Aug- 08		6.0		3		5			
N24 P/B LD	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	30-Jun- 08		4.6							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	30-Jun- 08		5.9		1		5			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	14-Jul- 08		5.8		28		43			
N24 P/B LD	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	4-Aug- 08		5.0							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	4-Aug- 08		5.8		1		11			
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	4-Aug- 08				3		8			
N24 P/B LD	N2 4	Boothby's	Nearshor e Undisturb ed	200 8	4-Aug- 08				4		12			

N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 8	18-Aug- 08		5.9		1		1			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 8	29-Aug- 08		4.7		1		1			
N11 P/B	N1 1	Britannia	Disturbed	200 8	30-Jun- 08		4.2		11		19			
N11 P/B FD	N1 1	Britannia	Disturbed	200 8	30-Jun- 08				8.0		16.0			
N11 P/B	N1 1	Britannia	Disturbed	200 8	14-Jul- 08		4.4		5		13			
N11 P/B	N1 1	Britannia	Disturbed	200 8	4-Aug- 08		8.4		3		3			
N11 P/B FD	N1 1	Britannia	Disturbed	200 8	4-Aug- 08				3.0		11.0			
N11 P/B	N1 1	Britannia	Disturbed	200 8	18-Aug- 08		4.1		3		8			
N11 P/B	N1 1	Britannia	Disturbed	200 8	29-Aug- 08		6.2		1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 8	30-Jun- 08				1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 8	14-Jul- 08		6.1		1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 8	4-Aug- 08		6.3		1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 8	18-Aug- 08		6.0		1		1			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 8	18-Aug- 08				1		1			
N1 P/B LD	N1	Dwight Bay	Deep Water	200 8	18-Aug- 08				1		1			
N1 P/B	N1	Dwight Bay	Deep Water	200 8	29-Aug- 08		6.0		1		8			

B2 P/B	B2	Fairview	Deep Water	200 8	30-Jun- 08		3.7		1		1			
B2 P/B FD	B2	Fairview	Deep Water	200 8	30-Jun- 08				1		1			
B2 P/B	B2	Fairview	Deep Water	200 8	14-Jul- 08		6.8		3		5			
B2 P/B	B2	Fairview	Deep Water	200 8	4-Aug- 08		6.5		1		1			
B2 P/B FD	B2	Fairview	Deep Water	200 8	4-Aug- 08		8.4							
B2 P/B	B2	Fairview	Deep Water	200 8	18-Aug- 08		6.0		1		3			
B2 P/B	B2	Fairview	Deep Water	200 8	29-Aug- 08		6.3		1		11			
N10 P/B	N1 0	Gull Rock	Deep Water	200 8	30-Jun- 08		4.3		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 8	14-Jul- 08				3		13			
N10 P/B	N1 0	Gull Rock	Deep Water	200 8	4-Aug- 08		5.7		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 8	18-Aug- 08		4.1		1		1			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 8	18-Aug- 08				1		1			
N10 P/B LD	N1 0	Gull Rock	Deep Water	200 8	18-Aug- 08				1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 8	29-Aug- 08		5.7		1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 8	30-Jun- 08		5.1		1		1			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 8	14-Jul- 08		4.8		3		11			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	200 8	14-Jul- 08				1		16			

E13 P/B LD	E1 3	Haystack Bay	Deep Water	200 8	14-Jul- 08				1		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 8	4-Aug- 08		5.6		1		3			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	200 8	4-Aug- 08				3		5			
E13 P/B LD	E1 3	Haystack Bay	Deep Water	200 8	4-Aug- 08				1		20			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 8	18-Aug- 08		5.6		3		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 8	29-Aug- 08				3		11			
E 6 P/B	E6	Hollow River Lagoon	River	200 8	14-Jul- 08		8.1		25		65			
E 6 P/B	E6	Hollow River Lagoon	River	200 8	4-Aug- 08		5.2		11		39			
E 6 P/B	E6	Hollow River Lagoon	River	200 8	18-Aug- 08		5.5		1		19			
E 6 P/B FD	E6	Hollow River Lagoon	River	200 8	18-Aug- 08				8		30			
E 6 P/B LD	E6	Hollow River Lagoon	River	200 8	18-Aug- 08				8		48			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 8	14-Jul- 08		24.7		39		98			
E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 8	4-Aug- 08		6.5		19		39			

E 6A P/B	E6 a	Hollow River lagoon- upstream	River	200 8	18-Aug- 08		5.3		5		25			
E18 P/B	E1 8	Hollow River mouth	River	200 8	14-Jul- 08		10.1		50		90			R
E18 P/B	E1 8	Hollow River mouth	River	200 8	4-Aug- 08		5.5		33		62			
E18 P/B	E1 8	Hollow River mouth	River	200 8	18-Aug- 08		5.8		5		16			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 8	30-Jun- 08		7.4		1		59			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 8	14-Jul- 08		7.0		1		16			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 8	4-Aug- 08		8.3		8		22			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 8	18-Aug- 08		6.5		1		3			
E20 P/B	E2 0	Little Trading Bay	Deep Water	200 8	29-Aug- 08		9.4		3		62			
E20 P/B FD	E2 0	Little Trading Bay	Deep Water	200 8	29-Aug- 08				5		52			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 8	30-Jun- 08		4.8		1		8			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 8	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	S2	Menominee Bay	Nearshore Undisturbed	2008	18-Aug-08		5.8		1		16			
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 FD	S2	Menominee Bay	Nearshore Undisturbed	2008	29-Aug-08				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	14-Jul-08		4.7		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	N1 3	Moffat's	Nearshore Undisturbed	200 8	29-Aug- 08		4.7		1		3			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	200 8	29-Aug- 08				1		3			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 8	30-Jun- 08				1		5			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 8	14-Jul- 08		4.9		3		19			
E25 P/B FD	E2 5	Narrows East	Nearshore Undisturbed	200 8	14-Jul- 08				1		19			
E25 P/B FD	E2 5	Narrows East	Nearshore Undisturbed	200 8	14-Jul- 08				3		8			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 8	4-Aug- 08		6.3		1		3			
E25 P/B LD	E2 5	Narrows East	Nearshore Undisturbed	200 8	4-Aug- 08				1		19			
E25 P/B LD	E2 5	Narrows East	Nearshore Undisturbed	200 8	4-Aug- 08				1		16			
E25 P/B	E2 5	Narrows East	Nearshore Undisturbed	200 8	18-Aug- 08		4.3		1		16			

E25 P/B	E2 5	Narrows East	Nearshor e Undisturb ed	200 8	29-Aug- 08		7.2		5		16			
E26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	30-Jun- 08				3		8			
E26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	14-Jul- 08		2.4		5		8			
E26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	4-Aug- 08		5.5		13		69			
E26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	18-Aug- 08		4.6		1		1			
E26 P/B FD	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	18-Aug- 08		5.9		1		1			
E26 P/B LD	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	18-Aug- 08				1		24			
E26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	200 8	29-Aug- 08		5.5		3		11			
N30 P/B	N3 0	Oxtongue Delta	River	200 8	4-Aug- 08		5.9		3		8			
N30 P/B	N3 0	Oxtongue Delta	River	200 8	18-Aug- 08		5.0		1		1			
N30 P/B	N3 0	Oxtongue Delta	River	200 8	29-Aug- 08		9.7		5		11			
N 2P/B	N2	Oxtongue mouth	River	200 8	4-Aug- 08		8.3		30		52			

N 2P/B	N2	Oxtongue mouth	River	200 8	18-Aug- 08		6.9		16		33			
N 2P/B	N2	Oxtongue mouth	River	200 8	29-Aug- 08		6.6		25		46			
S3 P/B LD	S3	Price's Point	Deep Water	200 8	30-Jun- 08		3.9							
S3 P/B	S3	Price's Point	Deep Water	200 8	30-Jun- 08		3.6		1		1			
S3 P/B	S3	Price's Point	Deep Water	200 8	14-Jul- 08		3.6		3		16			
S3 P/B FD	S3	Price's Point	Deep Water	200 8	14-Jul- 08				1		11			
S3 P/B LD	S3	Price's Point	Deep Water	200 8	14-Jul- 08				1		4			
S3 P/B	S3	Price's Point	Deep Water	200 8	4-Aug- 08		5.1		1		3			
S3 P/B FD	S3	Price's Point	Deep Water	200 8	4-Aug- 08				1		1			
S3 P/B LD	S3	Price's Point	Deep Water	200 8	4-Aug- 08				1		1			
S3 P/B	S3	Price's Point	Deep Water	200 8	18-Aug- 08		5.0		1		1			
S3 P/B LD	S3	Price's Point	Deep Water	200 8	18-Aug- 08		4.9							
S3 P/B	S3	Price's Point	Deep Water	200 8	29-Aug- 08		6.0		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 8	30-Jun- 08		5.1		8		28			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 8	14-Jul- 08		4.7		5		11			
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	200 8	14-Jul- 08		6.9		3		11		bs	

E30 P/B LD	E3 0	Ten Mile Bay	Deep Water	200 8	14-Jul- 08				1		8			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 8	4-Aug- 08		5.3		1		5			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 8	18-Aug- 08		6.6		1		11			
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	200 8	18-Aug- 08				1		19			
E30 P/B LD	E3 0	Ten Mile Bay	Deep Water	200 8	18-Aug- 08				1		16			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 8	29-Aug- 08		6.0		1		3			
E1 P/B	E1	Trading Bay	Deep Water	200 8	30-Jun- 08		4.0		1		33			
E1 P/B	E1	Trading Bay	Deep Water	200 8	14-Jul- 08		5.8		3		5			
E1 P/B FD	E1	Trading Bay	Deep Water	200 8	14-Jul- 08				5		16			
E1 P/B	E1	Trading Bay	Deep Water	200 8	4-Aug- 08		4.8		3		5			
E1 P/B FD	E1	Trading Bay	Deep Water	200 8	4-Aug- 08				1		8			
E1 P/B LD	E1	Trading Bay	Deep Water	200 8	4-Aug- 08				1		8			
E1 P/B FD	E1	Trading Bay	Deep Water	200 8	18-Aug- 08		5.8							
E1 P/B	E1	Trading Bay	Deep Water	200 8	18-Aug- 08		5.3		1		5			
E1 P/B	E1	Trading Bay	Deep Water	200 8	29-Aug- 08		6.7		1		5			
S1 P/B	S1	Adamson' s Island	Nearshor e	200 9	3-Jul-09		3.4		1		8			

			Undisturbed											
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	S1	Adamson's Island	Nearshore Undisturbed	2009	1-Aug-09		1.9		3		3			
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	4-Sep-09		2.2		3		5			
S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2009	4-Sep-09				3		8			
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			
B4 P/B	B4	Bigwin Bay	Disturbed	2009	1-Aug-09		3.9		1		11			
B4 P/B	B4	Bigwin Bay	Disturbed	2009	17-Aug-09		3.4		8		11			
B4 P/B	B4	Bigwin Bay	Disturbed	2009	4-Sep-09		2.1		5		13			
B1P	B1	Bigwin East	Deep Water	2009	3-Jul-09		4.2		1		3			

B1P FD	B1	Bigwin East	Deep Water	200 9	3-Jul-09		4.3							
B1P	B1	Bigwin East	Deep Water	200 9	17-Jul- 09		5.8		3		8			
B1P	B1	Bigwin East	Deep Water	200 9	1-Aug- 09		2.9		1		16			
B1P FD	B1	Bigwin East	Deep Water	200 9	1-Aug- 09				1		11			
B1P	B1	Bigwin East	Deep Water	200 9	17-Aug- 09		4.5		3		3			
B1P FD	B1	Bigwin East	Deep Water	200 9	17-Aug- 09				1		5			
B1P	B1	Bigwin East	Deep Water	200 9	4-Sep- 09		3.2		1		1			
B3 P/B	B3	Bigwin North	Disturbed	200 9	3-Jul-09		4.5		5		28			
B3 P/B	B3	Bigwin North	Disturbed	200 9	17-Jul- 09		10.2		8		30			
B3 P/B	B3	Bigwin North	Disturbed	200 9	1-Aug- 09		2.9		5		19			
B3 P/B	B3	Bigwin North	Disturbed	200 9	17-Aug- 09		5.4		3		11			
B3 P/B	B3	Bigwin North	Disturbed	200 9	4-Sep- 09		5.1		3		5			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 9	3-Jul-09		5.9		1		5			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 9	17-Jul- 09		6.2		3		13			
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	200 9	17-Jul- 09				5		11			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	200 9	1-Aug- 09		2.9		1		11			

N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 9	17-Aug- 09		4.0		5		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	200 9	4-Sep- 09		2.3		1		3			
N11 P/B	N1 1	Britannia	Disturbed	200 9	3-Jul-09		3.5		8.0		19.0			
N11 P/B FD	N1 1	Britannia	Disturbed	200 9	3-Jul-09				11.0		16.0			
N11 P/B	N1 1	Britannia	Disturbed	200 9	17-Jul- 09		5.3		1.0		13.0			
N11 P/B	N1 1	Britannia	Disturbed	200 9	1-Aug- 09		2.0		3.0		5.0			
N11 P/B	N1 1	Britannia	Disturbed	200 9	17-Aug- 09		3.5		3.0		8.0			
N11 P/B	N1 1	Britannia	Disturbed	200 9	4-Sep- 09		3.6		1.0		1.0			
N1 P/B	N1	Dwight Bay	Deep Water	200 9	3-Jul-09				5		11			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 9	17-Jul- 09		5.2				3			
N1 P/B	N1	Dwight Bay	Deep Water	200 9	17-Jul- 09		5.3		1		8			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 9	1-Aug- 09		3.2		8		11			
N1 P/B	N1	Dwight Bay	Deep Water	200 9	1-Aug- 09		4.5		3		8			
N1 P/B	N1	Dwight Bay	Deep Water	200 9	17-Aug- 09		3.6		1		11			
N1 P/B FD	N1	Dwight Bay	Deep Water	200 9	17-Aug- 09		3.7							
N1 P/B	N1	Dwight Bay	Deep Water	200 9	4-Sep- 09		6.9		1		3			

B2 P/B	B2	Fairview	Deep Water	200 9	3-Jul-09		4.9		3		3			
B2 P/B	B2	Fairview	Deep Water	200 9	17-Jul-09		12.3		3		3			x
B2 P/B	B2	Fairview	Deep Water	200 9	1-Aug-09		3.7		1		1			
B2 P/B FD	B2	Fairview	Deep Water	200 9	1-Aug-09				3		3			
B2 P/B	B2	Fairview	Deep Water	200 9	17-Aug-09		6.1		3		3			
B2 P/B	B2	Fairview	Deep Water	200 9	4-Sep-09		3.5		1		11			
N10 P/B	N1 0	Gull Rock	Deep Water	200 9	3-Jul-09		4.0		1		8			
N10 P/B	N1 0	Gull Rock	Deep Water	200 9	17-Jul-09		5.7		3		3			
N10 P/B	N1 0	Gull Rock	Deep Water	200 9	1-Aug-09		2.5		3		5			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 9	1-Aug-09		2.9							
N10 P/B	N1 0	Gull Rock	Deep Water	200 9	17-Aug-09		4.6		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	200 9	4-Sep-09		4.8		1		3			
N10 P/B FD	N1 0	Gull Rock	Deep Water	200 9	4-Sep-09				1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 9	3-Jul-09		6.8		1		8			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	200 9	3-Jul-09				1		5			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 9	17-Jul-09		57.7		3		11			x
E13 P/B	E1 3	Haystack Bay	Deep Water	200 9	1-Aug-09		4.0		3		8			

E13 P/B	E1 3	Haystack Bay	Deep Water	200 9	17-Aug- 09		6.3		3		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	200 9	4-Sep- 09		8.4		5		11			
E 6 P/B	E6	Hollow River Lagoon	River	200 9	3-Jul-09				8		11			
E 6 P/B	E6	Hollow River Lagoon	River	200 9	17-Jul- 09				16		39			
E 6 P/B	E6	Hollow River Lagoon	River	200 9	1-Aug- 09				11		28			
E 6 P/B	E6	Hollow River Lagoon	River	200 9	17-Aug- 09				8		43			
E 6 P/B	E6	Hollow River Lagoon	River	200 9	4-Sep- 09				3		16			
E 18 P/B	E1 8	Hollow River mouth	River	200 9	3-Jul-09				5		39			
E 18 P/B	E1 8	Hollow River mouth	River	200 9	17-Jul- 09				11		90			
E 18 P/B	E1 8	Hollow River mouth	River	200 9	1-Aug- 09				8		62			
E 18 P/B	E1 8	Hollow River mouth	River	200 9	17-Aug- 09				16		19			
E 18 P/B	E1 8	Hollow River mouth	River	200 9	4-Sep- 09				3		28			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	200 9	3-Jul-09		3.9		5		8			

S2 P/B FD	S2	Menominee Bay	Nearshore Undisturbed	2009	3-Jul-09				3		8			
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	17-Jul-09		4.9		8		19			
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	17-Aug-09		2.9		1		16			
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2009	4-Sep-09		2.1		1		11			
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	3-Jul-09		4.4		5		8			
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2009	17-Jul-09		6.9		3		5			
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-Aug-09		4.5		1		3			
N13 P/B FD	N13	Moffat's	Nearshore Undisturbed	2009	17-Aug-09				1		3			

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	200 9	4-Sep- 09		2.6		1		3			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 9	3-Jul-09				3		16			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 9	17-Jul- 09				5		8			
E 26 P/B FD	E2 6	Narrows West	Nearshore Undisturbed	200 9	17-Jul- 09				8		8			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 9	1-Aug- 09				3		11			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 9	17-Aug- 09				8		11			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	200 9	4-Sep- 09				3		11			
N30 P/B	N3 0	Oxtongue Delta	River	200 9	3-Jul-09		5.7		3		11			
N30 P/B	N3 0	Oxtongue Delta	River	200 9	17-Jul- 09		6.3		5		11			
N30 P/B	N3 0	Oxtongue Delta	River	200 9	1-Aug- 09		4.1		3		8			
N30 P/B	N3 0	Oxtongue Delta	River	200 9	17-Aug- 09		4.8		3		5			
N30 P/B	N3 0	Oxtongue Delta	River	200 9	4-Sep- 09		2.9		5		11			
N 2P/B	N2	Oxtongue mouth	River	200 9	3-Jul-09		9.4		5		22			

N 2P/B	N2	Oxtongue mouth	River	200 9	17-Jul- 09		8.5		11		13			
N 2P/B	N2	Oxtongue mouth	River	200 9	1-Aug- 09		6.8		8		30			
N 2P/B	N2	Oxtongue mouth	River	200 9	17-Aug- 09		6.9		11		33			
N 2P/B	N2	Oxtongue mouth	River	200 9	4-Sep- 09		6.4		25		46			
S3 P/B	S3	Price's Point	Deep Water	200 9	3-Jul-09		9.5		3		5			
S3 P/B FD	S3	Price's Point	Deep Water	200 9	3-Jul-09		9.2							
S3 P/B	S3	Price's Point	Deep Water	200 9	17-Jul- 09		7.4		1		16			
S3 P/B FD	S3	Price's Point	Deep Water	200 9	17-Jul- 09				3		19			
S3 P/B	S3	Price's Point	Deep Water	200 9	1-Aug- 09		2.3		1		3			
S3 P/B	S3	Price's Point	Deep Water	200 9	17-Aug- 09		6.7		3		3			
S3 P/B FD	S3	Price's Point	Deep Water	200 9	4-Sep- 09		2.7							
S3 P/B	S3	Price's Point	Deep Water	200 9	4-Sep- 09		2.6		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 9	3-Jul-09		4.6		1		28			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 9	17-Jul- 09		6.6		1		11			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 9	1-Aug- 09		3.7		3		5			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 9	17-Aug- 09		5.1		3		11			
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	200 9	17-Aug- 09				1		8			

E30 P/B	E3 0	Ten Mile Bay	Deep Water	200 9	4-Sep- 09		4.0		3		3			
E1 P/B	E1	Trading Bay	Deep Water	200 9	3-Jul-09		5.4		5		11			
E1 P/B	E1	Trading Bay	Deep Water	200 9	17-Jul- 09		5.4		3		3			
E1 P/B	E1	Trading Bay	Deep Water	200 9	1-Aug- 09		3.0		3		3			
E1 P/B	E1	Trading Bay	Deep Water	200 9	17-Aug- 09		5.3		1		5			
E1 P/B FD	E1	Trading Bay	Deep Water	200 9	17-Aug- 09		5.1							
E1 P/B	E1	Trading Bay	Deep Water	200 9	4-Sep- 09		5.6		3		5			
E1 P/B FD	E1	Trading Bay	Deep Water	200 9	4-Sep- 09				3		3			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 0	5-Jul-10		2.8							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 0	19-Jul- 10		3.1							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 0	2-Aug- 10		2.5							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 0	16-Aug- 10		2.7							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 0	7-Sep- 10		2.9							

S1 P/B FD	S1	Adamson's Island	Nearshore Undisturbed	2010	7-Sep-10	3.0								
B4 P/B	B4	Bigwin Bay	Disturbed	2010	5-Jul-10	3.0								
B4 P/B	B4	Bigwin Bay	Disturbed	2010	19-Jul-10	6.0								
B4 P/B	B4	Bigwin Bay	Disturbed	2010	2-Aug-10	3.2								
B4 P/B	B4	Bigwin Bay	Disturbed	2010	16-Aug-10	3.0								
B4 P/B	B4	Bigwin Bay	Disturbed	2010	7-Sep-10	2.7								
B1P FD	B1	Bigwin East	Deep Water	2010	5-Jul-10	4.8								
B1P	B1	Bigwin East	Deep Water	2010	5-Jul-10	5.6								
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	2-Aug-10	4.6								
B1P	B1	Bigwin East	Deep Water	2010	16-Aug-10	7.6								
B1P	B1	Bigwin East	Deep Water	2010	7-Sep-10	6.4								
B3 P/B	B3	Bigwin North	Disturbed	2010	5-Jul-10	3.6								
B3 P/B	B3	Bigwin North	Disturbed	2010	19-Jul-10	3.3								
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								
B3 P/B	B3	Bigwin North	Disturbed	2010	7-Sep-10	3.8								

N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 0	5-Jul-10		3.3							
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 0	19-Jul-10		2.9							
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 0	2-Aug-10		6.4							
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 0	16-Aug-10		7.4							
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 0	7-Sep-10		2.9							
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	201 0	7-Sep-10		2.9							
N11 P/B	N1 1	Britannia	Disturbed	201 0	5-Jul-10		2.9							
N11 P/B	N1 1	Britannia	Disturbed	201 0	19-Jul-10		3.8							
N11 P/B	N1 1	Britannia	Disturbed	201 0	2-Aug-10		2.7							
N11 P/B	N1 1	Britannia	Disturbed	201 0	16-Aug-10		4.6							
N11 P/B	N1 1	Britannia	Disturbed	201 0	7-Sep-10		4.9							
N1 P/B FD	N1	Dwight Bay	Deep Water	201 0	5-Jul-10		5.0							
N1 P/B	N1	Dwight Bay	Deep Water	201 0	5-Jul-10		6.5							

N1 P/B	N1	Dwight Bay	Deep Water	201 0	19-Jul- 10		11.7							
N1 P/B	N1	Dwight Bay	Deep Water	201 0	2-Aug- 10		3.6							
N1 P/B	N1	Dwight Bay	Deep Water	201 0	16-Aug- 10		3.4							
N1 P/B	N1	Dwight Bay	Deep Water	201 0	7-Sep- 10		6.6							
B2 P/B	B2	Fairview	Deep Water	201 0	5-Jul-10		4.7							
B2 P/B	B2	Fairview	Deep Water	201 0	19-Jul- 10		5.4							
B2 P/B	B2	Fairview	Deep Water	201 0	2-Aug- 10		5.5							
B2 P/B F/D	B2	Fairview	Deep Water	201 0	16-Aug- 10		3.9							
B2 P/B	B2	Fairview	Deep Water	201 0	16-Aug- 10		4.2							
B2 P/B	B2	Fairview	Deep Water	201 0	7-Sep- 10		6.4							
N10 P/B	N1 0	Gull Rock	Deep Water	201 0	5-Jul-10		3.9							
N10 P/B	N1 0	Gull Rock	Deep Water	201 0	19-Jul- 10		4.4							
N10 P/B	N1 0	Gull Rock	Deep Water	201 0	2-Aug- 10		8.6							
N10 P/B	N1 0	Gull Rock	Deep Water	201 0	16-Aug- 10									
N10 P/B	N1 0	Gull Rock	Deep Water	201 0	7-Sep- 10		5.0							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 0	5-Jul-10		6.2							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 0	19-Jul- 10		6.1							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 0	2-Aug- 10		5.0							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 0	16-Aug- 10		5.4							

E13 P/B	E1 3	Haystack Bay	Deep Water	201 0	7-Sep- 10		6.8							
E 18 P/B	E1 8	Hollow River mouth	River	201 0	5-Jul-10		4.0							
E 18 P/B	E1 8	Hollow River mouth	River	201 0	19-Jul- 10		4.0							
E 18 P/B F/D	E1 8	Hollow River mouth	River	201 0	2-Aug- 10		5.2							
E 18 P/B	E1 8	Hollow River mouth	River	201 0	2-Aug- 10		5.7							
E 18 P/B	E1 8	Hollow River mouth	River	201 0	16-Aug- 10		5.4							
E 18 P/B	E1 8	Hollow River mouth	River	201 0	7-Sep- 10		3.4							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 0	5-Jul-10		3.5							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 0	19-Jul- 10		2.0							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 0	2-Aug- 10		3.4							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 0	16-Aug- 10		1.9							
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 0	16-Aug- 10		2.1							

S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2010	7-Sep-10		3.4							
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2010	5-Jul-10		4.2							
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	N13	Moffat's	Nearshore Undisturbed	2010	16-Aug-10		4.7							
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	7-Sep-10		5.1						bs	
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							

E 26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	201 0	16-Aug- 10		3.2							
E 26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	201 0	7-Sep- 10		3.4							
N30 P/B	N3 0	Oxtongue Delta	River	201 0	5-Jul-10		4.5							
N30 P/B	N3 0	Oxtongue Delta	River	201 0	19-Jul- 10		4.0							
N30 P/B	N3 0	Oxtongue Delta	River	201 0	2-Aug- 10		4.7							
N30 P/B	N3 0	Oxtongue Delta	River	201 0	16-Aug- 10		3.1							
N30 P/B	N3 0	Oxtongue Delta	River	201 0	7-Sep- 10		3.5							
N 2P/B	N2	Oxtongue mouth	River	201 0	5-Jul-10		8.1							
N 2P/B	N2	Oxtongue mouth	River	201 0	19-Jul- 10		13.8							R
N 2P/B	N2	Oxtongue mouth	River	201 0	2-Aug- 10		6.8							
N 2P/B	N2	Oxtongue mouth	River	201 0	16-Aug- 10		10.4							
N 2P/B	N2	Oxtongue mouth	River	201 0	7-Sep- 10		8.0							
S3 P/B	S3	Price's Point	Deep Water	201 0	5-Jul-10		4.2							
S3 P/B	S3	Price's Point	Deep Water	201 0	19-Jul- 10		4.1							
S3 P/B	S3	Price's Point	Deep Water	201 0	2-Aug- 10		12.7							x
S3 P/B	S3	Price's Point	Deep Water	201 0	16-Aug- 10		7.3							
S3 P/B	S3	Price's Point	Deep Water	201 0	7-Sep- 10		5.1							

E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 0	5-Jul-10		5.2							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 0	19-Jul-10		5.3							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 0	2-Aug-10		5.2							
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	201 0	16-Aug-10		3.9							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 0	16-Aug-10		4.4							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 0	7-Sep-10		6.1							
E30 P/B F/D	E3 0	Ten Mile Bay	Deep Water	201 0	7-Sep-10		12.9						bs	
E1 P/B FD	E1	Trading Bay	Deep Water	201 0	5-Jul-10		3.8							
E1 P/B	E1	Trading Bay	Deep Water	201 0	5-Jul-10		3.4							
E1 P/B	E1	Trading Bay	Deep Water	201 0	19-Jul-10		6.6							
E1 P/B	E1	Trading Bay	Deep Water	201 0	2-Aug-10		4.3							
E1 P/B	E1	Trading Bay	Deep Water	201 0	16-Aug-10		4.6							
E1 P/B	E1	Trading Bay	Deep Water	201 0	7-Sep-10		6.8							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 1	4-Jul-11		4.9		3		5			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 1	18-Jul-11		15.1		1		8			x
S1 P/B	S1	Adamson' s Island	Nearshor e	201 1	1-Aug-11		4.9		3		3			

			Undisturbed											
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			
B4 P/B	B4	Bigwin Bay	Disturbed	2011	4-Jul-11		3.9		5		16			
B4 P/B	B4	Bigwin Bay	Disturbed	2011	18-Jul-11		3.7		8		19			
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 COA L lab	B4	Bigwin Bay	Disturbed	2011	15-Aug-11				20		55			
B4 P/B	B4	Bigwin Bay	Disturbed	2011	2-Sep-11		3.9		13		62			
B4 P/B COA L lab	B4	Bigwin Bay	Disturbed	2011	2-Sep-11				16		80+			
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	18-Jul-11		3.1		1		3			

B1P COA L lab	B1	Bigwin East	Deep Water	201 1	18-Jul- 11				0		3			
B1P FD bacti	B1	Bigwin East	Deep Water	201 1	18-Jul- 11				1		5			
B1P	B1	Bigwin East	Deep Water	201 1	1-Aug- 11		6.7		1		3			
B1P	B1	Bigwin East	Deep Water	201 1	14-Aug- 11		4.8		1		5			
B1P	B1	Bigwin East	Deep Water	201 1	2-Sep- 11		4.7		1		3			
B1P COA L lab	B1	Bigwin East	Deep Water	201 1	2-Sep- 11				0		6			
B3 P/B	B3	Bigwin North	Disturbed	201 1	4-Jul-11		6.2		1		3			
B3 P/B	B3	Bigwin North	Disturbed	201 1	18-Jul- 11		2.6		5		11			
B3 P/B	B3	Bigwin North	Disturbed	201 1	1-Aug- 11		5.2		1		3			
B3 P/B	B3	Bigwin North	Disturbed	201 1	14-Aug- 11		5.4		8		11			
B3 P/B FD b & p	B3	Bigwin North	Disturbed	201 1	2-Sep- 11		3.7		1		5			
B3 P/B	B3	Bigwin North	Disturbed	201 1	2-Sep- 11		5.9		1		3		bs	
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 1	4-Jul-11		4.9		1		5			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 1	18-Jul- 11		2.8		3		5			
N24 P/B	N2 4	Boothby's	Nearshor e	201 1	1-Aug- 11		5.5		3		8			

			Undisturbed											
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 1	15-Aug- 11		5.8		5		8			
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	201 1	2-Sep- 11		5.1		3		11			
N11 P/B	N1 1	Britannia	Disturbed	201 1	4-Jul-11		4.9		3		5			
N11 P/B	N1 1	Britannia	Disturbed	201 1	18-Jul- 11		2.9		3		3			
N11 P/B	N1 1	Britannia	Disturbed	201 1	1-Aug- 11		4.6		3		3			
N11 P/B	N1 1	Britannia	Disturbed	201 1	15-Aug- 11		4.5		1		8			
N11 P/B COA L lab	N1 1	Britannia	Disturbed	201 1	15-Aug- 11				0		11			
N11 P/B FD bacti	N1 1	Britannia	Disturbed	201 1	15-Aug- 11				1		8			
N10 P/B	N1 1	Britannia	Disturbed	201 1	2-Sep- 11		3.9		1		5			
N11 P/B COA L lab	N1 1	Britannia	Disturbed	201 1	2-Sep- 11				0		14			
N1 P/B	N1	Dwight Bay	Deep Water	201 1	4-Jul-11		5.3		3		5			
N1 P/B COA L lab	N1	Dwight Bay	Deep Water	201 1	4-Jul-11				2		5			

N1 P/B	N1	Dwight Bay	Deep Water	201 1	18-Jul- 11		5.2		1		3			
N1 P/B	N1	Dwight Bay	Deep Water	201 1	1-Aug- 11		5.3		1		3			
N1 P/B FD B & p	N1	Dwight Bay	Deep Water	201 1	1-Aug- 11		5.3		1		1			
N1 P/B	N1	Dwight Bay	Deep Water	201 1	15-Aug- 11		6.2		1		3			
N1 P/B	N1	Dwight Bay	Deep Water	201 1	2-Sep- 11		4.6		1		3			
N1 P/B COA L lab	N1	Dwight Bay	Deep Water	201 1	2-Sep- 11				0		12			
N3 P/B	N3	Dwight Beach	Disturbed	201 1	4-Jul-11		9.5		28		36			
N3 P/B	N3	Dwight Beach	Disturbed	201 1	18-Jul- 11		7.4		36		46			
N3 P/B COA L lab	N3	Dwight Beach	Disturbed	201 1	18-Jul- 11				40		47			
N3 P/B FD bacti	N3	Dwight Beach	Disturbed	201 1	18-Jul- 11				36		43			
N3 P/B FD phos	N3	Dwight Beach	Disturbed	201 1	1-Aug- 11		5.5							
N3 P/B	N3	Dwight Beach	Disturbed	201 1	1-Aug- 11		5.8		19		22			
N3 P/B	N3	Dwight Beach	Disturbed	201 1	15-Aug- 11		4.9		22		33			
N3 P/B	N3	Dwight Beach	Disturbed	201 1	2-Sep- 11		3.4		13		16			

N3 P/B FD phos	N3	Dwight Beach	Disturbed	201 1	2-Sep- 11		4.3							
B2 P/B	B2	Fairview	Deep Water	201 1	4-Jul-11		4.9		1		3			
B2 P/B COA L lab	B2	Fairview	Deep Water	201 1	4-Jul-11				0		3			
B2 P/B FD bacti	B2	Fairview	Deep Water	201 1	4-Jul-11				1		3			
B2 P/B	B2	Fairview	Deep Water	201 1	18-Jul- 11		4.0		1		1			
B2 P/B	B2	Fairview	Deep Water	201 1	1-Aug- 11		6.1		1		1			
B2 P/B	B2	Fairview	Deep Water	201 1	14-Aug- 11		4.8		1		5			
B2 P/B	B2	Fairview	Deep Water	201 1	2-Sep- 11		4.8		1		3			
N10 P/B	N1 0	Gull Rock	Deep Water	201 1	4-Jul-11		7.4		1		3			
N10 P/B COA L lab	N1 0	Gull Rock	Deep Water	201 1	4-Jul-11				0		2			
N10 P/B FD bacti	N1 0	Gull Rock	Deep Water	201 1	4-Jul-11				1		3			
N10 P/B	N1 0	Gull Rock	Deep Water	201 1	18-Jul- 11		5.0		3		3			
N10 P/B FD b & p	N1 0	Gull Rock	Deep Water	201 1	1-Aug- 11		4.9		1		1			
N10 P/B	N1 0	Gull Rock	Deep Water	201 1	1-Aug- 11		5.0		1		3			

N10 P/B	N1 0	Gull Rock	Deep Water	201 1	15-Aug- 11		6.0		1		1			
N10 P/B COA L lab	N1 0	Gull Rock	Deep Water	201 1	2-Sep- 11				0		7			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 1	4-Jul-11		6.9		3		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 1	18-Jul- 11		6.1		5		11			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 1	1-Aug- 11		5.6		5		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 1	14-Aug- 11		5.3		1		1			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 1	2-Sep- 11		7.1		1		3			
E 18 P/B	E1 8	Hollow River mouth	River	201 1	4-Jul-11		4.6		8		28			
E 18 P/B	E1 8	Hollow River mouth	River	201 1	18-Jul- 11		4.5		11		36			
E 18 P/B	E1 8	Hollow River mouth	River	201 1	1-Aug- 11		6.7		8		19			
E 18 P/B FD bacti	E1 8	Hollow River mouth	River	201 1	1-Aug- 11				11		16			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 1	4-Jul-11		5.1		8		11			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 1	18-Jul- 11		3.9		3		5			
S2 P/B	S2	Menomin ee Bay	Nearshor e	201 1	1-Aug- 11		4.4		5		11			

			Undisturbed											
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2011	15-Aug-11		5.0		1		3			
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			
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	18-Jul-11		3.6		5		16			
N13 P/B COA L 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	N13	Moffat's	Nearshore Undisturbed	2011	1-Aug-11		4.4		3		8			
N13 P/B	N13	Moffat's	Nearshore Undisturbed	2011	15-Aug-11		6.2		1		11			

N13 P/B COA L lab	N1 3	Moffat's	Nearshore Undisturbed	201 1	15-Aug- 11				2		28			
N11 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 1	2-Sep- 11		2.9		1		13			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 1	2-Sep- 11		3.3		3		11			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 1	4-Jul-11		11.4		8		19			x
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 1	18-Jul- 11		3.4		25		30			
E 26 P/B COA L lab	E2 6	Narrows West	Nearshore Undisturbed	201 1	18-Jul- 11				32		66			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 1	1-Aug- 11		8.5		11		16			x
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 1	15-Aug- 11		4.1		5		8			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 1	2-Sep- 11		4.6		16		30			
E 26 P/B COA L lab	E2 6	Narrows West	Nearshore Undisturbed	201 1	2-Sep- 11				18		35			

N30 P/B	N3 0	Oxtongue Delta	River	201 1	4-Jul-11		8.2		3		11			
N30 P/B	N3 0	Oxtongue Delta	River	201 1	18-Jul- 11		4.5		8		11			
N30 P/B	N3 0	Oxtongue Delta	River	201 1	1-Aug- 11		5.2		5		8			
N30 P/B FD bacti	N3 0	Oxtongue Delta	River	201 1	1-Aug- 11		5.2		3		8			
N30 P/B	N3 0	Oxtongue Delta	River	201 1	14-Aug- 11		3.7		3		3			
N30 P/B	N3 0	Oxtongue Delta	River	201 1	2-Sep- 11		3.1		3		5			
N 2P/B	N2	Oxtongue mouth	River	201 1	4-Jul-11		9.3		5		11			
N 2P/B	N2	Oxtongue mouth	River	201 1	18-Jul- 11		7.9		3		8			
N 2P/B	N2	Oxtongue mouth	River	201 1	1-Aug- 11		7.1		8		8			
N 2P/B	N2	Oxtongue mouth	River	201 1	15-Aug- 11		6.9		3		5			
N 2P/B	N2	Oxtongue mouth	River	201 1	2-Sep- 11				11		16			
B6 P/B	B6	Port Cunningt on	Disturbed	201 1	4-Jul-11		5.1		1		8			
B6 P/B COA L lab	B6	Port Cunningt on	Disturbed	201 1	4-Jul-11				1		9			
B6 P/B	B6	Port Cunningt on	Disturbed	201 1	18-Jul- 11		2.6		5		11			
B6 P/B	B6	Port Cunningt on	Disturbed	201 1	1-Aug- 11		4.0		8		13			
B6 P/B	B6	Port Cunningt on	Disturbed	201 1	15-Aug- 11		3.8		5		13			

B6 P/B	B6	Port Cunningt on	Disturbed	201 1	2-Sep- 11		3.5		3		16			
S3 P/B	S3	Price's Point	Deep Water	201 1	4-Jul-11		4.4		1		5			
S3 P/B FD b & p	S3	Price's Point	Deep Water	201 1	4-Jul-11		4.0		1		1			
S3 P/B COA L lab	S3	Price's Point	Deep Water	201 1	4-Jul-11				0		8			
S3 P/B	S3	Price's Point	Deep Water	201 1	18-Jul- 11		12.8		3		3			x
S3 P/B	S3	Price's Point	Deep Water	201 1	1-Aug- 11		5.6		1		1			
S3 P/B	S3	Price's Point	Deep Water	201 1	15-Aug- 11		4.7		1		5			
S3 P/B	S3	Price's Point	Deep Water	201 1	15-Aug- 11				1		3			
S3 P/B COA L lab	S3	Price's Point	Deep Water	201 1	15-Aug- 11				0		3			
S3 P/B	S3	Price's Point	Deep Water	201 1	2-Sep- 11		7.6		3		5			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 1	4-Jul-11		5.7		3		5			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 1	18-Jul- 11		4.5		3		3			
E30 P/B COA L lab	E3 0	Ten Mile Bay	Deep Water	201 1	18-Jul- 11				0		2			
E30 P/B FD bacti	E3 0	Ten Mile Bay	Deep Water	201 1	18-Jul- 11				1		3			

E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 1	1-Aug- 11		5.2		3		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 1	15-Aug- 11		5.1		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 1	2-Sep- 11		4.9		1		3			
E1 P/B	E1	Trading Bay	Deep Water	201 1	4-Jul-11		5.1		3		5			
E1 P/B	E1	Trading Bay	Deep Water	201 1	18-Jul- 11		4.2		1		1			
E1 P/B	E1	Trading Bay	Deep Water	201 1	1-Aug- 11		6.9		3		5			
E1 P/B	E1	Trading Bay	Deep Water	201 1	15-Aug- 11		7.1		1		8			
E1 P/B FD bacti	E1	Trading Bay	Deep Water	201 1	15-Aug- 11				1		8			
E1 P/B COA L lab	E1	Trading Bay	Deep Water	201 1	15-Aug- 11				2		8			
E1 P/B	E1	Trading Bay	Deep Water	201 1	2-Sep- 11		5.7		1		8			
E1 P/B	E1	Trading Bay	Deep Water	201 1	2-Sep- 11		5.6		1		5			
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	1-Jul-12		4.0							
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	1-Jul-12		4.2							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	23-Jul- 12		3.7							

S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	4-Aug- 12		3.7							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	20-Aug- 12		4.1							
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 2	31-Aug- 12		7.9							x
B4 P/B	B4	Bigwin Bay	Disturbed	201 2	1-Jul-12		3.4							
B4 P/B	B4	Bigwin Bay	Disturbed	201 2	23-Jul- 12		3.3							
B4 P/B	B4	Bigwin Bay	Disturbed	201 2	4-Aug- 12									
B4 P/B	B4	Bigwin Bay	Disturbed	201 2	20-Aug- 12		4.1							
B4 P/B	B4	Bigwin Bay	Disturbed	201 2	31-Aug- 12		7.0							
B1P	B1	Bigwin East	Deep Water	201 2	1-Jul-12		5.8							
B1P	B1	Bigwin East	Deep Water	201 2	23-Jul- 12		5.1							
B1P	B1	Bigwin East	Deep Water	201 2	4-Aug- 12		4.2							
B1P	B1	Bigwin East	Deep Water	201 2	20-Aug- 12		4.7							
B1P	B1	Bigwin East	Deep Water	201 2	31-Aug- 12		4.8							
B1P FD phos	B1	Bigwin East	Deep Water	201 2	31-Aug- 12		6.0							
B3 P/B	B3	Bigwin North	Disturbed	201 2	1-Jul-12		4.4							
B3 P/B	B3	Bigwin North	Disturbed	201 2	23-Jul- 12		4.3							

B3 P/B	B3	Bigwin North	Disturbed	201 2	4-Aug- 12		6.2							
B3 P/B	B3	Bigwin North	Disturbed	201 2	20-Aug- 12		4.4							
B3 P/B FD	B3	Bigwin North	Disturbed	201 2	20-Aug- 12		5.4							
B3 P/B	B3	Bigwin North	Disturbed	201 2	31-Aug- 12		4.2							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	1-Jul-12		3.4							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	23-Jul- 12		3.7							
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	23-Jul- 12		3.9							
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	4-Aug- 12		3.6							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	4-Aug- 12		3.7							
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	20-Aug- 12		5.2							
N26 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 2	31-Aug- 12		3.2							
N11 P/B	N1 1	Britannia	Disturbed	201 2	1-Jul-12		6.2							

N11 P/B	N1 1	Britannia	Disturbed	201 2	23-Jul- 12		3.1							
N11 P/B	N1 1	Britannia	Disturbed	201 2	4-Aug- 12		5.2							
N11 P/B	N1 1	Britannia	Disturbed	201 2	20-Aug- 12		4.1							
N11 P/B	N1 1	Britannia	Disturbed	201 2	31-Aug- 12		5.3							
N1 P/B	N1	Dwight Bay	Deep Water	201 2	1-Jul-12		6.1							
N1 P/B FD	N1	Dwight Bay	Deep Water	201 2	23-Jul- 12		5.9							
N1 P/B	N1	Dwight Bay	Deep Water	201 2	23-Jul- 12		6.4							
N1 P/B	N1	Dwight Bay	Deep Water	201 2	4-Aug- 12		6.1							
N1 P/B	N1	Dwight Bay	Deep Water	201 2	20-Aug- 12		8.6							
N1 P/B	N1	Dwight Bay	Deep Water	201 2	31-Aug- 12		5.7							
N3 P/B	N3	Dwight Beach	Disturbed	201 2	1-Jul-12		4.7							
N3 P/B FD phos	N3	Dwight Beach	Disturbed	201 2	23-Jul- 12		4.5							
N1 P/B	N3	Dwight Beach	Disturbed	201 2	23-Jul- 12		4.6							
N3 P/B	N3	Dwight Beach	Disturbed	201 2	4-Aug- 12		4.3							
N3 P/B	N3	Dwight Beach	Disturbed	201 2	20-Aug- 12		5.3							
N3 P/B	N3	Dwight Beach	Disturbed	201 2	31-Aug- 12		3.8							
B2 P/B	B2	Fairview	Deep Water	201 2	1-Jul-12		4.3							
B2 P/B	B2	Fairview	Deep Water	201 2	23-Jul- 12		5.1							

B2 P/B	B2	Fairview	Deep Water	201 2	4-Aug- 12		5.0							
B2 P/B FD	B2	Fairview	Deep Water	201 2	4-Aug- 12		5.3							
B2 P/B	B2	Fairview	Deep Water	201 2	20-Aug- 12		5.1							
B2 P/B FD	B2	Fairview	Deep Water	201 2	20-Aug- 12		5.2							
B2 P/B	B2	Fairview	Deep Water	201 2	31-Aug- 12		4.0							
N10 P/B	N1 0	Gull Rock	Deep Water	201 2	1-Jul-12		4.4							
N10 P/B FD	N1 0	Gull Rock	Deep Water	201 2	1-Jul-12		5.9							
N10 P/B	N1 0	Gull Rock	Deep Water	201 2	23-Jul- 12		4.8							
N10 P/B	N1 0	Gull Rock	Deep Water	201 2	4-Aug- 12		6.3							
N10 P/B	N1 0	Gull Rock	Deep Water	201 2	20-Aug- 12		4.1							
N10 P/B	N1 0	Gull Rock	Deep Water	201 2	31-Aug- 12		5.3							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 2	1-Jul-12		5.2							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 2	23-Jul- 12		3.8							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 2	4-Aug- 12		5.8							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 2	20-Aug- 12		3.9							
E13 P/B	E1 3	Haystack Bay	Deep Water	201 2	31-Aug- 12		22.4							x
E 18 P/B	E1 8	Hollow River mouth	River	201 2	1-Jul-12		5.5							

E 18 P/B	E1 8	Hollow River mouth	River	201 2	23-Jul- 12		5.0							
E 18 P/B	E1 8	Hollow River mouth	River	201 2	4-Aug- 12									
E 18 P/B	E1 8	Hollow River mouth	River	201 2	20-Aug- 12		4.8							
E 18 P/B	E1 8	Hollow River mouth	River	201 2	31-Aug- 12		4.9							
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	1-Jul-12		3.0							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	1-Jul-12		4.2							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	23-Jul- 12		3.9							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	4-Aug- 12		3.4							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	20-Aug- 12		4.2							
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 2	31-Aug- 12		3.6							
N13 P/B	N1 3	Moffat's	Nearshor e Undisturb ed	201 2	1-Jul-12		4.9							

N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	201 2	23-Jul- 12		3.1							
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 2	23-Jul- 12		3.3							
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 2	4-Aug- 12		5.7							
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 2	20-Aug- 12		4.2							
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	201 2	31-Aug- 12		4.1							
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 2	31-Aug- 12		4.6							
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 2	1-Jul-12		4.6							
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 2	23-Jul- 12		4.9							
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 2	4-Aug- 12									
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 2	20-Aug- 12		3.8							

E 26 P/B FD	E2 6	Narrows West	Nearshor e Undisturb ed	201 2	20-Aug- 12		3.8							
E 26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	201 2	31-Aug- 12		4.5							
N30 P/B	N3 0	Oxtongue Delta	River	201 2	1-Jul-12		6.0							
N30 P/B	N3 0	Oxtongue Delta	River	201 2	23-Jul- 12		3.8							
N30 P/B	N3 0	Oxtongue Delta	River	201 2	4-Aug- 12		4.5							
N30 P/B FD	N3 0	Oxtongue Delta	River	201 2	20-Aug- 12		4.0							
N30 P/B	N3 0	Oxtongue Delta	River	201 2	20-Aug- 12		4.1							
N30 P/B	N3 0	Oxtongue Delta	River	201 2	31-Aug- 12		3.5							
N 2P/B	N2	Oxtongue mouth	River	201 2	1-Jul-12		6.3							
N 2P/B	N2	Oxtongue mouth	River	201 2	23-Jul- 12		7.5							
N 2P/B	N2	Oxtongue mouth	River	201 2	4-Aug- 12		6.3							
N 2P/B	N2	Oxtongue mouth	River	201 2	20-Aug- 12		6.4							
N 2P/B	N2	Oxtongue mouth	River	201 2	31-Aug- 12		5.4							
B6 P/B	B6	Port Cunningt on	Disturbed	201 2	1-Jul-12		4.7							
B6 P/B	B6	Port Cunningt on	Disturbed	201 2	23-Jul- 12		5.1							
B6 P/B	B6	Port Cunningt on	Disturbed	201 2	4-Aug- 12		3.9							

B6 P/B	B6	Port Cunningt on	Disturbed	201 2	20-Aug- 12		4.5							
B6 P/B	B6	Port Cunningt on	Disturbed	201 2	31-Aug- 12		4.0							
N26 P/B	N2 6	Portage Bay	Deep Water	201 2	1-Jul-12		6.3							
N26 P/B	N2 6	Portage Bay	Deep Water	201 2	23-Jul- 12		12.9							
N26 P/B	N2 6	Portage Bay	Deep Water	201 2	4-Aug- 12		11.6							
N26 P/B	N2 6	Portage Bay	Deep Water	201 2	20-Aug- 12		61.3							x
N26 P/B	N2 6	Portage Bay	Deep Water	201 2	31-Aug- 12		7.7							
S3 P/B	S3	Price's Point	Deep Water	201 2	1-Jul-12		4.3							
S3 P/B	S3	Price's Point	Deep Water	201 2	23-Jul- 12		4.5							
S3 P/B	S3	Price's Point	Deep Water	201 2	4-Aug- 12		4.6							
S3 P/B	S3	Price's Point	Deep Water	201 2	20-Aug- 12		4.2							
S3 P/B	S3	Price's Point	Deep Water	201 2	31-Aug- 12		5.1							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 2	1-Jul-12		6.7							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 2	23-Jul- 12		6.0							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 2	4-Aug- 12		7.0							
E30 P/B FD	E3 0	Ten Mile Bay	Deep Water	201 2	4-Aug- 12		8.7							
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 2	20-Aug- 12		6.7							
E1 P/B	E1	Trading Bay	Deep Water	201 2	1-Jul-12		4.5							

E1 P/B	E1	Trading Bay	Deep Water	201 2	23-Jul- 12		4.5						
E1 P/B FD	E1	Trading Bay	Deep Water	201 2	23-Jul- 12		3.9						
E1 P/B	E1	Trading Bay	Deep Water	201 2	4-Aug- 12		5.6						
E1 P/B	E1	Trading Bay	Deep Water	201 2	20-Aug- 12		5.5						
E1 P/B	E1	Trading Bay	Deep Water	201 2	31-Aug- 12		5.7						
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	1-Jul-13		3.1		3		8		
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	21-Jul- 13		5.1		11		16		
S1 P/B lab	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	21-Jul- 13				15		44		
S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	21-Jul- 13				11		28		
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	5-Aug- 13		5.4		5		11		
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	18-Aug- 13		9.9		3		5		x
S1 P/B	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	28-Aug- 13		2.4		1		1		

S1 P/B FD	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	28-Aug- 13				1		5			
S1 P/B lab	S1	Adamson' s Island	Nearshor e Undisturb ed	201 3	28-Aug- 13				1		8			
B4 P/B	B4	Bigwin Bay	Disturbed	201 3	1-Jul-13		4.3		5		8			
B4 P/B	B4	Bigwin Bay	Disturbed	201 3	21-Jul- 13		5.0		3		8			
B4 P/B	B4	Bigwin Bay	Disturbed	201 3	5-Aug- 13		4.2		1		1			
B4 P/B	B4	Bigwin Bay	Disturbed	201 3	18-Aug- 13		5.1		1		5			
B4 P/B	B4	Bigwin Bay	Disturbed	201 3	28-Aug- 13		3.7		3		28			
	B1	Bigwin East	Deep Water	201 3	1-Jul-13		4.3		1		1			
B1P/ B FD	B1	Bigwin East	Deep Water	201 3	21-Jul- 13		5.1		8		11			
B1P	B1	Bigwin East	Deep Water	201 3	21-Jul- 13		5.6		3		8			
B1P lab	B1	Bigwin East	Deep Water	201 3	5-Aug- 13		4.2		10		19			
B1 P/B FD	B1	Bigwin East	Deep Water	201 3	18-Aug- 13		5.9		1		1			
B1P	B1	Bigwin East	Deep Water	201 3	18-Aug- 13		7.7		1		5			
B1jP/ B lab	B1	Bigwin East	Deep Water	201 3	18-Aug- 13				0		3			
B1P	B1	Bigwin East	Deep Water	201 3	28-Aug- 13		3.9		1		1			
B3 P/B	B3	Bigwin North	Disturbed	201 3	1-Jul-13		3.2							
B3 P/B	B3	Bigwin North	Disturbed	201 3	21-Jul- 13				3		17			

B3 P/B	B3	Bigwin North	Disturbed	201 3	5-Aug- 13		4.7		5		11			
B3 P/B	B3	Bigwin North	Disturbed	201 3	18-Aug- 13		5.7		1		8			
B3 P/B FD	B3	Bigwin North	Disturbed	201 3	18-Aug- 13				1		8			
B3 P/B lab	B3	Bigwin North	Disturbed	201 3	18-Aug- 13				2		12			
B3 P/B FD	B3	Bigwin North	Disturbed	201 3	28-Aug- 13		4.8		3		16			
B3 P/B	B3	Bigwin North	Disturbed	201 3	28-Aug- 13		6.2		3		8			
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	1-Jul-13		3.9		3		28			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	1-Jul-13		4.3		5		8			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	21-Jul- 13				8		11			
N24 P/B lab	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	21-Jul- 13				10		19			
N24 P/B FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	21-Jul- 13				8		16			
N24 P/B	N2 4	Boothby's	Nearshor e Undisturb ed	201 3	5-Aug- 13		3.6		5		8			

N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	2013	5-Aug-13		3.7		1		8		
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	2013	18-Aug-13				1		8		
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	2013	18-Aug-13				1		11		
N24 P/B lab	N2 4	Boothby's	Nearshore Undisturbed	2013	18-Aug-13				0		15		
N24 P/B	N2 4	Boothby's	Nearshore Undisturbed	2013	28-Aug-13		5.2		1		11		
N24 P/B FD	N2 4	Boothby's	Nearshore Undisturbed	2013	28-Aug-13				1		8		
N24 P/B lab	N2 4	Boothby's	Nearshore Undisturbed	2013	28-Aug-13				2		11		
N11 P/B	N1 1	Britannia	Disturbed	2013	1-Jul-13				1		8		
N11 P/B	N1 1	Britannia	Disturbed	2013	21-Jul-13		5.3		1		1		
N11 P/B	N1 1	Britannia	Disturbed	2013	5-Aug-13		2.9		1		3		
N11 P/B	N1 1	Britannia	Disturbed	2013	18-Aug-13		21.6		1		8		x
N11 P/B FD	N1 1	Britannia	Disturbed	2013	18-Aug-13				1		5		

N11 P/B lab	N1 1	Britannia	Disturbed	201 3	18-Aug- 13				0		6			
N11 P/B	N1 1	Britannia	Disturbed	201 3	28-Aug- 13		13.3		3		17			x
N11 P/B FD	N1 1	Britannia	Disturbed	201 3	28-Aug- 13				1		11			
N11 P/B lab	N1 1	Britannia	Disturbed	201 3	28-Aug- 13				2		9			
N1 P/B	N1	Dwight Bay	Deep Water	201 3	1-Jul-13		3.8		3		11			
N1 P/B FD	N1	Dwight Bay	Deep Water	201 3	1-Jul-13		3.8		1		11			
N1 P/B	N1	Dwight Bay	Deep Water	201 3	21-Jul- 13		5.4		1		8			
N1 P/B FD	N1	Dwight Bay	Deep Water	201 3	5-Aug- 13		5.1		5		28			
N1 P/B	N1	Dwight Bay	Deep Water	201 3	5-Aug- 13		7.0		3		35			
N1 P/B lab	N1	Dwight Bay	Deep Water	201 3	5-Aug- 13				6		45			
N1 P/B	N1	Dwight Bay	Deep Water	201 3	18-Aug- 13		5.5		5		11			
N1 P/B FD	N1	Dwight Bay	Deep Water	201 3	18-Aug- 13		6.1		3		8			
N1 P/B	N1	Dwight Bay	Deep Water	201 3	28-Aug- 13				3		8			
N3 P/B	N3	Dwight Beach	Disturbed	201 3	1-Jul-13		4.1		3		5			
N3 P/B	N3	Dwight Beach	Disturbed	201 3	21-Jul- 13		6.6		3		8			
N3 P/B	N3	Dwight Beach	Disturbed	201 3	5-Aug- 13		10.4		1		1			

N3 P/B FD	N3	Dwight Beach	Disturbed	201 3	5-Aug- 13				1		5			
N3 P/B lab	N3	Dwight Beach	Disturbed	201 3	5-Aug- 13				3		8			
N3 P/B	N3	Dwight Beach	Disturbed	201 3	18-Aug- 13		6.7		3		17			
N3 P/B	N3	Dwight Beach	Disturbed	201 3	28-Aug- 13		6.0		5		8			
B2 P/B FD	B2	Fairview	Deep Water	201 3	1-Jul-13		3.6		1		3			
B2 P/B	B2	Fairview	Deep Water	201 3	1-Jul-13		3.7		1		1			
B2 P/B	B2	Fairview	Deep Water	201 3	21-Jul- 13		5.1		3		3			
B2 P/B	B2	Fairview	Deep Water	201 3	5-Aug- 13		5.1		1		1			
B2 P/B	B2	Fairview	Deep Water	201 3	18-Aug- 13		4.2		1		5			
B2 P/B FD	B2	Fairview	Deep Water	201 3	18-Aug- 13		4.6		3		3			
B2 P/B	B2	Fairview	Deep Water	201 3	28-Aug- 13		4.0		1		1			
B2 P/B FD	B2	Fairview	Deep Water	201 3	28-Aug- 13		4.2		1		3			
N10 P/B	N1 0	Gull Rock	Deep Water	201 3	1-Jul-13		3.2		1		1			
N10 P/B FD	N1 0	Gull Rock	Deep Water	201 3	21-Jul- 13		3.8		11		17			
N10 P/B	N1 0	Gull Rock	Deep Water	201 3	21-Jul- 13		4.0		8		28			
N10 P/B lab	N1 0	Gull Rock	Deep Water	201 3	21-Jul- 13				17		49			

N10 P/B	N1 0	Gull Rock	Deep Water	201 3	5-Aug- 13		3.5		5		8			
N10 P/B	N1 0	Gull Rock	Deep Water	201 3	18-Aug- 13		5.7		1		3			
N10 P/B FD	N1 0	Gull Rock	Deep Water	201 3	18-Aug- 13				1		1			
N10 P/B lab	N1 0	Gull Rock	Deep Water	201 3	18-Aug- 13				0		1			
N10 P/B	N1 0	Gull Rock	Deep Water	201 3	28-Aug- 13		3.4		1		3			
N10 P/B FD	N1 0	Gull Rock	Deep Water	201 3	28-Aug- 13				1		8			
N10 P/B lab	N1 0	Gull Rock	Deep Water	201 3	28-Aug- 13				1		8			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 3	1-Jul-13		7.6		1		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 3	21-Jul- 13		7.7		3		3			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 3	5-Aug- 13		6.7		1		5			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	201 3	5-Aug- 13				1		8			
E13 P/B lab	E1 3	Haystack Bay	Deep Water	201 3	5-Aug- 13				0		10			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 3	18-Aug- 13		10.3		1		11			
E13 P/B FD	E1 3	Haystack Bay	Deep Water	201 3	18-Aug- 13				1		8			
E13 P/B lab	E1 3	Haystack Bay	Deep Water	201 3	18-Aug- 13				0		8			

E13 P/B FD	E1 3	Haystack Bay	Deep Water	201 3	28-Aug- 13		3.6		1		5			
E13 P/B	E1 3	Haystack Bay	Deep Water	201 3	28-Aug- 13		4.3		1		3			
E 18 P/B	E1 8	Hollow River mouth	River	201 3	1-Jul-13		4.8		3		17			
E 18 P/B	E1 8	Hollow River mouth	River	201 3	21-Jul- 13				5		28			
E 18 P/B	E1 8	Hollow River mouth	River	201 3	5-Aug- 13		3.8		3		28			
E 18 P/B FD	E1 8	Hollow River mouth	River	201 3	5-Aug- 13				1		17			
E 18 P/B lab	E1 8	Hollow River mouth	River	201 3	5-Aug- 13				2		14			
E 18 P/B	E1 8	Hollow River mouth	River	201 3	18-Aug- 13				3		11			
E 18 P/B	E1 8	Hollow River mouth	River	201 3	28-Aug- 13		3.8		3		8			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 3	1-Jul-13		3.1		5		8			
S2 P/B FD	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 3	21-Jul- 13		4.4		1		3			
S2 P/B	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 3	21-Jul- 13		5.7		3		5			

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	18-Aug-13		5.9		1		3			
S2 P/B	S2	Menominee Bay	Nearshore Undisturbed	2013	28-Aug-13		4.4		5		5			
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	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	N13	Moffat's	Nearshore Undisturbed	2013	5-Aug-13		11.4		1		8			x

N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 3	18-Aug- 13		4.1		1		11			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	201 3	18-Aug- 13		6.1		1		8			
N13 P/B	N1 3	Moffat's	Nearshore Undisturbed	201 3	28-Aug- 13		3.6		3		17			
N13 P/B FD	N1 3	Moffat's	Nearshore Undisturbed	201 3	28-Aug- 13				3		36			
N13 P/B lab	N1 3	Moffat's	Nearshore Undisturbed	201 3	28-Aug- 13				4		25			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 3	1-Jul-13		3.6		5		8			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 3	21-Jul- 13				5		17			
E 26 P/B	E2 6	Narrows West	Nearshore Undisturbed	201 3	5-Aug- 13		4.5		28		35			
E 26 P/B FD	E2 6	Narrows West	Nearshore Undisturbed	201 3	5-Aug- 13				18		35			
E 26 P/B lab	E2 6	Narrows West	Nearshore Undisturbed	201 3	5-Aug- 13				52		80			

E 26 P/B	E2 6	Narrows West	Nearshor e Undisturb ed	201 3	18-Aug- 13		5.3		11		17			
E 26 P/B FD	E2 6	Narrows West	Nearshor e Undisturb ed	201 3	18-Aug- 13		5.4		11		28			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	1-Jul-13		4.7		5		11			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	21-Jul- 13		5.1		3		8			
N30 P/B FD	N3 0	Oxtongue Delta	River	201 3	21-Jul- 13		6.4		3		11			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	5-Aug- 13		6.8		3		17			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	18-Aug- 13		10.3		1		5			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	28-Aug- 13		3.2		8		11			
N30 P/B	N3 0	Oxtongue Delta	River	201 3	28-Aug- 13		5.1		1		8			
N 2P/B	N2	Oxtongue mouth	River	201 3	1-Jul-13		6.0		8		17			
N 2P/B	N2	Oxtongue mouth	River	201 3	21-Jul- 13		10.0		5		28			
N 2P/B	N2	Oxtongue mouth	River	201 3	5-Aug- 13		8.0		5		11			
N 2P/B	N2	Oxtongue mouth	River	201 3	18-Aug- 13		8.6		3		8			
N 2P/B	N2	Oxtongue mouth	River	201 3	28-Aug- 13		8.0		5		8			
N26 P/B	N2 6	Portage Bay	Deep Water	201 3	1-Jul-13		3.9		1		11			
N26 P/B	N2 6	Portage Bay	Deep Water	201 3	21-Jul- 13		5.3		3		8			
N26 P/B	N2 6	Portage Bay	Deep Water	201 3	5-Aug- 13		5.3		1		5			

N26 P/B	N2 6	Portage Bay	Deep Water	201 3	18-Aug- 13		7.6		3		3			
N26 P/B	N2 6	Portage Bay	Deep Water	201 3	28-Aug- 13		6.4		3		11			
S3 P/B	S3	Price's Point	Deep Water	201 3	1-Jul-13		3.4		1		3			
S3 P/B FD	S3	Price's Point	Deep Water	201 3	1-Jul-13		3.2		1		1			
S3 P/B	S3	Price's Point	Deep Water	201 3	21-Jul- 13		7.3		1		5			
S3 P/B	S3	Price's Point	Deep Water	201 3	5-Aug- 13		6.4		3		3			
S3 P/B FD	S3	Price's Point	Deep Water	201 3	5-Aug- 13		5.7		5		11			
S3 P/B	S3	Price's Point	Deep Water	201 3	18-Aug- 13		7.5		3		5			
S3 P/B FD	S3	Price's Point	Deep Water	201 3	28-Aug- 13		5.0		1		3			
S3 P/B	S3	Price's Point	Deep Water	201 3	28-Aug- 13		4.2		1		1			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 3	1-Jul-13		5.5		3		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 3	21-Jul- 13		6.1		5		8			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 3	5-Aug- 13		5.1		3		8			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 3	18-Aug- 13		6.9		1		3			
E30 P/B	E3 0	Ten Mile Bay	Deep Water	201 3	28-Aug- 13		5.1		1		5			
E1 P/B	E1	Trading Bay	Deep Water	201 3	1-Jul-13		2.4		5		17			
E1 P/B FD	E1	Trading Bay	Deep Water	201 3	1-Jul-13		2.2		8		11			

E1 P/B	E1	Trading Bay	Deep Water	201 3	21-Jul- 13									
E1 P/B FD	E1	Trading Bay	Deep Water	201 3	5-Aug- 13		2.8							
E1 P/B	E1	Trading Bay	Deep Water	201 3	5-Aug- 13		2.5		3		8			
E1 P/B	E1	Trading Bay	Deep Water	201 3	18-Aug- 13									
E1 P/B	E1	Trading Bay	Deep Water	201 3	28-Aug- 13		2.6		3		5			
S1	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	29-Jun- 14		5.2							
S1	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	20-Jul- 14		5.2							
S1	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	3-Aug- 14		2.8							
S1 FD	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	3-Aug- 14		3.0							
S1	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	17-Aug- 14		3.7							
S1	S1	Adamson' s Island	Nearshor e Undisturb ed	201 4	28-Aug- 14		4.2							
B4	B4	Bigwin Bay	Disturbed	201 4	29-Jun- 14		5.4							
B4	B4	Bigwin Bay	Disturbed	201 4	20-Jul- 14		10.1							x

B4	B4	Bigwin Bay	Disturbed	2014	3-Aug-14		3.3						
B4	B4	Bigwin Bay	Disturbed	2014	17-Aug-14		4.7						
B4	B4	Bigwin Bay	Disturbed	2014	28-Aug-14		3.9						
B1	B1	Bigwin East	Deep Water	2014	29-Jun-14		5.3						
B1 FD	B1	Bigwin East	Deep Water	2014	29-Jun-14		7.2						
B1	B1	Bigwin East	Deep Water	2014	20-Jul-14		6.0						
B1 FD	B1	Bigwin East	Deep Water	2014	20-Jul-14		9.5					bs	
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	17-Aug-14		8.6						
B1	B1	Bigwin East	Deep Water	2014	28-Aug-14		5.7						
B3	B3	Bigwin North	Disturbed	2014	29-Jun-14		4.6						
B3	B3	Bigwin North	Disturbed	2014	20-Jul-14		7.7						
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						
N24 FD	N24	Boothby's	Nearshore	2014	29-Jun-14		5.3						

			Undisturbed											
N24	N24	Boothby's	Nearshore Undisturbed	2014	29-Jun-14		6.6							
N24	N24	Boothby's	Nearshore Undisturbed	2014	20-Jul-14		6.0							
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	N24	Boothby's	Nearshore Undisturbed	2014	28-Aug-14		3.7							
N11	N11	Britannia	Disturbed	2014	29-Jun-14		5.0							
N11	N11	Britannia	Disturbed	2014	20-Jul-14		6.0							
N11	N11	Britannia	Disturbed	2014	3-Aug-14									
N11	N11	Britannia	Disturbed	2014	17-Aug-14		4.2							
N11	N11	Britannia	Disturbed	2014	28-Aug-14		3.9							
N1	N1	Dwight Bay	Deep Water	2014	29-Jun-14									
N1	N1	Dwight Bay	Deep Water	2014	20-Jul-14		9.7							
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	28-Aug-14									
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	3-Aug-14		3.4							
B2	B2	Fairview	Deep Water	2014	3-Aug-14		4.8							
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	28-Aug-14		4.8							
B2 FD	B2	Fairview	Deep Water	2014	28-Aug-14		5.4							
N10	N10	Gull Rock	Deep Water	2014	29-Jun-14		5.5							
N10 FD	N10	Gull Rock	Deep Water	2014	29-Jun-14		9.0						bs	
N10	N10	Gull Rock	Deep Water	2014	20-Jul-14		5.3							
N10	N10	Gull Rock	Deep Water	2014	3-Aug-14		4.7							
N10	N10	Gull Rock	Deep Water	2014	17-Aug-14		4.5							
N10	N10	Gull Rock	Deep Water	2014	28-Aug-14		4.9							
E13	E13	Haystack Bay	Deep Water	2014	29-Jun-14		8.5							
E13	E13	Haystack Bay	Deep Water	2014	20-Jul-14		9.2							
E13	E13	Haystack Bay	Deep Water	2014	3-Aug-14		4.7							

E13	E13	Haystack Bay	Deep Water	2014	17-Aug-14		4.2							
E13	E13	Haystack Bay	Deep Water	2014	28-Aug-14		4.4							
E18	E18	Hollow River mouth	River	2014	29-Jun-14		6.2							
E18	E18	Hollow River mouth	River	2014	20-Jul-14		4.7							
E18	E18	Hollow River mouth	River	2014	3-Aug-14		4.3							
E18	E18	Hollow River mouth	River	2014	17-Aug-14		5.7							
E18	E18	Hollow River mouth	River	2014	28-Aug-14		6.6							
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	29-Jun-14		4.5							
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	20-Jul-14		5.6							
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	3-Aug-14		6.2							
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	28-Aug-14		4.6							
S2	S2	Menominee Bay	Nearshore Undisturbed	2014	28-Aug-14		4.6							
N13	N13	Moffat's	Nearshore Undisturbed	2014	29-Jun-14		6.1							
N13	N13	Moffat's	Nearshore Undisturbed	2014	20-Jul-14		5.9							
N13	N13	Moffat's	Nearshore Undisturbed	2014	3-Aug-14		5.0							
N13	N13	Moffat's	Nearshore Undisturbed	2014	17-Aug-14		5.9							
N13	N13	Moffat's	Nearshore Undisturbed	2014	28-Aug-14		4.4							
N13 FD	N13	Moffat's	Nearshore Undisturbed	2014	28-Aug-14		6.9						bs	
E26	E26	Narrows West	Nearshore Undisturbed	2014	29-Jun-14		6.3							
E26	E26	Narrows West	Nearshore Undisturbed	2014	20-Jul-14		4.3							

E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 4	3-Aug- 14		3.6							
E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 4	17-Aug- 14		5.0							
E26 FD	E2 6	Narrows West	Nearshor e Undisturb ed	201 4	17-Aug- 14		5.5							
E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 4	28-Aug- 14		4.5							
E26 FD	E2 6	Narrows West	Nearshor e Undisturb ed	201 4	28-Aug- 14		5.2							
N30	N3 0	Oxtongue Delta	River	201 4	29-Jun- 14		10.9							
N30	N3 0	Oxtongue Delta	River	201 4	20-Jul- 14		9.1							
N30	N3 0	Oxtongue Delta	River	201 4	3-Aug- 14		7.8							
N30	N3 0	Oxtongue Delta	River	201 4	17-Aug- 14		6.5							
N30	N3 0	Oxtongue Delta	River	201 4	28-Aug- 14		8.3							
N30 FD	N3 0	Oxtongue Delta	River	201 4	28-Aug- 14		8.3							
N2	N2	Oxtongue mouth	River	201 4	29-Jun- 14		76.8							R
N2	N2	Oxtongue mouth	River	201 4	20-Jul- 14		9.4							
N2	N2	Oxtongue mouth	River	201 4	3-Aug- 14		8.2							
N2 FD	N2	Oxtongue mouth	River	201 4	3-Aug- 14		8.4							

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	28-Aug-14	9.2							
N26	N26	Portage Bay	Deep Water	2014	29-Jun-14	5.8							
N26	N26	Portage Bay	Deep Water	2014	20-Jul-14	8.8							
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	28-Aug-14	4.6							
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							
S3	S3	Price's Point	Deep Water	2014	3-Aug-14	3.7							
S3	S3	Price's Point	Deep Water	2014	17-Aug-14	3.4							
S3 FD	S3	Price's Point	Deep Water	2014	28-Aug-14	4.8							
S3	S3	Price's Point	Deep Water	2014	28-Aug-14	4.7							
E30	E30	Ten Mile Bay	Deep Water	2014	29-Jun-14	10.2							
E30 FD	E30	Ten Mile Bay	Deep Water	2014	29-Jun-14	10.3							
E30	E30	Ten Mile Bay	Deep Water	2014	20-Jul-14	8.7							
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							
E1	E1	Trading Bay	Deep Water	2014	29-Jun-14		4.4							
E1	E1	Trading Bay	Deep Water	2014	20-Jul-14		4.7							
E1	E1	Trading Bay	Deep Water	2014	3-Aug-14		3.7							
E1 FD	E1	Trading Bay	Deep Water	2014	17-Aug-14		4.6							
E1	E1	Trading Bay	Deep Water	2014	17-Aug-14		3.8							
E1	E1	Trading Bay	Deep Water	2014	28-Aug-14		4.2							
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	28-Jun-15		4.1							
S1 FD	S1	Adamson's Island	Nearshore Undisturbed	2015	28-Jun-15		4.6							
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	20-Jul-15		4.5							
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	4-Aug-15		3.9							
S1	S1	Adamson's Island	Nearshore Undisturbed	2015	23-Aug-15		2.6							
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							
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
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							
B1	B1	Bigwin East	Deep Water	2015	28-Jun-15		18.1							x
B1	B1	Bigwin East	Deep Water	2015	20-Jul-15		4.6							
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	4-Sep-15		5.5							
B3	B3	Bigwin North	Disturbed	2015	28-Jun-15		4.2							
B3	B3	Bigwin North	Disturbed	2015	20-Jul-15		8.1							
B3 FD	B3	Bigwin North	Disturbed	2015	4-Aug-15		4.0							
B3	B3	Bigwin North	Disturbed	2015	4-Aug-15		19.3						bs	
B3	B3	Bigwin North	Disturbed	2015	23-Aug-15		4.5							
B3	B3	Bigwin North	Disturbed	2015	4-Sep-15		4.5							

B3 FD	B3	Bigwin North	Disturbed	201 5	4-Sep- 15		8.7						bs	
N24	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	28-Jun- 15		5.0							
N24	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	20-Jul- 15		4.1							
N24 FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	20-Jul- 15		7.4						bs	
N24	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	4-Aug- 15		4.5							
N24 FD	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	23-Aug- 15		2.1							
N24	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	23-Aug- 15		5.0						bs	
N24	N2 4	Boothby's	Nearshor e Undisturb ed	201 5	4-Sep- 15		2.6							
N11	N1 1	Britannia	Disturbed	201 5	28-Jun- 15		4.6							
N11	N1 1	Britannia	Disturbed	201 5	20-Jul- 15		3.9							
N11	N1 1	Britannia	Disturbed	201 5	4-Aug- 15		6.9							
N11	N1 1	Britannia	Disturbed	201 5	23-Aug- 15		6.2							
N11	N1 1	Britannia	Disturbed	201 5	4-Sep- 15		2.6							

N11 FD	N1 1	Britannia	Disturbed	201 5	4-Sep- 15		2.7							
N1	N1	Dwight Bay	Deep Water	201 5	28-Jun- 15		8.1							
N1	N1	Dwight Bay	Deep Water	201 5	20-Jul- 15		4.3							
N1 FD	N1	Dwight Bay	Deep Water	201 5	20-Jul- 15		8.3						bs	
N1	N1	Dwight Bay	Deep Water	201 5	4-Aug- 15		5.1							
N1	N1	Dwight Bay	Deep Water	201 5	23-Aug- 15		3.1							
N1 FD	N1	Dwight Bay	Deep Water	201 5	4-Sep- 15		4.4							
N1	N1	Dwight Bay	Deep Water	201 5	4-Sep- 15		7.0						bs	
B2	B2	Fairview	Deep Water	201 5	28-Jun- 15		5.9							
B2	B2	Fairview	Deep Water	201 5	20-Jul- 15		4.8							
B2	B2	Fairview	Deep Water	201 5	4-Aug- 15		3.7							
B2	B2	Fairview	Deep Water	201 5	23-Aug- 15		3.3							
B2 FD	B2	Fairview	Deep Water	201 5	23-Aug- 15		5.4							
B2	B2	Fairview	Deep Water	201 5	4-Sep- 15		3.3							
N10	N1 0	Gull Rock	Deep Water	201 5	28-Jun- 15		5.7							
N10	N1 0	Gull Rock	Deep Water	201 5	20-Jul- 15		4.8							
N10	N1 0	Gull Rock	Deep Water	201 5	20-Jul- 15		5.1							
N10 FD	N1 0	Gull Rock	Deep Water	201 5	4-Aug- 15		3.8							
N10	N1 0	Gull Rock	Deep Water	201 5	4-Aug- 15		3.9							

N10	N1 0	Gull Rock	Deep Water	201 5	23-Aug- 15		3.3							
N10	N1 0	Gull Rock	Deep Water	201 5	4-Sep- 15		2.5							
E13	E1 3	Haystack Bay	Deep Water	201 5	28-Jun- 15		14.6							x
E13	E1 3	Haystack Bay	Deep Water	201 5	20-Jul- 15									
E13	E1 3	Haystack Bay	Deep Water	201 5	4-Aug- 15		4.8							
E13	E1 3	Haystack Bay	Deep Water	201 5	23-Aug- 15		3.3							
E13	E1 3	Haystack Bay	Deep Water	201 5	4-Sep- 15		15.7							x
E13 FD	E1 3	Haystack Bay	Deep Water	201 5	4-Sep- 15		20.5						bs	x
E18	E1 8	Hollow River mouth	River	201 5	28-Jun- 15		16.3							R
E18	E1 8	Hollow River mouth	River	201 5	20-Jul- 15		8.6							
E18	E1 8	Hollow River mouth	River	201 5	4-Aug- 15		5.5							
E18	E1 8	Hollow River mouth	River	201 5	4-Aug- 15		6.3							
E18	E1 8	Hollow River mouth	River	201 5	23-Aug- 15									
E18	E1 8	Hollow River mouth	River	201 5	4-Sep- 15		7.5							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 5	28-Jun- 15		4.8							

S2	S2	Menominee Bay	Nearshore Undisturbed	2015	20-Jul-15	4.5								
S2 FD	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Aug-15	3.7								
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Aug-15	4.5								
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	23-Aug-15	1.9								
S2	S2	Menominee Bay	Nearshore Undisturbed	2015	4-Sep-15	3.0								
N13	N13	Moffat's	Nearshore Undisturbed	2015	28-Jun-15	4.9								
N13	N13	Moffat's	Nearshore Undisturbed	2015	20-Jul-15	4.1								
N13	N13	Moffat's	Nearshore Undisturbed	2015	20-Jul-15	7.3								
N13	N13	Moffat's	Nearshore Undisturbed	2015	4-Aug-15	4.1								
N13 FD	N13	Moffat's	Nearshore Undisturbed	2015	23-Aug-15	1.8								

N13	N1 3	Moffat's	Nearshore Undisturbed	201 5	23-Aug- 15		3.9							
N13	N1 3	Moffat's	Nearshore Undisturbed	201 5	4-Sep- 15		3.1							
E25	E2 6	Narrows West	Nearshore Undisturbed	201 5	28-Jun- 15		3.4							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 5	20-Jul- 15		4.5							
E26 FD	E2 6	Narrows West	Nearshore Undisturbed	201 5	20-Jul- 15		5.1							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 5	4-Aug- 15		4.9							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 5	23-Aug- 15									
E26	E2 6	Narrows West	Nearshore Undisturbed	201 5	4-Sep- 15		8.9							x
N30	N3 0	Oxtongue Delta	River	201 5	28-Jun- 15		7.1							
N30 FD	N3 0	Oxtongue Delta	River	201 5	28-Jun- 15		8.1							
N30	N3 0	Oxtongue Delta	River	201 5	20-Jul- 15		7.0							
N30 FD	N3 0	Oxtongue Delta	River	201 5	4-Aug- 15		4.9							

N30	N3 0	Oxtongue Delta	River	201 5	4-Aug- 15		5.1							
N30	N3 0	Oxtongue Delta	River	201 5	23-Aug- 15		2.4							
N30 FD	N3 0	Oxtongue Delta	River	201 5	23-Aug- 15		2.5							
N30	N3 0	Oxtongue Delta	River	201 5	4-Sep- 15		8.1							
N2	N2	Oxtongue mouth	River	201 5	28-Jun- 15		7.4							
N2	N2	Oxtongue mouth	River	201 5	20-Jul- 15		7.5							
N2	N2	Oxtongue mouth	River	201 5	4-Aug- 15		4.6							
N2	N2	Oxtongue mouth	River	201 5	23-Aug- 15		5.7							
N2 FD	N2	Oxtongue mouth	River	201 5	23-Aug- 15		6.1							
N2	N2	Oxtongue mouth	River	201 5	4-Sep- 15		7.7							
N26	N2 6	Portage Bay	Deep Water	201 5	28-Jun- 15		5.5							
N26	N2 6	Portage Bay	Deep Water	201 5	20-Jul- 15		4.8							
N26	N2 6	Portage Bay	Deep Water	201 5	4-Aug- 15		4.9							
N26	N2 6	Portage Bay	Deep Water	201 5	23-Aug- 15		4.5							
N26	N2 6	Portage Bay	Deep Water	201 5	4-Sep- 15		3.6							
S3	S3	Price's Point	Deep Water	201 5	28-Jun- 15		5.4							
S3 FD	S3	Price's Point	Deep Water	201 5	20-Jul- 15		5.3							
S3	S3	Price's Point	Deep Water	201 5	20-Jul- 15		4.8							
S3	S3	Price's Point	Deep Water	201 5	4-Aug- 15		4.2							

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						
E30	E30	Ten Mile Bay	Deep Water	2015	28-Jun-15		4.8						
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						
E30	E30	Ten Mile Bay	Deep Water	2015	23-Aug-15		4.3						
E30 FD	E30	Ten Mile Bay	Deep Water	2015	23-Aug-15		5.3						
E30	E30	Ten Mile Bay	Deep Water	2015	4-Sep-15		4.6						
E1	E1	Trading Bay	Deep Water	2015	28-Jun-15		10.6						
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	23-Aug-15		5.0						
E1	E1	Trading Bay	Deep Water	2015	4-Sep-15		4.7						
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							
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							
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							
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							
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							
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	N1 1	Britannia	Disturbed	201 6	1-Aug- 16		3.9							
N11	N1 1	Britannia	Disturbed	201 6	14-Aug- 16		3.9							
N11 FD	N1 1	Britannia	Disturbed	201 6	14-Aug- 16		3.8							
N11	N1 1	Britannia	Disturbed	201 6	1-Sep- 16		4.5							
N1	N1	Dwight Bay	Deep Water	201 6	1-Jul-16		11.7							
N1 FD	N1	Dwight Bay	Deep Water	201 6	1-Jul-16		10.4							
N1	N1	Dwight Bay	Deep Water	201 6	18-Jul- 16		12.4							
N1	N1	Dwight Bay	Deep Water	201 6	1-Aug- 16		6.5		0		3			
N1	N1	Dwight Bay	Deep Water	201 6	14-Aug- 16		7.3							
N1 FD	N1	Dwight Bay	Deep Water	201 6	14-Aug- 16		11.2						bs	
N1	N1	Dwight Bay	Deep Water	201 6	1-Sep- 16		7.3							
B2	B2	Fairview	Deep Water	201 6	1-Jul-16		4.3							
B2 FD	B2	Fairview	Deep Water	201 6	1-Jul-16		3.3							
B2	B2	Fairview	Deep Water	201 6	18-Jul- 16		3.6							
B2	B2	Fairview	Deep Water	201 6	1-Aug- 16		4.7		0		5			
B2 FD	B2	Fairview	Deep Water	201 6	1-Aug- 16				0		3			
B2	B2	Fairview	Deep Water	201 6	14-Aug- 16		10.2						bs	
B2 FD	B2	Fairview	Deep Water	201 6	14-Aug- 16		3.7							
B2	B2	Fairview	Deep Water	201 6	1-Sep- 16		4.8							

N10	N1 0	Gull Rock	Deep Water	201 6	1-Jul-16		3.8						
N10	N1 0	Gull Rock	Deep Water	201 6	18-Jul-16		8.5						
N10 FD	N1 0	Gull Rock	Deep Water	201 6	18-Jul-16		7.9						
N10	N1 0	Gull Rock	Deep Water	201 6	1-Aug-16		4.1		0		3		
N10	N1 0	Gull Rock	Deep Water	201 6	14-Aug-16		4.8						
N10	N1 0	Gull Rock	Deep Water	201 6	1-Sep-16								
E13	E1 3	Haystack Bay	Deep Water	201 6	1-Jul-16		7.2						
E13	E1 3	Haystack Bay	Deep Water	201 6	18-Jul-16		4.3						
E13 F/D	E1 3	Haystack Bay	Deep Water	201 6	18-Jul-16		4.1						
E13	E1 3	Haystack Bay	Deep Water	201 6	1-Aug-16		5.8		0		8		
E13	E1 3	Haystack Bay	Deep Water	201 6	14-Aug-16		5.5						
E18	E1 8	Hollow River mouth	River	201 6	1-Jul-16								
E18	E1 8	Hollow River mouth	River	201 6	18-Jul-16		13.3						R
E18	E1 8	Hollow River mouth	River	201 6	1-Aug-16		7.3		3		11		
E18	E1 8	Hollow River mouth	River	201 6	14-Aug-16		25.7						R
E18	E1 8	Hollow River mouth	River	201 6	1-Sep-16		18.3						R
S2	S2	Menomin ee Bay	Nearshor e	201 6	1-Jul-16		3.1						

			Undisturbed											
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							x
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	N1 3	Moffat's	Nearshore Undisturbed	201 6	1-Aug- 16				0		3			
N13	N1 3	Moffat's	Nearshore Undisturbed	201 6	14-Aug- 16		3.4							
N13 FD	N1 3	Moffat's	Nearshore Undisturbed	201 6	14-Aug- 16		3.3							
N13	N1 3	Moffat's	Nearshore Undisturbed	201 6	1-Sep- 16		3.8							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 6	1-Jul-16									
E26	E2 6	Narrows West	Nearshore Undisturbed	201 6	18-Jul- 16		5.9							
E26 F/D	E2 6	Narrows West	Nearshore Undisturbed	201 6	18-Jul- 16		12.3						bs	
E26	E2 6	Narrows West	Nearshore Undisturbed	201 6	1-Aug- 16		5.8		3		8			
E26	E2 6	Narrows West	Nearshore Undisturbed	201 6	14-Aug- 16		3.7							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 6	1-Sep- 16		6.1							

N30	N3 0	Oxtongue Delta	River	201 6	1-Jul-16		5.5						
N30	N3 0	Oxtongue Delta	River	201 6	18-Jul- 16		13.2						x
N30 FD	N3 0	Oxtongue Delta	River	201 6	18-Jul- 16		15.1						x
N30	N3 0	Oxtongue Delta	River	201 6	1-Aug- 16		6.6		5		16		
N30	N3 0	Oxtongue Delta	River	201 6	14-Aug- 16		6.3						
N30	N3 0	Oxtongue Delta	River	201 6	1-Sep- 16		6.3						
N30 FD	N3 0	Oxtongue Delta	River	201 6	1-Sep- 16		6.4						
N2	N2	Oxtongue mouth	River	201 6	1-Jul-16		5.6						
N2	N2	Oxtongue mouth	River	201 6	18-Jul- 16		11.9						
N2	N2	Oxtongue mouth	River	201 6	1-Aug- 16		6.2		3		13		
N2	N2	Oxtongue mouth	River	201 6	14-Aug- 16		5.6						
N2	N2	Oxtongue mouth	River	201 6	1-Sep- 16		6.7						
N26	N2 6	Portage Bay	Deep water	201 6	1-Jul-16		0.6						
N26	N2 6	Portage Bay	Deep water	201 6	18-Jul- 16		8.7						
N26	N2 6	Portage Bay	Deep water	201 6	1-Aug- 16		5.7		3		11		
N26 FD	N2 6	Portage Bay	Deep water	201 6	1-Aug- 16		6.6						
N26	N2 6	Portage Bay	Deep water	201 6	14-Aug- 16		5.6						
N26	N2 6	Portage Bay	Deep water	201 6	1-Sep- 16								
S3	S3	Price's Point	Deep water	201 6	1-Jul-16		6.1						

S3 FD	S3	Price's Point	Deep water	201 6	18-Jul- 16		9.3						
S3	S3	Price's Point	Deep water	201 6	18-Jul- 16		7.6						
S3 FD	S3	Price's Point	Deep water	201 6	1-Aug- 16		6.2		0		8		bs
S3	S3	Price's Point	Deep water	201 6	1-Aug- 16		3.9		3		5		
S3	S3	Price's Point	Deep water	201 6	14-Aug- 16		4.1						
S3	S3	Price's Point	Deep water	201 6	1-Sep- 16		5.9						
E30	E3 0	Ten Mile Bay	Deep water	201 6	1-Jul-16								
E30	E3 0	Ten Mile Bay	Deep water	201 6	18-Jul- 16		15.0						x
E30	E3 0	Ten Mile Bay	Deep water	201 6	1-Aug- 16		7.3		0		8		
E30 FD	E3 0	Ten Mile Bay	Deep water	201 6	1-Aug- 16				3		8		
E30	E3 0	Ten Mile Bay	Deep water	201 6	14-Aug- 16		7.9						
E30	E3 0	Ten Mile Bay	Deep water	201 6	1-Sep- 16		7.0						
E30 FD	E3 0	Ten Mile Bay	Deep water	201 6	1-Sep- 16		6.1						
E1	E1	Trading Bay	Deep water	201 6	1-Jul-16								
E1	E1	Trading Bay	Deep water	201 6	18-Jul- 16		8.8						
E1	E1	Trading Bay	Deep water	201 6	1-Aug- 16		6.6		3		8		
E1	E1	Trading Bay	Deep water	201 6	14-Aug- 16		5.4						
E1 F/D	E1	Trading Bay	Deep water	201 6	14-Aug- 16		5.0						
E1	E1	Trading Bay	Deep water	201 6	1-Sep- 16		15.8						x

B1	B1	Bigwin East	Deep water	2017	23-Jul-17		8.3						
B1	B1	Bigwin East	Deep water	2017	7-Aug-17		7.7		1		8		
B1 FD	B1	Bigwin East	Deep water	2017	7-Aug-17				1		11		
B1	B1	Bigwin East	Deep water	2017	21-Aug-17		5.9						
B1 FD	B1	Bigwin East	Deep water	2017	21-Aug-17		5.3						
B1	B1	Bigwin East	Deep water	2017	1-Sep-17		4.8						
B3	B3	Bigwin North	Disturbed	2017	3-Jul-17		5.8						
B3	B3	Bigwin North	Disturbed	2017	7-Aug-17		6.6		8		52		
B3	B3	Bigwin North	Disturbed	2017	21-Aug-17		5.1						
B3 F/D	B3	Bigwin North	Disturbed	2017	21-Aug-17		5.4						
B3	B3	Bigwin North	Disturbed	2017	1-Sep-17		6.3						
N24	N24	Boothby's	Nearshore Undisturbed	2017	3-Jul-17		5.6						
N24	N24	Boothby's	Nearshore Undisturbed	2017	7-Aug-17		4.9						
N24 F/D	N24	Boothby's	Nearshore Undisturbed	2017	7-Aug-17		5.1		5		166		
N24 lab results	N24	Boothby's	Nearshore Undisturbed	2017	7-Aug-17				5		800		

N24	N2 4	Boothby's	Nearshore Undisturbed	201 7	21-Aug- 17		8.5							
N24	N2 4	Boothby's	Nearshore Undisturbed	201 7	1-Sep- 17		5.0							
N11	N1 1	Britannia	Disturbed	201 7	3-Jul-17		5.0							
N11	N1 1	Britannia	Disturbed	201 7	23-Jul- 17		5.5							
N11	N1 1	Britannia	Disturbed	201 7	7-Aug- 17		6.3		3		47			
N11	N1 1	Britannia	Disturbed	201 7	21-Aug- 17		5.0							
N11	N1 1	Britannia	Disturbed	201 7	1-Sep- 17		5.8							
N11 F/D	N1 1	Britannia	Disturbed	201 7	1-Sep- 17		5.3							
N1	N1	Dwight Bay	Deep Water	201 7	3-Jul-17		6.3							
N1	N1	Dwight Bay	Deep Water	201 7	23-Jul- 17		13.0							
N1 F/D	N1	Dwight Bay	Deep Water	201 7	23-Jul- 17		15.5							x
N1	N1	Dwight Bay	Deep Water	201 7	7-Aug- 17		7.0		1		5			
N1	N1	Dwight Bay	Deep Water	201 7	21-Aug- 17		6.9							
N1	N1	Dwight Bay	Deep Water	201 7	1-Sep- 17		15.4							x
B2	B2	Fairview	Deep Water	201 7	3-Jul-17		5.5							
B2	B2	Fairview	Deep Water	201 7	23-Jul- 17		10.4							x
B2	B2	Fairview	Deep Water	201 7	7-Aug- 17		6.3		1		22			

B2 F/D	B2	Fairview	Deep Water	201 7	7-Aug- 17		7.5		1		28			
B2 lab result s	B2	Fairview	Deep Water	201 7	7-Aug- 17				2		500			
B2	B2	Fairview	Deep Water	201 7	21-Aug- 17		5.1							
B2	B2	Fairview	Deep Water	201 7	1-Sep- 17		5.0							
B2 F/D	B2	Fairview	Deep Water	201 7	1-Sep- 17		5.7							
N10	N1 0	Gull Rock	Deep Water	201 7	3-Jul-17		4.5							
N10	N1 0	Gull Rock	Deep Water	201 7	23-Jul- 17		7.0							
N10	N1 0	Gull Rock	Deep Water	201 7	7-Aug- 17		5.0		1		17			
N10	N1 0	Gull Rock	Deep Water	201 7	21-Aug- 17		6.2							
N10 F/D	N1 0	Gull Rock	Deep Water	201 7	21-Aug- 17		4.9							
N10	N1 0	Gull Rock	Deep Water	201 7	1-Sep- 17		6.5							
E13	E1 3	Haystack Bay	Deep Water	201 7	3-Jul-17		10.3							
E13	E1 3	Haystack Bay	Deep Water	201 7	23-Jul- 17		5.7							
E13	E1 3	Haystack Bay	Deep Water	201 7	7-Aug- 17		10.2		5		52			
E13 lab result s	E1 3	Haystack Bay	Deep Water	201 7	7-Aug- 17				9		600			
E13	E1 3	Haystack Bay	Deep Water	201 7	21-Aug- 17		7.9							
E13	E1 3	Haystack Bay	Deep Water	201 7	1-Sep- 17		7.1							

E18	E18	Hollow River mouth	River	2017	3-Jul-17		6.4							
E18	E18	Hollow River mouth	River	2017	23-Jul-17		7.4							
E18 F/D	E18	Hollow River mouth	River	2017	23-Jul-17		7.3							
E18	E18	Hollow River mouth	River	2017	7-Aug-17		11.4		8		80			
E18	E18	Hollow River mouth	River	2017	21-Aug-17		5.8							
E18	E18	Hollow River mouth	River	2017	1-Sep-17		15.9							
S2	S2	Menominee Bay	Nearshore Undisturbed	2017	3-Jul-17		4.6							
S2	S2	Menominee Bay	Nearshore Undisturbed	2017	23-Jul-17		4.8							
S2	S2	Menominee Bay	Nearshore Undisturbed	2017	7-Aug-17		5.6		8		22			
S2	S2	Menominee Bay	Nearshore Undisturbed	2017	21-Aug-17		5.1							
S2	S2	Menominee Bay	Nearshore Undisturbed	2017	1-Sep-17		8.6							

N13	N1 3	Moffat's	Nearshore Undisturbed	201 7	3-Jul-17		6.3							
N13 F/D	N1 3	Moffat's	Nearshore Undisturbed	201 7	3-Jul-17		7.1							
N13	N1 3	Moffat's	Nearshore Undisturbed	201 7	23-Jul-17									
N13	N1 3	Moffat's	Nearshore Undisturbed	201 7	7-Aug-17		4.8		3		80			
N13 lab results	N1 3	Moffat's	Nearshore Undisturbed	201 7	7-Aug-17				4		600			
N13	N1 3	Moffat's	Nearshore Undisturbed	201 7	21-Aug-17		5.5							
N13	N1 3	Moffat's	Nearshore Undisturbed	201 7	1-Sep-17		5.1							
E26	E2 6	Narrows West	Nearshore Undisturbed	201 7	3-Jul-17		6.2							
E26 F/D	E2 6	Narrows West	Nearshore Undisturbed	201 7	3-Jul-17		12.7						bs	
E26	E2 6	Narrows West	Nearshore Undisturbed	201 7	23-Jul-17		6.1							

E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 7	7-Aug- 17		8.6		11		52		x
E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 7	21-Aug- 17		6.1						
E26 F/D	E2 6	Narrows West	Nearshor e Undisturb ed	201 7	21-Aug- 17		29.5					bs	
E26	E2 6	Narrows West	Nearshor e Undisturb ed	201 7	1-Sep- 17		5.5						
N30	N3 0	Oxtongue Delta	River	201 7	3-Jul-17		10.9						
N30 F/D	N3 0	Oxtongue Delta	River	201 7	3-Jul-17		11.4						
N30	N3 0	Oxtongue Delta	River	201 7	23-Jul- 17		8.5						
N30	N3 0	Oxtongue Delta	River	201 7	7-Aug- 17		7.7		11		80		
N30	N3 0	Oxtongue Delta	River	201 7	21-Aug- 17		7.8						
N30	N3 0	Oxtongue Delta	River	201 7	1-Sep- 17		9.3						
N2	N2	Oxtongue mouth	River	201 7	3-Jul-17		10.4						
N2	N2	Oxtongue mouth	River	201 7	23-Jul- 17		9.1						
N2	N2	Oxtongue mouth	River	201 7	7-Aug- 17		7.2						
N2 F/D	N2	Oxtongue mouth	River	201 7	7-Aug- 17		8.2		5		80		
N2	N2	Oxtongue mouth	River	201 7	21-Aug- 17		8.6						
N2 F/D	N2	Oxtongue mouth	River	201 7	21-Aug- 17		7.4						

N2	N2	Oxtongue mouth	River	2017	1-Sep-17		9.3						
N26	N26	Portage Bay	Deep water	2017	3-Jul-17		11.4						
N26	N26	Portage Bay	Deep water	2017	23-Jul-17		8.1						
N26	N26	Portage Bay	Deep water	2017	7-Aug-17		5.8		5		47		
N26 F/D	N26	Portage Bay	Deep water	2017	7-Aug-17		5.5						
N26	N26	Portage Bay	Deep water	2017	21-Aug-17		5.9						
N26	N26	Portage Bay	Deep water	2017	1-Sep-17		9.6						
S3	S3	Price's Point	Deep water	2017	3-Jul-17		4.5						
S3 F/D	S3	Price's Point	Deep water	2017	23-Jul-17		8.5					bs	
S3	S3	Price's Point	Deep water	2017	23-Jul-17		5.4						
S3	S3	Price's Point	Deep water	2017	7-Aug-17		5.1		3		13		
S3 F/D	S3	Price's Point	Deep water	2017	7-Aug-17		4.3		1		16		
S3	S3	Price's Point	Deep water	2017	21-Aug-17		7.0						
S3	S3	Price's Point	Deep water	2017	1-Sep-17		4.9						
E30	E30	Ten Mile Bay	Deep water	2017	3-Jul-17		9.5						
E30	E30	Ten Mile Bay	Deep water	2017	23-Jul-17		5.7						
E30	E30	Ten Mile Bay	Deep water	2017	7-Aug-17		5.8		1		8		
E30	E30	Ten Mile Bay	Deep water	2017	21-Aug-17		5.3						
E30	E30	Ten Mile Bay	Deep water	2017	1-Sep-17		5.7						

E1	E1	Trading Bay	Deep water	2017	3-Jul-17		6.9						
E1	E1	Trading Bay	Deep water	2017	23-Jul-17		5.6						
E1	E1	Trading Bay	Deep water	2017	7-Aug-17		7.2		3		17		
E1 F/D	E1	Trading Bay	Deep water	2017	7-Aug-17				3		22		
E1	E1	Trading Bay	Deep water	2017	21-Aug-17		11.1						bs
E1 F/D	E1	Trading Bay	Deep water	2017	21-Aug-17		6.1						
E1 F/D	E1	Trading Bay	Deep water	2017	1-Sep-17		6.6						
E1	E1	Trading Bay	Deep water	2017	1-Sep-17		4.9						
S1	S1	Adamson's Island	Nearshore Undisturbed	2018	2-Jul-18	Y	3.0		5		19		
S1	S1	Adamson's Island	Nearshore Undisturbed	2018	6-Aug-18		5.5		3		22		
S1 F/D	S1	Adamson's Island	Nearshore Undisturbed	2018	6-Aug-18		4.4		3		52		
S1	S1	Adamson's Island	Nearshore Undisturbed	2018	31-Aug-18	Y	3.0	Y	3		55		
S1 L/D	S1	Adamson's Island	Nearshore Undisturbed	2018	31-Aug-18				0	A	201	78	
B5	B5	Bigwin Bay	Disturbed	2018	2-Jul-18				3		16		
B5	B5	Bigwin Bay	Disturbed	2018	6-Aug-18		3.7		3		25		

B5 L/D	B5	Bigwin Bay	Disturbed	2018	6-Aug-18				4	A	201	45		
B5	B5	Bigwin Bay	Disturbed	2018	31-Aug-18	Y	3.0		5		52			
B5 F/D	B5	Bigwin Bay	Disturbed	2018	31-Aug-18	Y	3.0		4		65			
B5 L/D	B5	Bigwin Bay	Disturbed	2018	31-Aug-18				12	A	201	45		
B1	B1	Bigwin East	Deep water	2018	2-Jul-18	Y	3.0		3		13			
B1	B1	Bigwin East	Deep water	2018	6-Aug-18		6.2	Y	3		13			
B1	B1	Bigwin East	Deep water	2018	31-Aug-18	Y	3.0	Y	3		43			
B1 L/D	B1	Bigwin East	Deep water	2018	31-Aug-18				2		83	92		
B3	B3	Bigwin North	Disturbed	2018	2-Jul-18	Y	3.0				46			
B3 L/D	B3	Bigwin North	Disturbed	2018	2-Jul-18				4	A	201	20		
B3	B3	Bigwin North	Disturbed	2018	6-Aug-18		5.1	Y	3		5			
B3	B3	Bigwin North	Disturbed	2018	31-Aug-18	Y	3.0		3		11			
N24	N24	Boothby's	Nearshore Undisturbed	2018	2-Jul-18	Y	3.0		5		16			
N24 LD	N24	Boothby's	Nearshore Undisturbed	2018	2-Jul-18				34	A	201	16		
N24	N24	Boothby's	Nearshore Undisturbed	2018	6-Aug-18		6.1		3		8			
N24	N24	Boothby's	Nearshore Undisturbed	2018	31-Aug-18	Y	3.0	Y	3		3			

N11	N1 1	Britannia	Disturbed	201 8	2-Jul-18		6.7		3		11			
N11	N1 1	Britannia	Disturbed	201 8	6-Aug-18		4.5		3		52			
N11 L/D	N1 1	Britannia	Disturbed	201 8	6-Aug-18				4	A	201	62		
N11	N1 1	Britannia	Disturbed	201 8	31-Aug-18	Y	3.0		5		25			
N11 F/D	N1 1	Britannia	Disturbed	201 8	31-Aug-18	Y	3.0		5		33			
N1	N1	Dwight Bay	Deep Water	201 8	2-Jul-18	Y	3.0	Y	3		13			
N1	N1	Dwight Bay	Deep Water	201 8	6-Aug-18		5.0		5		16			
N1 L/D	N1	Dwight Bay	Deep Water	201 8	6-Aug-18				9		201	NDOGH PC		
N1	N1	Dwight Bay	Deep Water	201 8	31-Aug-18	Y	3.0							
B2	B2	Fairview	Deep Water	201 8	2-Jul-18	Y	3.0	Y	3		13			
B2 L/D	B2	Fairview	Deep Water	201 8	2-Jul-18				0		27	36		
B2	B2	Fairview	Deep Water	201 8	6-Aug-18		4.9	Y	3		3			
B2	B2	Fairview	Deep Water	201 8	31-Aug-18	Y	3.0	Y	3	B	3			
B2 L/D	B2	Fairview	Deep Water	201 8	31-Aug-18				2		95	6		
N10	N1 0	Gull Rock	Deep Water	201 8	2-Jul-18	Y	3.0	Y	3		5			
N10 L/D	N1 0	Gull Rock	Deep Water	201 8	2-Jul-18				0		38	43		
N10	N1 0	Gull Rock	Deep Water	201 8	6-Aug-18		5.3	Y	3		11			
N10 F/D	N1 0	Gull Rock	Deep Water	201 8	6-Aug-18		5.9		3		11			
N10	N1 0	Gull Rock	Deep Water	201 8	31-Aug-18	Y	3.0	Y	3		5			

N10 F/D	N1 0	Gull Rock	Deep Water	201 8	31-Aug- 18	Y	3.0	Y	3		8			
E13	E1 3	Haystack Bay	Deep Water	201 8	2-Jul-18	Y	3.0	Y	3		28			
E13	E1 3	Haystack Bay	Deep Water	201 8	6-Aug- 18		4.5		3		55			
E13 L/D	E1 3	Haystack Bay	Deep Water	201 8	6-Aug- 18				4		118	119		
E13	E1 3	Haystack Bay	Deep Water	201 8	31-Aug- 18	Y	3.0	Y	3		30			
E13 F/D	E1 3	Haystack Bay	Deep Water	201 8	31-Aug- 18	Y	3.0	Y	3		39			
E13 L/D	E1 3	Haystack Bay	Deep Water	201 8	31-Aug- 18				3		74	9		
E18	E1 8	Hollow River mouth	River	201 8	2-Jul-18		4.2		28		69			
E18 L/D	E1 8	Hollow River mouth	River	201 8	2-Jul-18				83	A	201	463		
E18	E1 8	Hollow River mouth	River	201 8	6-Aug- 18		7.0							
E18 L/D	E1 8	Hollow River mouth	River	201 8	6-Aug- 18				1	A	201	NDOGH PC		
E18	E1 8	Hollow River mouth	River	201 8	31-Aug- 18	Y	3.0		8		22			
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 8	2-Jul-18	Y	3.0		3		28			
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 8	6-Aug- 18		5.1		3		49			
S2 L/D	S2	Menomin ee Bay	Nearshor e	201 8	6-Aug- 18				1		201	121		

			Undisturbed											
S2	S2	Menominee Bay	Nearshore Undisturbed	2018	31-Aug-18	Y	3.0	Y	3		52			
S2 F/D	S2	Menominee Bay	Nearshore Undisturbed	2018	31-Aug-18	Y	3.0	Y	3		62			
S2 L/D	S2	Menominee Bay	Nearshore Undisturbed	2018	31-Aug-18				2		145	113		
N13	N13	Moffat's	Nearshore Undisturbed	2018	2-Jul-18		3.0	Y	3		5			
N13	N13	Moffat's	Nearshore Undisturbed	2018	6-Aug-18			Y	3	B	3			
N13	N13	Moffat's	Nearshore Undisturbed	2018	31-Aug-18		4.2		3		8			
E26	E26	Narrows West	Nearshore Undisturbed	2018	2-Jul-18		4.1		3		8			
E26	E26	Narrows West	Nearshore Undisturbed	2018	6-Aug-18				3		11			
E26	E26	Narrows West	Nearshore Undisturbed	2018	31-Aug-18	Y	3.0		5		16			
N30	N30	Oxtongue Delta	River	2018	2-Jul-18	Y	3.0		11		36			

N30	N30	Oxtongue Delta	River	2018	6-Aug-18				8		25			
N30	N30	Oxtongue Delta	River	2018	31-Aug-18	Y	3.0		11		30			
N30 L/D	N30	Oxtongue Delta	River	2018	31-Aug-18				15	A	201	50		
N2	N2	Oxtongue mouth	River	2018	2-Jul-18		40.4		13		36			R
N2	N2	Oxtongue mouth	River	2018	6-Aug-18		6.3		8		22			
N2	N2	Oxtongue mouth	River	2018	31-Aug-18		16.5		5		16			R
N26	N26	Portage Bay	Deep water	2018	2-Jul-18				5		16			
N26	N26	Portage Bay	Deep water	2018	6-Aug-18		5.3		5		11			
N26	N26	Portage Bay	Deep water	2018	31-Aug-18		9.2		3		25			
S3	S3	Price's Point	Deep water	2018	2-Jul-18		102.0	Y	3		30			x
S3	S3	Price's Point	Deep water	2018	6-Aug-18		12.3	Y	3		33			x
S3	S3	Price's Point	Deep water	2018	31-Aug-18		3.9	Y	3		47			
E30	E30	Ten Mile Bay	Deep water	2018	2-Jul-18		3.3	Y	3		11			
E30	E30	Ten Mile Bay	Deep water	2018	6-Aug-18		5.2	Y	3		8			
E30	E30	Ten Mile Bay	Deep water	2018	31-Aug-18	Y	3.0	Y	3		13			
E1	E1	Trading Bay	Deep water	2018	2-Jul-18		6.2	Y	3		8			
E1	E1	Trading Bay	Deep water	2018	6-Aug-18		5.6		3		11			
E1	E1	Trading Bay	Deep water	2018	31-Aug-18	Y	3.0		3		8			
S1	S1	Adamson's Island	Nearshore	2019	1-Jul-19	y	3.0							

			Undisturbed											
S1	S1	Adamson's Island	Nearshore Undisturbed	2019	5-Aug-19	y	3.0		3		5			
S1	S1	Adamson's Island	Nearshore Undisturbed	2019	30-Aug-19	y	3.0							
B5	B5	Bigwin Bay	Disturbed	2019	1-Jul-19		3.6							
B5	B5	Bigwin Bay	Disturbed	2019	5-Aug-19		5.0		11		16			
B5	B5	Bigwin Bay	Disturbed	2019	30-Aug-19	y	3.0							
B5	B5	Bigwin Bay	Disturbed	2019	30-Aug-19	y	3.0							
B1	B1	Bigwin East	Deep Water	2019	1-Jul-19		47.8							x
B1	B1	Bigwin East	Deep Water	2019	5-Aug-19		3.1		3		5			
B1	B1	Bigwin East	Deep Water	2019	30-Aug-19	Y	3.0							
B3	B3	Bigwin North	Disturbed	2019	1-Jul-19		4.1							
B3	B3	Bigwin North	Disturbed	2019	5-Aug-19	y	3.0		8		16			
B3	B3	Bigwin North	Disturbed	2019	30-Aug-19	y	3.0							
N24	N24	Boothby's	Nearshore Undisturbed	2019	1-Jul-19		3.3							
N24	N24	Boothby's	Nearshore Undisturbed	2019	5-Aug-19		4.0	y	3		8			

N24	N24	Boothby's	Nearshore Undisturbed	2019	5-Aug-19		3.2	y	3		5			
N24	N24	Boothby's	Nearshore Undisturbed	2019	30-Aug-19	y	3.0							
N11	N11	Britannia	Disturbed	2019	1-Jul-19		3.2							
N11	N11	Britannia	Disturbed	2019	5-Aug-19	y	3.0		8		11			
N11	N11	Britannia	Disturbed	2019	30-Aug-19	y	3.0							
N1	N1	Dwight Bay	Deep Water	2019	1-Jul-19		4.2							
N1	N1	Dwight Bay	Deep Water	2019	1-Jul-19		3.2							
N1	N1	Dwight Bay	Deep Water	2019	5-Aug-19		3.4		3		3			
N1	N1	Dwight Bay	Deep Water	2019	30-Aug-19	y	3.0							
B2	B2	Fairview	Deep Water	2019	1-Jul-19		3.4							
B2	B2	Fairview	Deep Water	2019	1-Jul-19		4.1							
B2	B2	Fairview	Deep Water	2019	5-Aug-19	y	3.0		5		11			
B2	B2	Fairview	Deep Water	2019	30-Aug-19	y	3.0							
B2	B2	Fairview	Deep Water	2019	30-Aug-19	y	3.0							
N10	N10	Gull Rock	Deep Water	2019	1-Jul-19		4.1							
N10	N10	Gull Rock	Deep Water	2019	5-Aug-19		4.1	y	3		5			
N10	N10	Gull Rock	Deep Water	2019	5-Aug-19		11.1	y	3		8		bs	

N10	N1 0	Gull Rock	Deep Water	201 9	30-Aug- 19	y	3.0							
E13	E1 3	Haystack Bay	Deep Water	201 9	1-Jul-19		4.3							
E13	E1 3	Haystack Bay	Deep Water	201 9	5-Aug- 19		4.7		5		8			
E13	E1 3	Haystack Bay	Deep Water	201 9	30-Aug- 19		4.3							
E18	E1 8	Hollow River mouth	River	201 9	1-Jul-19		5.8							
E18	E1 8	Hollow River mouth	River	201 9	30-Aug- 19		3.0							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 9	1-Jul-19		3.1							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 9	5-Aug- 19		4.3		3		3			
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 9	30-Aug- 19	y	3.0							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	201 9	30-Aug- 19	y	3.0							
N13	N1 3	Moffat's	Nearshor e Undisturb ed	201 9	1-Jul-19	y	3.0							
N13	N1 3	Moffat's	Nearshor e Undisturb ed	201 9	5-Aug- 19		7.6	y	3		3		bs	

N13	N13	Moffat's	Nearshore Undisturbed	2019	5-Aug-19		3.4		3		5			
N13	N13	Moffat's	Nearshore Undisturbed	2019	30-Aug-19	y	3.0							
E26	E26	Narrows West	Nearshore Undisturbed	2019	1-Jul-19		3.8							
E26	E26	Narrows West	Nearshore Undisturbed	2019	5-Aug-19	y	3.0		8		19			
E26	E26	Narrows West	Nearshore Undisturbed	2019	30-Aug-19		4.5							
E26	E26	Narrows West	Nearshore Undisturbed	2019	30-Aug-19	y	3.0							
N30	N30	Oxtongue Delta	River	2019	1-Jul-19		3.4							
N30	N30	Oxtongue Delta	River	2019	1-Jul-19		3.3							
N30	N30	Oxtongue Delta	River	2019	5-Aug-19		3.4		11		22			
N30	N30	Oxtongue Delta	River	2019	30-Aug-19		16.0						bs	
N30	N30	Oxtongue Delta	River	2019	30-Aug-19		3.8							
N2	N2	Oxtongue mouth	River	2019	1-Jul-19		4.4							
N2	N2	Oxtongue mouth	River	2019	5-Aug-19		7.0		13		49			
N2	N2	Oxtongue mouth	River	2019	30-Aug-19		646.0							R

N26	N2 6	Portage Bay	Deep Water	201 9	1-Jul-19		4.7						
N26	N2 6	Portage Bay	Deep Water	201 9	5-Aug- 19		3.8		33		36		
N26	N2 6	Portage Bay	Deep Water	201 9	30-Aug- 19		3.3						
N31	N3 1	Portage Bay docks	Disturbed	201 9	5-Aug- 19		3.6		16		25		
N31	N3 1	Portage Bay docks	Disturbed	201 9	30-Aug- 19		20.7					bs	
N31	N3 1	Portage Bay docks	Disturbed	201 9	30-Aug- 19	y	3.0						
S3	S3	Price's Point	Deep Water	201 9	1-Jul-19		12.1						x
S3	S3	Price's Point	Deep Water	201 9	5-Aug- 19		5.2	y	3		3		
S3	S3	Price's Point	Deep Water	201 9	30-Aug- 19	y	3.0						
S3	S3	Price's Point	Deep Water	201 9	30-Aug- 19		3.3						
E30	E3 0	Ten Mile Bay	Deep water	201 9	1-Jul-19		4.5						
E30	E3 0	Ten Mile Bay	Deep water	201 9	5-Aug- 19	y	3.0		3		28		
E30	E3 0	Ten Mile Bay	Deep Water	201 9	30-Aug- 19	y	3.0						
E1	E1	Trading Bay	Deep water	201 9	1-Jul-19		10.3						
E1	E1	Trading Bay	Deep water	201 9	5-Aug- 19		19.5		3		5		x
E1	E1	Trading Bay	Deep Water	201 9	30-Aug- 19	y	3.0						
E1	E1	Trading Bay	Deep Water	201 9	30-Aug- 19	y	3.0						
S1	S1	Adamson' s island	Nearshor e	202 1	5-Jul-21		5.2						

			Undisturbed											
S1	S1	Adamson's island	Nearshore Undisturbed	2021	2-Aug-21		5.4		2		6			
S1	S1	Adamson's island	Nearshore Undisturbed	2021	27-Aug-21	y	3.0							
B4	B4	Bigwin Bay	Disturbed	2021	5-Jul-21		4.4						bs	
B4	B4	Bigwin Bay	Disturbed	2021	5-Jul-21	y	3.0							
B4	B4	Bigwin Bay	Disturbed	2021	2-Aug-21		5.2		10		16			
B4	B4	Bigwin Bay	Disturbed	2021	27-Aug-21	y	3.0							
B1	B1	Bigwin East	Deep Water	2021	5-Jul-21	y	3.0							
B1	B1	Bigwin East	Deep Water	2021	2-Aug-21		3.5		2		5			
B1	B1	Bigwin East	Deep Water	2021	27-Aug-21	y	3.0							
B3	B3	Bigwin North	Disturbed	2021	5-Jul-21		10.1						bs	
B3	B3	Bigwin North	Disturbed	2021	5-Jul-21		6.5							
B3	B3	Bigwin North	Disturbed	2021	2-Aug-21		6.5		6		15			
B3	B3	Bigwin North	Disturbed	2021	27-Aug-21	y	3.0							
N24	N24	Boothby's	Nearshore Undisturbed	2021	5-Jul-21	y	3.0							
N24	N24	Boothby's	Nearshore	2021	2-Aug-21		6.2		3		9			

			Undisturbed											
N24	N24	Boothby's	Nearshore Undisturbed	2021	27-Aug-21	y	3.0							
N11	N11	Britannia	Disturbed	2021	5-Jul-21		3.8							
N11	N11	Britannia	Disturbed	2021	2-Aug-21		7.2							
N11	N11	Britannia	Disturbed	2021	27-Aug-21	y	3.0							
N1	N1	Dwight Bay	Deep Water	2021	5-Jul-21	y	3.0							
N1	N1	Dwight Bay	Deep Water	2021	2-Aug-21	y	3.0		2		3			
N1	N1	Dwight Bay	Deep Water	2021	27-Aug-21	y	3.0							
N3	N3	Dwight Beach	Disturbed	2021	5-Jul-21		6.6							
N3	N3	Dwight Beach	Disturbed	2021	2-Aug-21	y	3.0		10		30			
N3	N3	Dwight Beach	Disturbed	2021	27-Aug-21		3.2							
B2	B2	Fairview	Deep Water	2021	5-Jul-21		8.2							
B2	B2	Fairview	Deep Water	2021	2-Aug-21	y	3.0		3		14			
B2	B2	Fairview	Deep Water	2021	27-Aug-21	y	3.0							
N10	N10	Gull Rock	Deep Water	2021	5-Jul-21	y	3.0							
N10	N10	Gull Rock	Deep Water	2021	2-Aug-21	y	3.0		2		10			
N10	N10	Gull Rock	Deep Water	2021	27-Aug-21		6.9							
E13	E13	Haystack bay	Deep Water	2021	5-Jul-21		7.3							

E13	E1 3	Haystack bay	Deep Water	202 1	2-Aug- 21	y	3.0		3		10			
E13	E1 3	Haystack bay	Deep Water	202 1	27-Aug- 21	y	3.0							
E6	E6	Hollow River Lagoon	River	202 1	5-Jul-21	y	3.0							
E6	E6	Hollow River Lagoon	River	202 1	2-Aug- 21		5.0		7		13			
E6	E6	Hollow River Lagoon	River	202 1	27-Aug- 21		3.8							
E18	E1 8	Hollow River mouth	River	202 1	5-Jul-21		3.7							
E18	E1 8	Hollow River mouth	River	202 1	2-Aug- 21		3.7		20		30			
E18	E1 8	Hollow River mouth	River	202 1	27-Aug- 21		4.2							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	202 1	5-Jul-21	y	3.0							
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	202 1	2-Aug- 21		5.3		1		2			
S2	S2	Menomin ee Bay	Nearshor e Undisturb ed	202 1	27-Aug- 21	y	3.0							
N13	N1 3	Moffat's	Nearshor e Undisturb ed	202 1	5-Jul-21		5.8						bs	

N13 F/D	N1 3	Moffat's	Nearshore Undisturbed	2021	5-Jul-21	y	3.0							
N13	N1 3	Moffat's	Nearshore Undisturbed	2021	2-Aug-21		3.8							
N13	N1 3	Moffat's	Nearshore Undisturbed	2021	27-Aug-21		3.9							
E26	E2 6	Narrows west	Nearshore Undisturbed	2021	5-Jul-21		5.9							
E26	E2 6	Narrows west	Nearshore Undisturbed	2021	2-Aug-21	y	3.0		6		16			
E26	E2 6	Narrows west	Nearshore Undisturbed	2021	27-Aug-21	y	3.0							
N30	N3 0	Oxtongue Delta	River	2021	5-Jul-21	y	3.0							
N30	N3 0	Oxtongue Delta	River	2021	2-Aug-21	y	3.0		3		12			
N30	N3 0	Oxtongue Delta	River	2021	27-Aug-21	y	3.0							
N2	N2	Oxtongue mouth	River	2021	5-Jul-21		5.7							
N2	N2	Oxtongue mouth	River	2021	2-Aug-21	y	3.0		5		20			
N2	N2	Oxtongue mouth	River	2021	27-Aug-21		4.2							
N26	N2 6	Portage Bay	Deep Water	2021	5-Jul-21	y	3.0							
N26	N2 6	Portage Bay	Deep Water	2021	2-Aug-21	y	3.0		20		35			

N26	N2 6	Portage Bay	Deep Water	202 1	27-Aug- 21	y	3.0							
N31	N3 1	Portage Bay docks	Disturbed	202 1	5-Jul-21		3.3							
N31	N3 1	Portage Bay docks	Disturbed	202 1	2-Aug- 21	y	3.0		6		14			
N31	N3 1	Portage Bay docks	Disturbed	202 1	27-Aug- 21	y	3.0							
S3	S3	Price's point	Deep Water	202 1	5-Jul-21		3.9							
S3	S3	Price's point	Deep Water	202 1	2-Aug- 21		7.1		2		4			
S3	S3	Price's point	Deep Water	202 1	27-Aug- 21	y	3.0							
E30	E3 0	Ten Mile Bay	Deep Water	202 1	5-Jul-21	y	3.0							
E30	E3 0	Ten Mile Bay	Deep Water	202 1	2-Aug- 21		3.9		3		25			
E30	E3 0	Ten Mile Bay	Deep Water	202 1	27-Aug- 21	y	3.0							
E1	E1	Trading bay	Deep Water	202 1	5-Jul-21	y	3.0							
E1	E1	Trading bay	Deep Water	202 1	2-Aug- 21		4.2		3		7			
E1	E1	Trading bay	Deep Water	202 1	27-Aug- 21	y	3.0							