



MONTHLY RECEIVING WATERS MONITORING REPORT FOR THE SOUTH BAY OCEAN OUTFALL

SOUTH BAY WATER RECLAMATION PLANT

NPDES PERMIT No. CA 0109045
SDRWQCB Order No. R9-2013-0006

NOVEMBER 2017

Environmental Monitoring and Technical Services
2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101
Tel (619) 758-2300 Fax (619) 758-2309



December 31, 2017

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the November 2017 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006, NPDES Permit No. CA0109045.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the South Bay outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan. These data are also presented in the monthly report submitted by the International Boundary and Water Commission, U.S. Section for discharge from the South Bay International Wastewater Treatment Plant (Order No. R9-2014-0009, NPDES Permit No. CA0108928).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Peter S. Vroom, Ph.D.
Deputy Director, Public Utilities Department

TS/rjg

cc: U.S. Environmental Protection Agency, Region 9

INTRODUCTION

Monthly reports of water quality and ocean conditions from Playa Blanco, Mexico to Coronado, USA are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2013-0006, NPDES Permit No. CA0109045, for the South Bay Water Reclamation Plant (SBWRP), South Bay Ocean Outfall (SBOO). Order No. R9-2013-0006 superseded Order No. R9-2006-0067 effective April 4, 2013. This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the SBWRP are presented in separate reports.

MATERIALS AND METHODS

Shore Stations

Water quality monitoring was conducted at 11 stations located along the shore from Playa Blanca, Mexico to Coronado, USA (see station locations map). Three sites are located south of the international border (stations S0, S2, S3), while eight sites are in the United States (stations S4–S6 and S8–S12).

Seawater samples were collected from the surf zone at each station on a weekly basis. These samples were subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of total coliform, fecal coliform, and *Enterococcus* bacteria. Visual observations of water color and clarity, surf height, human or animal activity, and weather conditions were recorded at the time of sample collection. Wind speed and direction were measured using a hand-held anemometer with a compass.

Kelp Bed Stations

Seven kelp bed and other nearshore stations (I19, I24, I25, I26, I32, I39, I40; collectively referred to as “kelp” stations herein) were sampled four times during the month according to NPDES permit specifications. Six stations (I19, I24, I25, I26, I32, I40) are located along the 9- m depth contour, and one (I39) is located along the 18-m depth contour. Three of these stations, I25, I26, and I39, were selected based on their proximity to suitable substrates for the Imperial Beach kelp bed (see station locations map); however, this kelp bed has been historically transient and variable in terms of size and density. Thus, these three stations are only occasionally located within an area where kelp is actually found.

The seven kelp stations are sampled on a weekly basis during the month. Routine monitoring at each kelp site consists of collecting seawater samples at three discrete depths for bacteriological analyses (total coliforms, fecal coliforms, and *Enterococcus* bacteria) and generating water column profiles of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, and transmissivity. Visual observations of weather and water conditions are also recorded at all stations.

Seawater samples at the kelp bed stations are primarily collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses were drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column profiles of the various physical/chemical parameters were taken using a CTD. The CTD collected these physical/chemical data at a rate of eight scans per second. The data were then

internally averaged using the CTD proprietary software, Seasoft, to create water column profiles equivalent to one reading per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

Offshore Stations

Quarterly offshore water quality sampling is typically conducted over three days during February, May, August, and November for a total of 40 stations during each month (see station locations map). These offshore stations (I1–I40) are arranged in a grid surrounding the discharge site, and are generally located along the 9, 19, 28, 38, and 55-m depth contours. The seven offshore sites designated as kelp bed stations (described above) are included as part of the monthly offshore water quality sampling, however the data from these seven stations are reported within the kelp bed station section of the report with the other four days of kelp bed water quality sampling. Monitoring at all sites included measurements of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, and chromomorphpic dissolved organic matter (CDOM). Visual observations of weather and water conditions were also recorded at all stations. Seawater samples for the analysis of indicator bacteria, suspended solids, and oil and grease concentrations were collected at 28 of the stations.

At these offshore stations, water samples for bacteriological, suspended solids, and oil and grease analyses were typically collected using a rosette sampler with Niskin bottles. Measurements of the physical/chemical parameters listed above were taken using a Sea-Bird CTD. Additionally, CTD profile data for depths closest to those at which bacteriological samples were collected were extracted from the CTD profiles and are presented with the bacteriological data.

Bacteriological Reporting and Quality Assurance

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)^[1]. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan (Ocean Plan). The seven standards are defined as follows:

30-day Geometric Mean: The following standards are based on the geometric mean of the five most recent samples from each site.

- (1) Total coliform density shall not exceed 1000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 200 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 35 CFU/100 mL.

^[1]Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

Single Sample Maximums:

- (1) Total coliform density shall not exceed 10,000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 400 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 104 CFU/100 mL;
- (4) Total coliform density shall not exceed 1,000 CFU/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Compliance with the seven Ocean Plan standards are summarized below for the stations located in USA waters. In contrast, no such compliance summaries are presented for the three shore stations located in Mexican waters south of the International Border (i.e., S0, S2, and S3) since this region is not subject to the Ocean Plan standards.

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated exactly the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2017 Quality Assurance Report, which will be completed in March 2018.

SUMMARY OF RESULTS

➤ **Shoreline Water Quality Sampling**

- Because of site access restrictions in Mexico, the South Bay shoreline sampling is carried out on the same day each week (i.e., Tuesday) in order to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the IBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
- During November, the eight shore stations located north of the border were in compliance with all California Ocean Plan (Ocean Plan) water-contact standards; these standards do not apply to stations located in Mexican waters.
- Although the Ocean Plan standards do not apply to these stations, bacteria densities exceeded one or more benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1) in a seawater sample collected at station S0 on November 28.
- Historical analyses of Ocean Plan compliance rates for the South Bay outfall shore and kelp monitoring stations, combined with the results of satellite imagery data, suggest that

outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego's most recent *South Bay Ocean Outfall Annual Receiving Waters Monitoring and Assessment Report* for details (<http://www.sandiego.gov/mwwd/environment/oceanmonitor/reports/index.shtml>).

- Nothing of sewage origin was observed at any of the shore stations.

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled four times over five days during the month (i.e. November 7, 8, 14, 20, 29).
- During November, all of the kelp bed stations were in compliance.
- Water column temperatures ranged from 13.56 to 17.17°C. The difference between surface and bottom waters ranged from 0.31 to 2.93°C, indicating the water column was stratified at some of these sites during the month.
- Chlorophyll *a* concentrations ranged from 0.86 to 3.47 µg/L at the kelp bed stations, suggesting the presence of phytoplankton blooms during the month.
- Suspended solid values ranged from 0.2 to 9.1 mg/L in November.
- Oil and grease values were ≤ 8.75 mg/L in all kelp bed seawater samples.
- Nothing of sewage origin was observed at any of the kelp bed stations.

➤ **Offshore Water Quality Sampling**

- Quarterly offshore water quality sampling was conducted over three days during the month (i.e., November 6, 7, 8).
- During November, all of the offshore stations located within State jurisdictional waters (i.e., I12, I14, I16, I18, I22, I23, I33, I36–I38) were in compliance with the relevant Ocean Plan single sample maximum standards.
- Although the Ocean Plan standards do not apply to stations outside State jurisdictional waters, bacteria densities for these stations did not exceed benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1).
- Water column temperatures ranged from 12.20 to 18.21°C at the offshore sites. The difference between surface and bottom waters ranged from 1.52 to 5.86°C, indicating that the water column was stratified at all of the offshore stations during the month.
- Chlorophyll *a* concentrations ranged from 0.36 to 3.03 µg/L at the offshore sites, suggesting the presence of phytoplankton blooms during the month.
- CDOM data are available upon request.
- Suspended solid values ranged from 0.2 to 10.2 mg/L in November.
- Oil and grease values were ≤ 3.39 mg/L in all offshore seawater samples.
- Nothing of sewage origin was observed at any of the offshore stations.



TABLES AND FIGURES

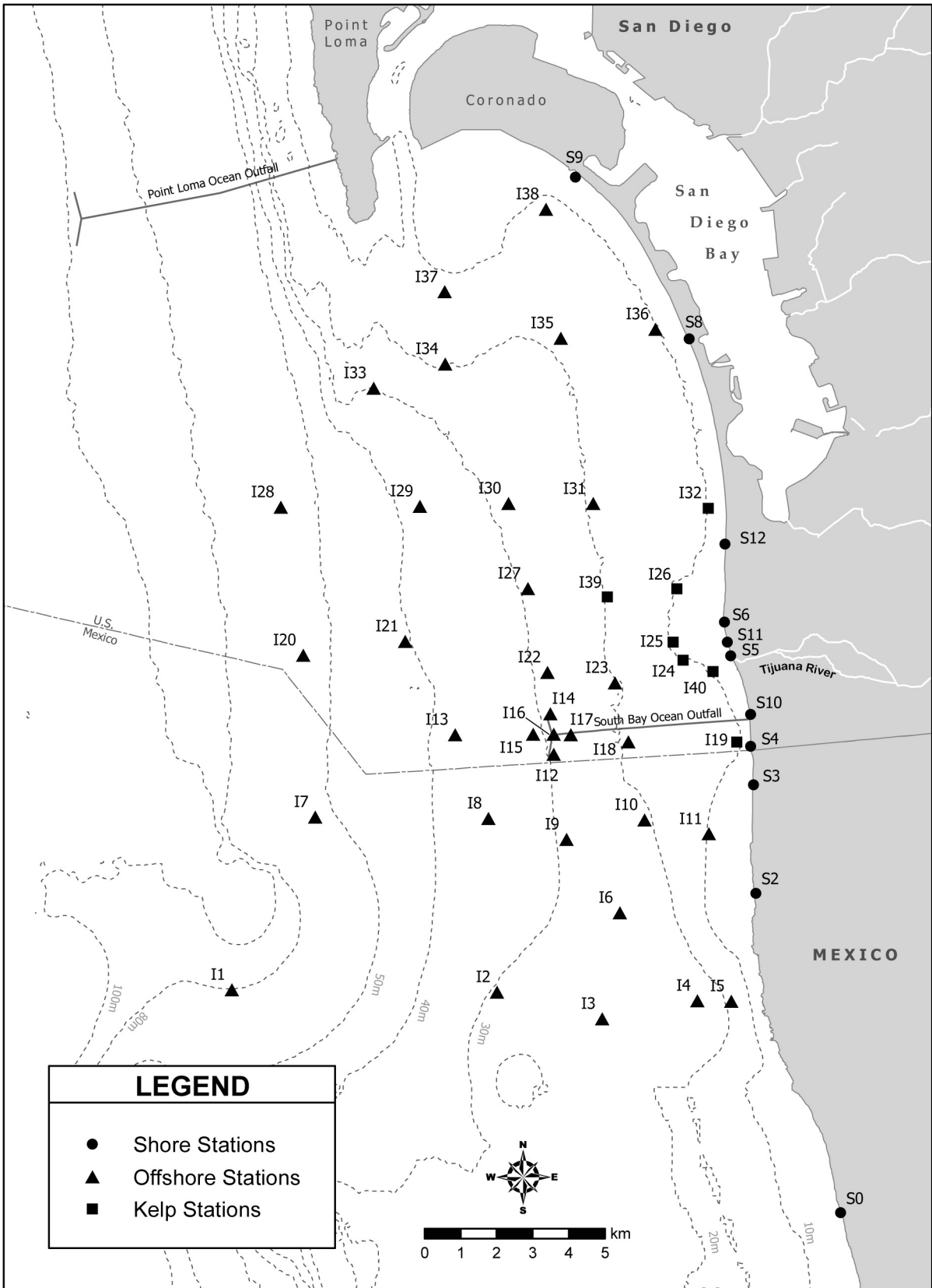


Figure 1.1 Station Map

Shore Stations

Table 2.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2017	19	11	20	5	15	27	20	20
02 Nov 2017	24*	18*	20*	6*	25*	44*	20*	20*
03 Nov 2017	24*	18*	20*	6*	25*	44*	20*	20*
04 Nov 2017	24*	18*	20*	6*	25*	44*	20*	20*
05 Nov 2017	24*	18*	20*	6*	25*	44*	20*	20*
06 Nov 2017	24*	18*	20*	6*	25*	44*	20*	20*
07 Nov 2017	23	18	20	8	28	38	20	20
08 Nov 2017	23	18	20	8	28	38	20	20
09 Nov 2017	20*	24*	20*	11*	25*	26*	20*	20*
10 Nov 2017	20*	24*	20*	11*	25*	26*	20*	20*
11 Nov 2017	20*	24*	20*	11*	25*	26*	20*	20*
12 Nov 2017	20*	24*	20*	11*	25*	26*	20*	20*
13 Nov 2017	20*	24*	20*	11*	25*	26*	20*	20*
14 Nov 2017	19	39	20	8	33	25	23	20
15 Nov 2017	19	39	20	8	33	25	23	20
16 Nov 2017	19*	39*	20*	6*	38*	20*	24*	20*
17 Nov 2017	19*	39*	20*	6*	38*	20*	24*	20*
18 Nov 2017	19*	39*	20*	6*	38*	20*	24*	20*
19 Nov 2017	19*	39*	20*	6*	38*	20*	24*	20*
20 Nov 2017	19*	39*	20*	6*	38*	20*	24*	20*
21 Nov 2017	12	25	32	5	33	13	14	14
22 Nov 2017	12	25	32	5	33	13	14	14
23 Nov 2017	11*	26*	36*	4*	20*	11*	13*	13*
24 Nov 2017	11*	26*	36*	4*	20*	11*	13*	13*
25 Nov 2017	11*	26*	36*	4*	20*	11*	13*	13*
26 Nov 2017	11*	26*	36*	4*	20*	11*	13*	13*
27 Nov 2017	11*	26*	36*	4*	20*	11*	13*	13*
28 Nov 2017	12	25	32	5	20	14	14	14
29 Nov 2017	12	25	32	5	20	14	14	14
30 Nov 2017	11*	26*	36*	6*	36*	13*	13*	13*

* Geometric mean calculated using n<5

Table 2.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2017	3	2	3	3	3	4	2	2
02 Nov 2017	4*	2*	3*	3*	4*	4*	3*	3*
03 Nov 2017	4*	2*	3*	3*	4*	4*	3*	3*
04 Nov 2017	4*	2*	3*	3*	4*	4*	3*	3*
05 Nov 2017	4*	2*	3*	3*	4*	4*	3*	3*
06 Nov 2017	4*	2*	3*	3*	4*	4*	3*	3*
07 Nov 2017	3	2	3	3	4	4	2	2
08 Nov 2017	3	2	3	3	4	4	2	2
09 Nov 2017	4*	2*	3*	3*	5*	4*	3*	2*
10 Nov 2017	4*	2*	3*	3*	5*	4*	3*	2*
11 Nov 2017	4*	2*	3*	3*	5*	4*	3*	2*
12 Nov 2017	4*	2*	3*	3*	5*	4*	3*	2*
13 Nov 2017	4*	2*	3*	3*	5*	4*	3*	2*
14 Nov 2017	3	4	3	3	8	4	2	3
15 Nov 2017	3	4	3	3	8	4	2	3
16 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
17 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
18 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
19 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
20 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
21 Nov 2017	2	4	2	2	5	2	2	4
22 Nov 2017	2	4	2	2	5	2	2	4
23 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
24 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
25 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
26 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
27 Nov 2017	2*	5*	2*	2*	6*	2*	2*	4*
28 Nov 2017	2	4	3	2	5	2	2	4
29 Nov 2017	2	4	3	2	5	2	2	4
30 Nov 2017	2*	4*	3*	2*	6*	2*	2*	4*

* Geometric mean calculated using n<5

Table 2.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Nov 2017	7	3	3	2	2	6	2	3
02 Nov 2017	8*	3*	3*	2*	2*	8	2*	3*
03 Nov 2017	8*	3*	3*	2*	2*	8	2*	3*
04 Nov 2017	8*	3*	3*	2*	2*	8	2*	3*
05 Nov 2017	8*	3*	3*	2*	2*	8	2*	3*
06 Nov 2017	8*	3*	3*	2*	2*	8	2*	3*
07 Nov 2017	8	3	3	2	3	6	2	4
08 Nov 2017	8	3	3	2	3	6	2	4
09 Nov 2017	6*	3*	3*	2*	3*	6	2*	4*
10 Nov 2017	6*	3*	3*	2*	3*	6	2*	4*
11 Nov 2017	6*	3*	3*	2*	3*	6	2*	4*
12 Nov 2017	6*	3*	3*	2*	3*	6	2*	4*
13 Nov 2017	6*	3*	3*	2*	3*	6	2*	4*
14 Nov 2017	5	3	3	2	4	5	2	3
15 Nov 2017	5	3	3	2	4	5	2	3
16 Nov 2017	3*	2*	2*	2*	4*	2	2*	3*
17 Nov 2017	3*	2*	2*	2*	4*	2	2*	3*
18 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
19 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
20 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
21 Nov 2017	3	2	2	2	4	2	2	2
22 Nov 2017	3	2	2	2	4	2	2	2
23 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
24 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
25 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
26 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
27 Nov 2017	3*	2*	2*	2*	4*	2*	2*	3*
28 Nov 2017	3	2	2	2	4	3	2	2
29 Nov 2017	3	2	2	2	4	3	2	2
30 Nov 2017	3*	2*	2*	2*	5*	3*	2*	3*

* Geometric mean calculated using n<5

Table 2.4

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
07 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
21 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
28 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.5

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
07 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
21 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
28 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.6

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
07 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
21 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
28 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.7

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	S4	S5	S6	S8	S9	S10	S11	S12
07 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
21 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC
28 Nov 2017	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.8

Summary of water quality parameters at the SBOO shore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL. The fecal:total coliform ratio (F:T) is unitless. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero	F:T
S0	07 Nov 2017	1040	180e	12e	40	0.067
S0	14 Nov 2017	1020	760	18e	52	0.024
S0	21 Nov 2017	1025	14e	<2	20e	0.143
S0	28 Nov 2017	1030	>16000	4000	5200	0.250
S2	07 Nov 2017	1140	<20	<2	<2	0.100
S2	14 Nov 2017	1110	<20	<2	<2	0.100
S2	21 Nov 2017	1120	<20	<2	<2	0.100
S2	28 Nov 2017	1120	<20	<2	6e	0.100
S3	07 Nov 2017	1225	<20	<2	<2	0.100
S3	14 Nov 2017	1145	20e	<2	<2	0.100
S3	21 Nov 2017	1150	<2	<2	4e	1.000
S3	28 Nov 2017	1205	<20	<2	6e	0.100
S4	07 Nov 2017	831	20e	2e	6e	0.100
S4	14 Nov 2017	843	16e	<2	<2	0.125
S4	21 Nov 2017	836	2e	<2	<2	1.000
S4	28 Nov 2017	832	<20	2e	2e	0.100
S5	07 Nov 2017	956	20e	<2	2e	0.100
S5	14 Nov 2017	1006	300e	26e	4e	0.087
S5	21 Nov 2017	945	4e	<2	2e	0.500
S5	28 Nov 2017	941	<20	<2	<2	0.100
S6	07 Nov 2017	945	<20	<2	<2	0.100
S6	14 Nov 2017	955	20e	4e	<2	0.200
S6	21 Nov 2017	936	220e	<2	<2	0.009
S6	28 Nov 2017	929	<20	6e	4e	0.300
S8	07 Nov 2017	1155	<20	<2	<2	0.100
S8	14 Nov 2017	1150	<2	<2	<2	1.000
S8	21 Nov 2017	1053	<2	<2	<2	1.000
S8	28 Nov 2017	1055	<20	2e	<2	0.100
S9	07 Nov 2017	1221	40e	10e	6e	0.250
S9	14 Nov 2017	1223	100e	40e	14e	0.400
S9	21 Nov 2017	1143	<20	2e	2e	0.100
S9	28 Nov 2017	1119	<20	<2	4e	0.100
S10	07 Nov 2017	836	<20	<2	<2	0.100
S10	14 Nov 2017	848	<20	<2	<2	0.100
S10	21 Nov 2017	831	2e	<2	2e	1.000
S10	28 Nov 2017	826	40e	4e	10e	0.100
S11	07 Nov 2017	949	<20	<2	<2	0.100
S11	14 Nov 2017	1000	40e	2e	<2	0.050
S11	21 Nov 2017	940	<2	<2	<2	1.000
S11	28 Nov 2017	935	<20	2e	<2	0.100

Station	Date	Time	Total	Fecal	Entero	F:T
S12	07 Nov 2017	932	<20	<2	6e	0.100
S12	14 Nov 2017	944	<20	<20	<2	1.000
S12	21 Nov 2017	927	4e	4e	2e	1.000
S12	28 Nov 2017	1001	<20	2e	2e	0.100

ns = not sampled

ND = no data

Table 2.9

Summary of visual observations made during the month for each SBOO shore station by sample date.

Station	Date	Parameter	Value
S0	07 Nov 2017	Arrive Time	1040
S0	07 Nov 2017	Weather	Cloudy
S0	07 Nov 2017	Wind Speed (kts)	2.7
S0	07 Nov 2017	Wind Dir	SE
S0	07 Nov 2017	Animal Life	5 Seagulls
S0	07 Nov 2017	Floatables	None
S0	07 Nov 2017	Water Color	Green
S0	07 Nov 2017	Current Direction	SE
S0	07 Nov 2017	Water Temp (C)	15
S0	07 Nov 2017	Wave Height Low (ft)	2
S0	07 Nov 2017	High Tide (ft)	6.1
S0	07 Nov 2017	High Tide Time	1025
S0	07 Nov 2017	Low Tide (ft)	1.9
S0	07 Nov 2017	Low Tide Time	416
S0	07 Nov 2017	Comments	Kelp; Water clear; Flow from storm drain 1.5 L/sec
S0	14 Nov 2017	Arrive Time	1020
S0	14 Nov 2017	Weather	Sunny
S0	14 Nov 2017	Wind Speed (kts)	5.2
S0	14 Nov 2017	Wind Dir	NE
S0	14 Nov 2017	Animal Life	5 Shorebirds
S0	14 Nov 2017	Floatables	None
S0	14 Nov 2017	Water Color	Green
S0	14 Nov 2017	Current Direction	NE
S0	14 Nov 2017	Water Temp (C)	15
S0	14 Nov 2017	Wave Height Low (ft)	3
S0	14 Nov 2017	High Tide (ft)	5.5
S0	14 Nov 2017	High Tide Time	621
S0	14 Nov 2017	Low Tide (ft)	0.6
S0	14 Nov 2017	Low Tide Time	1251
S0	14 Nov 2017	Comments	Kelp; Water clear; Flow from storm drain 0.5 L/sec
S0	21 Nov 2017	Arrive Time	1025
S0	21 Nov 2017	Weather	Sunny
S0	21 Nov 2017	Wind Speed (kts)	0.9
S0	21 Nov 2017	Wind Dir	SE
S0	21 Nov 2017	Animal Life	5 Birds; 1 Dog
S0	21 Nov 2017	Floatables	None
S0	21 Nov 2017	Water Color	Green
S0	21 Nov 2017	Current Direction	N
S0	21 Nov 2017	Water Temp (C)	16
S0	21 Nov 2017	Wave Height Low (ft)	3
S0	21 Nov 2017	High Tide (ft)	5.4
S0	21 Nov 2017	High Tide Time	935
S0	21 Nov 2017	Low Tide (ft)	0.1
S0	21 Nov 2017	Low Tide Time	1700
S0	21 Nov 2017	Comments	Kelp; 4 Persons; Water clear; Flow from storm drain 1 L/sec
S0	28 Nov 2017	Arrive Time	1030
S0	28 Nov 2017	Weather	Partly Cloudy
S0	28 Nov 2017	Wind Speed (kts)	2.6

Station	Date	Parameter	Value
S0	28 Nov 2017	Wind Dir	SE
S0	28 Nov 2017	Animal Life	>20 Shorebirds
S0	28 Nov 2017	Floatables	None
S0	28 Nov 2017	Water Color	Green
S0	28 Nov 2017	Current Direction	SE
S0	28 Nov 2017	Water Temp (C)	17
S0	28 Nov 2017	Wave Height Low (ft)	3
S0	28 Nov 2017	High Tide (ft)	4.7
S0	28 Nov 2017	High Tide Time	500
S0	28 Nov 2017	Low Tide (ft)	1.6
S0	28 Nov 2017	Low Tide Time	1124
S0	28 Nov 2017	Comments	Kelp; Water clear; Flow from storm drain 1 L/sec
S2	07 Nov 2017	Arrive Time	1140
S2	07 Nov 2017	Weather	Cloudy
S2	07 Nov 2017	Wind Speed (kts)	2.3
S2	07 Nov 2017	Wind Dir	SE
S2	07 Nov 2017	Animal Life	>20 Shorebirds
S2	07 Nov 2017	Floatables	None
S2	07 Nov 2017	Water Color	Green
S2	07 Nov 2017	Current Direction	SE
S2	07 Nov 2017	Water Temp (C)	15
S2	07 Nov 2017	Wave Height Low (ft)	2
S2	07 Nov 2017	High Tide (ft)	6.1
S2	07 Nov 2017	High Tide Time	1025
S2	07 Nov 2017	Low Tide (ft)	-0.5
S2	07 Nov 2017	Low Tide Time	1748
S2	07 Nov 2017	Comments	Kelp; Seagrass; Water clear; No flow from the storm drain; Trash on the shore
S2	14 Nov 2017	Arrive Time	1110
S2	14 Nov 2017	Weather	Sunny
S2	14 Nov 2017	Wind Speed (kts)	4.2
S2	14 Nov 2017	Wind Dir	NE
S2	14 Nov 2017	Animal Life	5 Shorebirds
S2	14 Nov 2017	Floatables	None
S2	14 Nov 2017	Water Color	Green
S2	14 Nov 2017	Current Direction	NE
S2	14 Nov 2017	Water Temp (C)	15
S2	14 Nov 2017	Wave Height Low (ft)	3
S2	14 Nov 2017	High Tide (ft)	5.5
S2	14 Nov 2017	High Tide Time	621
S2	14 Nov 2017	Low Tide (ft)	0.6
S2	14 Nov 2017	Low Tide Time	1251
S2	14 Nov 2017	Comments	Kelp; Water clear; No flow from storm drain
S2	21 Nov 2017	Arrive Time	1120
S2	21 Nov 2017	Weather	Sunny
S2	21 Nov 2017	Wind Speed (kts)	2.4
S2	21 Nov 2017	Wind Dir	SE
S2	21 Nov 2017	Animal Life	5 Birds; 1 Dog; 6 Dolphins
S2	21 Nov 2017	Floatables	None
S2	21 Nov 2017	Water Color	Green
S2	21 Nov 2017	Current Direction	N
S2	21 Nov 2017	Water Temp (C)	16

Station	Date	Parameter	Value
S2	21 Nov 2017	Wave Height Low (ft)	3
S2	21 Nov 2017	High Tide (ft)	5.4
S2	21 Nov 2017	High Tide Time	935
S2	21 Nov 2017	Low Tide (ft)	0.1
S2	21 Nov 2017	Low Tide Time	1700
S2	21 Nov 2017	Comments	Kelp; Water clear; No flow from storm drain
S2	28 Nov 2017	Arrive Time	1120
S2	28 Nov 2017	Weather	Partly Cloudy
S2	28 Nov 2017	Wind Speed (kts)	1.9
S2	28 Nov 2017	Wind Dir	NE
S2	28 Nov 2017	Animal Life	>20 Shorebirds
S2	28 Nov 2017	Floatables	None
S2	28 Nov 2017	Water Color	Green
S2	28 Nov 2017	Current Direction	NE
S2	28 Nov 2017	Water Temp (C)	17
S2	28 Nov 2017	Wave Height Low (ft)	5
S2	28 Nov 2017	High Tide (ft)	3.8
S2	28 Nov 2017	High Tide Time	1655
S2	28 Nov 2017	Low Tide (ft)	1.6
S2	28 Nov 2017	Low Tide Time	1124
S2	28 Nov 2017	Comments	Kelp; Water clear; No flow from storm drain
S3	07 Nov 2017	Arrive Time	1225
S3	07 Nov 2017	Weather	Cloudy
S3	07 Nov 2017	Wind Speed (kts)	3.4
S3	07 Nov 2017	Wind Dir	SE
S3	07 Nov 2017	Animal Life	>20 Shorebirds; 5 Dogs
S3	07 Nov 2017	Floatables	None
S3	07 Nov 2017	Water Color	Green
S3	07 Nov 2017	Current Direction	SE
S3	07 Nov 2017	Water Temp (C)	15
S3	07 Nov 2017	Wave Height Low (ft)	2
S3	07 Nov 2017	High Tide (ft)	6.1
S3	07 Nov 2017	High Tide Time	1025
S3	07 Nov 2017	Low Tide (ft)	-0.5
S3	07 Nov 2017	Low Tide Time	1748
S3	07 Nov 2017	Comments	Kelp; 4 Persons; Water clear; No flow from storm drain
S3	14 Nov 2017	Arrive Time	1145
S3	14 Nov 2017	Weather	Sunny
S3	14 Nov 2017	Wind Speed (kts)	3.8
S3	14 Nov 2017	Wind Dir	NE
S3	14 Nov 2017	Animal Life	5 Shorebirds
S3	14 Nov 2017	Floatables	None
S3	14 Nov 2017	Water Color	Green
S3	14 Nov 2017	Current Direction	NE
S3	14 Nov 2017	Water Temp (C)	15
S3	14 Nov 2017	Wave Height Low (ft)	3
S3	14 Nov 2017	High Tide (ft)	5.5
S3	14 Nov 2017	High Tide Time	621
S3	14 Nov 2017	Low Tide (ft)	0.6
S3	14 Nov 2017	Low Tide Time	1251
S3	14 Nov 2017	Comments	Kelp; Water clear; No flow from storm drain

Station	Date	Parameter	Value
S3	21 Nov 2017	Arrive Time	1150
S3	21 Nov 2017	Weather	Sunny
S3	21 Nov 2017	Wind Speed (kts)	1.3
S3	21 Nov 2017	Wind Dir	SE
S3	21 Nov 2017	Animal Life	3 Birds; 1 Dog
S3	21 Nov 2017	Floatables	None
S3	21 Nov 2017	Water Color	Green
S3	21 Nov 2017	Current Direction	N
S3	21 Nov 2017	Water Temp (C)	16
S3	21 Nov 2017	Wave Height Low (ft)	3
S3	21 Nov 2017	High Tide (ft)	5.4
S3	21 Nov 2017	High Tide Time	935
S3	21 Nov 2017	Low Tide (ft)	0.1
S3	21 Nov 2017	Low Tide Time	1700
S3	21 Nov 2017	Comments	Kelp; 5 Persons; 3 Surfers; Water clear; No flow from storm drain
S3	28 Nov 2017	Arrive Time	1205
S3	28 Nov 2017	Weather	Partly Cloudy
S3	28 Nov 2017	Wind Speed (kts)	6.4
S3	28 Nov 2017	Wind Dir	SE
S3	28 Nov 2017	Animal Life	>20 Shorebirds
S3	28 Nov 2017	Floatables	None
S3	28 Nov 2017	Water Color	Green
S3	28 Nov 2017	Current Direction	SE
S3	28 Nov 2017	Water Temp (C)	17
S3	28 Nov 2017	Wave Height Low (ft)	5
S3	28 Nov 2017	High Tide (ft)	3.8
S3	28 Nov 2017	High Tide Time	1655
S3	28 Nov 2017	Low Tide (ft)	1.6
S3	28 Nov 2017	Low Tide Time	1124
S3	28 Nov 2017	Comments	Kelp; 5 Fishermen; Water clear; No flow from storm drain
S4	07 Nov 2017	Arrive Time	831
S4	07 Nov 2017	Weather	Cloudy
S4	07 Nov 2017	Wind Speed (kts)	3.4
S4	07 Nov 2017	Wind Dir	E
S4	07 Nov 2017	Animal Life	9 Birds
S4	07 Nov 2017	Floatables	None
S4	07 Nov 2017	Water Color	Green
S4	07 Nov 2017	Current Direction	N
S4	07 Nov 2017	Water Temp (C)	15.3
S4	07 Nov 2017	Wave Height Low (ft)	3
S4	07 Nov 2017	High Tide (ft)	6.1
S4	07 Nov 2017	High Tide Time	1025
S4	07 Nov 2017	Low Tide (ft)	1.9
S4	07 Nov 2017	Low Tide Time	416
S4	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S4	14 Nov 2017	Arrive Time	843
S4	14 Nov 2017	Weather	Sunny
S4	14 Nov 2017	Wind Speed (kts)	6.2
S4	14 Nov 2017	Wind Dir	NE
S4	14 Nov 2017	Animal Life	4 Birds
S4	14 Nov 2017	Floatables	None
S4	14 Nov 2017	Water Color	Green

Station	Date	Parameter	Value
S4	14 Nov 2017	Current Direction	N
S4	14 Nov 2017	Water Temp (C)	13.5
S4	14 Nov 2017	Wave Height Low (ft)	2
S4	14 Nov 2017	High Tide (ft)	5.5
S4	14 Nov 2017	High Tide Time	621
S4	14 Nov 2017	Low Tide (ft)	0.6
S4	14 Nov 2017	Low Tide Time	1251
S4	14 Nov 2017	Comments	Seagrass; Water clear
S4	21 Nov 2017	Arrive Time	836
S4	21 Nov 2017	Weather	Sunny
S4	21 Nov 2017	Wind Speed (kts)	0.7
S4	21 Nov 2017	Wind Dir	W
S4	21 Nov 2017	Animal Life	None
S4	21 Nov 2017	Floatables	None
S4	21 Nov 2017	Water Color	Green
S4	21 Nov 2017	Current Direction	N
S4	21 Nov 2017	Water Temp (C)	12.8
S4	21 Nov 2017	Wave Height Low (ft)	3
S4	21 Nov 2017	High Tide (ft)	5.4
S4	21 Nov 2017	High Tide Time	935
S4	21 Nov 2017	Low Tide (ft)	2.3
S4	21 Nov 2017	Low Tide Time	329
S4	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S4	28 Nov 2017	Arrive Time	832
S4	28 Nov 2017	Weather	Cloudy
S4	28 Nov 2017	Wind Speed (kts)	2.8
S4	28 Nov 2017	Wind Dir	SE
S4	28 Nov 2017	Animal Life	None
S4	28 Nov 2017	Floatables	None
S4	28 Nov 2017	Water Color	Green
S4	28 Nov 2017	Current Direction	N
S4	28 Nov 2017	Water Temp (C)	12.4
S4	28 Nov 2017	Wave Height Low (ft)	3
S4	28 Nov 2017	High Tide (ft)	4.7
S4	28 Nov 2017	High Tide Time	500
S4	28 Nov 2017	Low Tide (ft)	1.6
S4	28 Nov 2017	Low Tide Time	1124
S4	28 Nov 2017	Comments	Kelp; Seagrass; Water clear
S5	07 Nov 2017	Arrive Time	956
S5	07 Nov 2017	Weather	Cloudy
S5	07 Nov 2017	Wind Speed (kts)	3.6
S5	07 Nov 2017	Wind Dir	N
S5	07 Nov 2017	Animal Life	2 Birds
S5	07 Nov 2017	Floatables	None
S5	07 Nov 2017	Water Color	Green
S5	07 Nov 2017	Current Direction	N
S5	07 Nov 2017	Water Temp (C)	14.8
S5	07 Nov 2017	Wave Height Low (ft)	3
S5	07 Nov 2017	High Tide (ft)	6.1
S5	07 Nov 2017	High Tide Time	1025
S5	07 Nov 2017	Low Tide (ft)	1.9
S5	07 Nov 2017	Low Tide Time	416

Station	Date	Parameter	Value
S5	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S5	14 Nov 2017	Arrive Time	1006
S5	14 Nov 2017	Weather	Sunny
S5	14 Nov 2017	Wind Speed (kts)	13.2
S5	14 Nov 2017	Wind Dir	N
S5	14 Nov 2017	Animal Life	1 Dog
S5	14 Nov 2017	Floatables	None
S5	14 Nov 2017	Water Color	Green
S5	14 Nov 2017	Current Direction	N
S5	14 Nov 2017	Water Temp (C)	14.9
S5	14 Nov 2017	Wave Height Low (ft)	3
S5	14 Nov 2017	High Tide (ft)	5.5
S5	14 Nov 2017	High Tide Time	621
S5	14 Nov 2017	Low Tide (ft)	0.6
S5	14 Nov 2017	Low Tide Time	1251
S5	14 Nov 2017	Comments	Kelp; Seagrass; 5 Persons; Water clear
S5	21 Nov 2017	Arrive Time	945
S5	21 Nov 2017	Weather	Sunny
S5	21 Nov 2017	Wind Speed (kts)	3.8
S5	21 Nov 2017	Wind Dir	W
S5	21 Nov 2017	Animal Life	None
S5	21 Nov 2017	Floatables	None
S5	21 Nov 2017	Water Color	Green
S5	21 Nov 2017	Current Direction	N
S5	21 Nov 2017	Water Temp (C)	11.6
S5	21 Nov 2017	Wave Height Low (ft)	2
S5	21 Nov 2017	High Tide (ft)	5.4
S5	21 Nov 2017	High Tide Time	935
S5	21 Nov 2017	Low Tide (ft)	2.3
S5	21 Nov 2017	Low Tide Time	329
S5	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S5	28 Nov 2017	Arrive Time	941
S5	28 Nov 2017	Weather	Partly Cloudy
S5	28 Nov 2017	Wind Speed (kts)	1.5
S5	28 Nov 2017	Wind Dir	W
S5	28 Nov 2017	Animal Life	None
S5	28 Nov 2017	Floatables	None
S5	28 Nov 2017	Water Color	Green
S5	28 Nov 2017	Current Direction	N
S5	28 Nov 2017	Water Temp (C)	12.6
S5	28 Nov 2017	Wave Height Low (ft)	2
S5	28 Nov 2017	High Tide (ft)	4.7
S5	28 Nov 2017	High Tide Time	500
S5	28 Nov 2017	Low Tide (ft)	1.6
S5	28 Nov 2017	Low Tide Time	1124
S5	28 Nov 2017	Comments	Kelp; 2 Persons; Water clear
S6	07 Nov 2017	Arrive Time	945
S6	07 Nov 2017	Weather	Cloudy
S6	07 Nov 2017	Wind Speed (kts)	0
S6	07 Nov 2017	Wind Dir	
S6	07 Nov 2017	Animal Life	None

Station	Date	Parameter	Value
S6	07 Nov 2017	Floatables	None
S6	07 Nov 2017	Water Color	Green
S6	07 Nov 2017	Current Direction	N
S6	07 Nov 2017	Water Temp (C)	14.7
S6	07 Nov 2017	Wave Height Low (ft)	3
S6	07 Nov 2017	High Tide (ft)	6.1
S6	07 Nov 2017	High Tide Time	1025
S6	07 Nov 2017	Low Tide (ft)	1.9
S6	07 Nov 2017	Low Tide Time	416
S6	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S6	14 Nov 2017	Arrive Time	955
S6	14 Nov 2017	Weather	Sunny
S6	14 Nov 2017	Wind Speed (kts)	4.4
S6	14 Nov 2017	Wind Dir	N
S6	14 Nov 2017	Animal Life	None
S6	14 Nov 2017	Floatables	None
S6	14 Nov 2017	Water Color	Green
S6	14 Nov 2017	Current Direction	N
S6	14 Nov 2017	Water Temp (C)	13.9
S6	14 Nov 2017	Wave Height Low (ft)	3
S6	14 Nov 2017	High Tide (ft)	5.5
S6	14 Nov 2017	High Tide Time	621
S6	14 Nov 2017	Low Tide (ft)	0.6
S6	14 Nov 2017	Low Tide Time	1251
S6	14 Nov 2017	Comments	2 Surfers; Water clear
S6	21 Nov 2017	Arrive Time	936
S6	21 Nov 2017	Weather	Sunny
S6	21 Nov 2017	Wind Speed (kts)	3.6
S6	21 Nov 2017	Wind Dir	W
S6	21 Nov 2017	Animal Life	None
S6	21 Nov 2017	Floatables	None
S6	21 Nov 2017	Water Color	Green
S6	21 Nov 2017	Current Direction	N
S6	21 Nov 2017	Water Temp (C)	12.4
S6	21 Nov 2017	Wave Height Low (ft)	4
S6	21 Nov 2017	High Tide (ft)	5.4
S6	21 Nov 2017	High Tide Time	935
S6	21 Nov 2017	Low Tide (ft)	2.3
S6	21 Nov 2017	Low Tide Time	329
S6	21 Nov 2017	Comments	Kelp; Seagrass; 4 Persons; Water clear
S6	28 Nov 2017	Arrive Time	929
S6	28 Nov 2017	Weather	Partly Cloudy
S6	28 Nov 2017	Wind Speed (kts)	1.3
S6	28 Nov 2017	Wind Dir	W
S6	28 Nov 2017	Animal Life	None
S6	28 Nov 2017	Floatables	None
S6	28 Nov 2017	Water Color	Green
S6	28 Nov 2017	Current Direction	N
S6	28 Nov 2017	Water Temp (C)	12.3
S6	28 Nov 2017	Wave Height Low (ft)	3
S6	28 Nov 2017	High Tide (ft)	4.7
S6	28 Nov 2017	High Tide Time	500

Station	Date	Parameter	Value
S6	28 Nov 2017	Low Tide (ft)	1.6
S6	28 Nov 2017	Low Tide Time	1124
S6	28 Nov 2017	Comments	4 Persons; 4 Surfers; Water clear
S8	07 Nov 2017	Arrive Time	1155
S8	07 Nov 2017	Weather	Cloudy
S8	07 Nov 2017	Wind Speed (kts)	5
S8	07 Nov 2017	Wind Dir	NW
S8	07 Nov 2017	Animal Life	None
S8	07 Nov 2017	Floatables	None
S8	07 Nov 2017	Water Color	Green
S8	07 Nov 2017	Current Direction	N
S8	07 Nov 2017	Water Temp (C)	15.1
S8	07 Nov 2017	Wave Height Low (ft)	3
S8	07 Nov 2017	High Tide (ft)	6.1
S8	07 Nov 2017	High Tide Time	1025
S8	07 Nov 2017	Low Tide (ft)	-0.5
S8	07 Nov 2017	Low Tide Time	1748
S8	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S8	14 Nov 2017	Arrive Time	1150
S8	14 Nov 2017	Weather	Sunny
S8	14 Nov 2017	Wind Speed (kts)	6.4
S8	14 Nov 2017	Wind Dir	N
S8	14 Nov 2017	Animal Life	None
S8	14 Nov 2017	Floatables	None
S8	14 Nov 2017	Water Color	Green
S8	14 Nov 2017	Current Direction	N
S8	14 Nov 2017	Water Temp (C)	14.1
S8	14 Nov 2017	Wave Height Low (ft)	2
S8	14 Nov 2017	High Tide (ft)	5.5
S8	14 Nov 2017	High Tide Time	621
S8	14 Nov 2017	Low Tide (ft)	0.6
S8	14 Nov 2017	Low Tide Time	1251
S8	14 Nov 2017	Comments	Kelp; 5 Persons; Water clear
S8	21 Nov 2017	Arrive Time	1053
S8	21 Nov 2017	Weather	Sunny
S8	21 Nov 2017	Wind Speed (kts)	4
S8	21 Nov 2017	Wind Dir	W
S8	21 Nov 2017	Animal Life	1 Shorebird; 1 Bird; 1 Seagull
S8	21 Nov 2017	Floatables	None
S8	21 Nov 2017	Water Color	Green
S8	21 Nov 2017	Current Direction	N
S8	21 Nov 2017	Water Temp (C)	14
S8	21 Nov 2017	Wave Height Low (ft)	2
S8	21 Nov 2017	High Tide (ft)	5.4
S8	21 Nov 2017	High Tide Time	935
S8	21 Nov 2017	Low Tide (ft)	0.1
S8	21 Nov 2017	Low Tide Time	1700
S8	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S8	28 Nov 2017	Arrive Time	1055
S8	28 Nov 2017	Weather	Partly Cloudy
S8	28 Nov 2017	Wind Speed (kts)	6

Station	Date	Parameter	Value
S8	28 Nov 2017	Wind Dir	W
S8	28 Nov 2017	Animal Life	None
S8	28 Nov 2017	Floatables	None
S8	28 Nov 2017	Water Color	Green
S8	28 Nov 2017	Current Direction	N
S8	28 Nov 2017	Water Temp (C)	12.9
S8	28 Nov 2017	Wave Height Low (ft)	2
S8	28 Nov 2017	High Tide (ft)	4.7
S8	28 Nov 2017	High Tide Time	500
S8	28 Nov 2017	Low Tide (ft)	1.6
S8	28 Nov 2017	Low Tide Time	1124
S8	28 Nov 2017	Comments	Seagrass; Water clear
S9	07 Nov 2017	Arrive Time	1221
S9	07 Nov 2017	Weather	Cloudy
S9	07 Nov 2017	Wind Speed (kts)	3.1
S9	07 Nov 2017	Wind Dir	NW
S9	07 Nov 2017	Animal Life	None
S9	07 Nov 2017	Floatables	None
S9	07 Nov 2017	Water Color	Green
S9	07 Nov 2017	Current Direction	N
S9	07 Nov 2017	Water Temp (C)	15.6
S9	07 Nov 2017	Wave Height Low (ft)	2
S9	07 Nov 2017	High Tide (ft)	6.1
S9	07 Nov 2017	High Tide Time	1025
S9	07 Nov 2017	Low Tide (ft)	-0.5
S9	07 Nov 2017	Low Tide Time	1748
S9	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S9	14 Nov 2017	Arrive Time	1223
S9	14 Nov 2017	Weather	Sunny
S9	14 Nov 2017	Wind Speed (kts)	5.6
S9	14 Nov 2017	Wind Dir	N
S9	14 Nov 2017	Animal Life	None
S9	14 Nov 2017	Floatables	None
S9	14 Nov 2017	Water Color	Green
S9	14 Nov 2017	Current Direction	N
S9	14 Nov 2017	Water Temp (C)	15.8
S9	14 Nov 2017	Wave Height Low (ft)	2
S9	14 Nov 2017	High Tide (ft)	5.5
S9	14 Nov 2017	High Tide Time	621
S9	14 Nov 2017	Low Tide (ft)	0.6
S9	14 Nov 2017	Low Tide Time	1251
S9	14 Nov 2017	Comments	2 Persons; Water clear
S9	21 Nov 2017	Arrive Time	1143
S9	21 Nov 2017	Weather	Sunny
S9	21 Nov 2017	Wind Speed (kts)	1.9
S9	21 Nov 2017	Wind Dir	W
S9	21 Nov 2017	Animal Life	None
S9	21 Nov 2017	Floatables	None
S9	21 Nov 2017	Water Color	Green
S9	21 Nov 2017	Current Direction	N
S9	21 Nov 2017	Water Temp (C)	14.1
S9	21 Nov 2017	Wave Height Low (ft)	2

Station	Date	Parameter	Value
S9	21 Nov 2017	High Tide (ft)	5.4
S9	21 Nov 2017	High Tide Time	935
S9	21 Nov 2017	Low Tide (ft)	0.1
S9	21 Nov 2017	Low Tide Time	1700
S9	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S9	28 Nov 2017	Arrive Time	1119
S9	28 Nov 2017	Weather	Partly Cloudy
S9	28 Nov 2017	Wind Speed (kts)	6.3
S9	28 Nov 2017	Wind Dir	W
S9	28 Nov 2017	Animal Life	None
S9	28 Nov 2017	Floatables	None
S9	28 Nov 2017	Water Color	Green
S9	28 Nov 2017	Current Direction	N
S9	28 Nov 2017	Water Temp (C)	12.1
S9	28 Nov 2017	Wave Height Low (ft)	3
S9	28 Nov 2017	High Tide (ft)	3.8
S9	28 Nov 2017	High Tide Time	1655
S9	28 Nov 2017	Low Tide (ft)	1.6
S9	28 Nov 2017	Low Tide Time	1124
S9	28 Nov 2017	Comments	Water clear
S10	07 Nov 2017	Arrive Time	836
S10	07 Nov 2017	Weather	Cloudy
S10	07 Nov 2017	Wind Speed (kts)	3.6
S10	07 Nov 2017	Wind Dir	E
S10	07 Nov 2017	Animal Life	None
S10	07 Nov 2017	Floatables	None
S10	07 Nov 2017	Water Color	Green
S10	07 Nov 2017	Current Direction	N
S10	07 Nov 2017	Water Temp (C)	14
S10	07 Nov 2017	Wave Height Low (ft)	3
S10	07 Nov 2017	High Tide (ft)	6.1
S10	07 Nov 2017	High Tide Time	1025
S10	07 Nov 2017	Low Tide (ft)	1.9
S10	07 Nov 2017	Low Tide Time	416
S10	07 Nov 2017	Comments	Kelp; Seagrass; Water clear
S10	14 Nov 2017	Arrive Time	848
S10	14 Nov 2017	Weather	Sunny
S10	14 Nov 2017	Wind Speed (kts)	5.8
S10	14 Nov 2017	Wind Dir	N
S10	14 Nov 2017	Animal Life	None
S10	14 Nov 2017	Floatables	None
S10	14 Nov 2017	Water Color	Green
S10	14 Nov 2017	Current Direction	N
S10	14 Nov 2017	Water Temp (C)	12.8
S10	14 Nov 2017	Wave Height Low (ft)	3
S10	14 Nov 2017	High Tide (ft)	5.5
S10	14 Nov 2017	High Tide Time	621
S10	14 Nov 2017	Low Tide (ft)	0.6
S10	14 Nov 2017	Low Tide Time	1251
S10	14 Nov 2017	Comments	Water clear
S10	21 Nov 2017	Arrive Time	831

Station	Date	Parameter	Value
S10	21 Nov 2017	Weather	Sunny
S10	21 Nov 2017	Wind Speed (kts)	1.1
S10	21 Nov 2017	Wind Dir	W
S10	21 Nov 2017	Animal Life	None
S10	21 Nov 2017	Floatables	None
S10	21 Nov 2017	Water Color	Green
S10	21 Nov 2017	Current Direction	N
S10	21 Nov 2017	Water Temp (C)	12.4
S10	21 Nov 2017	Wave Height Low (ft)	2
S10	21 Nov 2017	High Tide (ft)	5.4
S10	21 Nov 2017	High Tide Time	935
S10	21 Nov 2017	Low Tide (ft)	2.3
S10	21 Nov 2017	Low Tide Time	329
S10	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S10	28 Nov 2017	Arrive Time	826
S10	28 Nov 2017	Weather	Cloudy
S10	28 Nov 2017	Wind Speed (kts)	2.8
S10	28 Nov 2017	Wind Dir	SE
S10	28 Nov 2017	Animal Life	None
S10	28 Nov 2017	Floatables	None
S10	28 Nov 2017	Water Color	Green
S10	28 Nov 2017	Current Direction	N
S10	28 Nov 2017	Water Temp (C)	13.5
S10	28 Nov 2017	Wave Height Low (ft)	3
S10	28 Nov 2017	High Tide (ft)	4.7
S10	28 Nov 2017	High Tide Time	500
S10	28 Nov 2017	Low Tide (ft)	1.6
S10	28 Nov 2017	Low Tide Time	1124
S10	28 Nov 2017	Comments	Kelp; Seagrass; Water clear
S11	07 Nov 2017	Arrive Time	949
S11	07 Nov 2017	Weather	Cloudy
S11	07 Nov 2017	Wind Speed (kts)	3.4
S11	07 Nov 2017	Wind Dir	NW
S11	07 Nov 2017	Animal Life	1 Dog
S11	07 Nov 2017	Floatables	None
S11	07 Nov 2017	Water Color	Green
S11	07 Nov 2017	Current Direction	N
S11	07 Nov 2017	Water Temp (C)	14.4
S11	07 Nov 2017	Wave Height Low (ft)	3
S11	07 Nov 2017	High Tide (ft)	6.1
S11	07 Nov 2017	High Tide Time	1025
S11	07 Nov 2017	Low Tide (ft)	1.9
S11	07 Nov 2017	Low Tide Time	416
S11	07 Nov 2017	Comments	Kelp; Seagrass; 2 Persons; Water clear
S11	14 Nov 2017	Arrive Time	1000
S11	14 Nov 2017	Weather	Sunny
S11	14 Nov 2017	Wind Speed (kts)	4.4
S11	14 Nov 2017	Wind Dir	N
S11	14 Nov 2017	Animal Life	None
S11	14 Nov 2017	Floatables	None
S11	14 Nov 2017	Water Color	Green
S11	14 Nov 2017	Current Direction	N

Station	Date	Parameter	Value
S11	14 Nov 2017	Water Temp (C)	13.2
S11	14 Nov 2017	Wave Height Low (ft)	2
S11	14 Nov 2017	High Tide (ft)	5.5
S11	14 Nov 2017	High Tide Time	621
S11	14 Nov 2017	Low Tide (ft)	0.6
S11	14 Nov 2017	Low Tide Time	1251
S11	14 Nov 2017	Comments	Water clear
S11	21 Nov 2017	Arrive Time	940
S11	21 Nov 2017	Weather	Sunny
S11	21 Nov 2017	Wind Speed (kts)	1.5
S11	21 Nov 2017	Wind Dir	W
S11	21 Nov 2017	Animal Life	None
S11	21 Nov 2017	Floatables	None
S11	21 Nov 2017	Water Color	Green
S11	21 Nov 2017	Current Direction	N
S11	21 Nov 2017	Water Temp (C)	12.8
S11	21 Nov 2017	Wave Height Low (ft)	3
S11	21 Nov 2017	High Tide (ft)	5.4
S11	21 Nov 2017	High Tide Time	935
S11	21 Nov 2017	Low Tide (ft)	2.3
S11	21 Nov 2017	Low Tide Time	329
S11	21 Nov 2017	Comments	Kelp; Seagrass; Water clear
S11	28 Nov 2017	Arrive Time	935
S11	28 Nov 2017	Weather	Partly Cloudy
S11	28 Nov 2017	Wind Speed (kts)	2.6
S11	28 Nov 2017	Wind Dir	SW
S11	28 Nov 2017	Animal Life	None
S11	28 Nov 2017	Floatables	None
S11	28 Nov 2017	Water Color	Green
S11	28 Nov 2017	Current Direction	N
S11	28 Nov 2017	Water Temp (C)	13.2
S11	28 Nov 2017	Wave Height Low (ft)	3
S11	28 Nov 2017	High Tide (ft)	4.7
S11	28 Nov 2017	High Tide Time	500
S11	28 Nov 2017	Low Tide (ft)	1.6
S11	28 Nov 2017	Low Tide Time	1124
S11	28 Nov 2017	Comments	Seagrass; Water clear
S12	07 Nov 2017	Arrive Time	932
S12	07 Nov 2017	Weather	Cloudy
S12	07 Nov 2017	Wind Speed (kts)	1.7
S12	07 Nov 2017	Wind Dir	W
S12	07 Nov 2017	Animal Life	None
S12	07 Nov 2017	Floatables	None
S12	07 Nov 2017	Water Color	Green
S12	07 Nov 2017	Current Direction	N
S12	07 Nov 2017	Water Temp (C)	15.1
S12	07 Nov 2017	Wave Height Low (ft)	2
S12	07 Nov 2017	High Tide (ft)	6.1
S12	07 Nov 2017	High Tide Time	1025
S12	07 Nov 2017	Low Tide (ft)	1.9
S12	07 Nov 2017	Low Tide Time	416
S12	07 Nov 2017	Comments	Kelp; Seagrass; 3 Persons; 1 Surfer; Water clear

Station	Date	Parameter	Value
S12	14 Nov 2017	Arrive Time	944
S12	14 Nov 2017	Weather	Sunny
S12	14 Nov 2017	Wind Speed (kts)	5.2
S12	14 Nov 2017	Wind Dir	N
S12	14 Nov 2017	Animal Life	2 Dogs
S12	14 Nov 2017	Floatables	None
S12	14 Nov 2017	Water Color	Green
S12	14 Nov 2017	Current Direction	N
S12	14 Nov 2017	Water Temp (C)	13.3
S12	14 Nov 2017	Wave Height Low (ft)	2
S12	14 Nov 2017	High Tide (ft)	5.5
S12	14 Nov 2017	High Tide Time	621
S12	14 Nov 2017	Low Tide (ft)	0.6
S12	14 Nov 2017	Low Tide Time	1251
S12	14 Nov 2017	Comments	2 Persons; 1 Surfer; Water clear
S12	21 Nov 2017	Arrive Time	927
S12	21 Nov 2017	Weather	Sunny
S12	21 Nov 2017	Wind Speed (kts)	2.1
S12	21 Nov 2017	Wind Dir	W
S12	21 Nov 2017	Animal Life	None
S12	21 Nov 2017	Floatables	None
S12	21 Nov 2017	Water Color	Green
S12	21 Nov 2017	Current Direction	N
S12	21 Nov 2017	Water Temp (C)	14.2
S12	21 Nov 2017	Wave Height Low (ft)	3
S12	21 Nov 2017	High Tide (ft)	5.4
S12	21 Nov 2017	High Tide Time	935
S12	21 Nov 2017	Low Tide (ft)	2.3
S12	21 Nov 2017	Low Tide Time	329
S12	21 Nov 2017	Comments	Kelp; Seagrass; 6 Persons; 2 Fishermen; Water clear
S12	28 Nov 2017	Arrive Time	1001
S12	28 Nov 2017	Weather	Partly Cloudy
S12	28 Nov 2017	Wind Speed (kts)	3.1
S12	28 Nov 2017	Wind Dir	W
S12	28 Nov 2017	Animal Life	None
S12	28 Nov 2017	Floatables	None
S12	28 Nov 2017	Water Color	Green
S12	28 Nov 2017	Current Direction	N
S12	28 Nov 2017	Water Temp (C)	14.2
S12	28 Nov 2017	Wave Height Low (ft)	2
S12	28 Nov 2017	High Tide (ft)	4.7
S12	28 Nov 2017	High Tide Time	500
S12	28 Nov 2017	Low Tide (ft)	1.6
S12	28 Nov 2017	Low Tide Time	1124
S12	28 Nov 2017	Comments	Kelp; 2 Persons; Water clear

Kelp Stations

Table 3.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Nov 2017	38*	8*	3*	3*	3*	2*	17*
02 Nov 2017	38*	8*	3*	3*	3*	2*	17*
03 Nov 2017	38*	8*	3*	3*	3*	2*	17*
04 Nov 2017	38*	8*	3*	3*	3*	2*	17*
05 Nov 2017	38*	8*	3*	3*	3*	2*	17*
06 Nov 2017	38*	8*	3*	3*	3*	2*	17*
07 Nov 2017	21	6	3	3	3*	2	11
08 Nov 2017	21	6	3	3	3	2	11
09 Nov 2017	18*	5*	2*	2*	2*	2*	11*
10 Nov 2017	18*	5*	2*	2*	2*	2*	11*
11 Nov 2017	18*	5*	2*	2*	2*	2*	11*
12 Nov 2017	18*	5*	2*	2*	2*	2*	11*
13 Nov 2017	18*	5*	2*	2*	2*	2*	11*
14 Nov 2017	12	4	2	2	3	2	14
15 Nov 2017	12	4	2	2	3	2	14
16 Nov 2017	18*	5*	2*	2*	3*	2*	14*
17 Nov 2017	18*	5*	2*	2*	3*	2*	14*
18 Nov 2017	18*	5*	2*	2*	3*	2*	14*
19 Nov 2017	18*	5*	2*	2*	3*	2*	14*
20 Nov 2017	12	4	2	2	3	2	12
21 Nov 2017	12	4	2	2	3	2	12
22 Nov 2017	12	4	2	2	3	2	12
23 Nov 2017	12	4	2	2	3	2	12
24 Nov 2017	12	4	2	2	3	2	12
25 Nov 2017	2*	3*	2*	2*	3*	2*	6*
26 Nov 2017	2*	3*	2*	2*	3*	2*	6*
27 Nov 2017	2*	3*	2*	2*	3*	2*	6*
28 Nov 2017	2*	3*	2*	2*	3*	2*	6*
29 Nov 2017	3*	2*	2*	2*	3*	2*	6*
30 Nov 2017	3*	2*	2*	2*	3*	2*	6*

* Geometric mean calculated using n<5

Table 3.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Nov 2017	8*	2*	2*	2*	2*	2*	3*
02 Nov 2017	8*	2*	2*	2*	2*	2*	3*
03 Nov 2017	8*	2*	2*	2*	2*	2*	3*
04 Nov 2017	8*	2*	2*	2*	2*	2*	3*
05 Nov 2017	8*	2*	2*	2*	2*	2*	3*
06 Nov 2017	8*	2*	2*	2*	2*	2*	3*
07 Nov 2017	6	2	2	2	2*	2	3
08 Nov 2017	6	2	2	2	2	2	3
09 Nov 2017	8*	2*	2*	2*	2*	2*	3*
10 Nov 2017	8*	2*	2*	2*	2*	2*	3*
11 Nov 2017	8*	2*	2*	2*	2*	2*	3*
12 Nov 2017	8*	2*	2*	2*	2*	2*	3*
13 Nov 2017	8*	2*	2*	2*	2*	2*	3*
14 Nov 2017	6	2	2	2	2	2	3
15 Nov 2017	6	2	2	2	2	2	3
16 Nov 2017	8*	2*	2*	2*	2*	2*	3*
17 Nov 2017	8*	2*	2*	2*	2*	2*	3*
18 Nov 2017	8*	2*	2*	2*	2*	2*	3*
19 Nov 2017	8*	2*	2*	2*	2*	2*	3*
20 Nov 2017	6	2	2	2	2	2	3
21 Nov 2017	6	2	2	2	2	2	3
22 Nov 2017	6	2	2	2	2	2	3
23 Nov 2017	6	2	2	2	2	2	3
24 Nov 2017	6	2	2	2	2	2	3
25 Nov 2017	2*	2*	2*	2*	2*	2*	2*
26 Nov 2017	2*	2*	2*	2*	2*	2*	2*
27 Nov 2017	2*	2*	2*	2*	2*	2*	2*
28 Nov 2017	2*	2*	2*	2*	2*	2*	2*
29 Nov 2017	2*	2*	2*	2*	2*	2*	2*
30 Nov 2017	2*	2*	2*	2*	2*	2*	2*

* Geometric mean calculated using n<5

Table 3.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Nov 2017	17*	2*	2*	2*	2*	2*	6*
02 Nov 2017	17*	2*	2*	2*	2*	2*	6*
03 Nov 2017	17*	2*	2*	2*	2*	2*	6*
04 Nov 2017	17*	2*	2*	2*	2*	2*	6*
05 Nov 2017	17*	2*	2*	2*	2*	2*	6*
06 Nov 2017	17*	2*	2*	2*	2*	2*	6*
07 Nov 2017	11	2	2	2	2*	2	5
08 Nov 2017	11	2	2	2	2	2	5
09 Nov 2017	11*	2*	2*	2*	2*	2*	4*
10 Nov 2017	11*	2*	2*	2*	2*	2*	4*
11 Nov 2017	11*	2*	2*	2*	2*	2*	4*
12 Nov 2017	11*	2*	2*	2*	2*	2*	4*
13 Nov 2017	11*	2*	2*	2*	2*	2*	4*
14 Nov 2017	8	2	2	2	2	2	4
15 Nov 2017	8	2	2	2	2	2	4
16 Nov 2017	11*	2*	2*	2*	2*	2*	4*
17 Nov 2017	11*	2*	2*	2*	2*	2*	4*
18 Nov 2017	11*	2*	2*	2*	2*	2*	4*
19 Nov 2017	11*	2*	2*	2*	2*	2*	4*
20 Nov 2017	8	2	2	2	2	2	4
21 Nov 2017	8	2	2	2	2	2	4
22 Nov 2017	8	2	2	2	2	2	4
23 Nov 2017	8	2	2	2	2	2	4
24 Nov 2017	8	2	2	2	2	2	4
25 Nov 2017	2*	2*	2*	2*	2*	2*	2*
26 Nov 2017	2*	2*	2*	2*	2*	2*	2*
27 Nov 2017	2*	2*	2*	2*	2*	2*	2*
28 Nov 2017	2*	2*	2*	2*	2*	2*	2*
29 Nov 2017	3*	2*	2*	2*	2*	2*	2*
30 Nov 2017	3*	2*	2*	2*	2*	2*	2*

* Geometric mean calculated using n<5

Table 3.4

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Nov 2017	IC	IC	IC	IC	ns	IC	IC
08 Nov 2017	ns	ns	ns	ns	IC	ns	ns
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC
20 Nov 2017	IC	IC	IC	IC	IC	IC	IC
29 Nov 2017	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.5

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Nov 2017	IC	IC	IC	IC	ns	IC	IC
08 Nov 2017	ns	ns	ns	ns	IC	ns	ns
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC
20 Nov 2017	IC	IC	IC	IC	IC	IC	IC
29 Nov 2017	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.6

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Nov 2017	IC	IC	IC	IC	ns	IC	IC
08 Nov 2017	ns	ns	ns	ns	IC	ns	ns
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC
20 Nov 2017	IC	IC	IC	IC	IC	IC	IC
29 Nov 2017	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.7

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	I19	I24	I25	I26	I32	I39	I40
07 Nov 2017	IC	IC	IC	IC	ns	IC	IC
08 Nov 2017	ns	ns	ns	ns	IC	ns	ns
14 Nov 2017	IC	IC	IC	IC	IC	IC	IC
20 Nov 2017	IC	IC	IC	IC	IC	IC	IC
29 Nov 2017	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.8

Summary of water quality parameters at the SBOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected; oil and grease samples (OG) and suspended solids (SUSO) data are reported as mg/L. Duplicates are indicated by *. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
119	07 Nov 2017	933	2	<2	<2	<2	1.00	16.1	76.82	7.5	33.40	8.0	3.27	8.2
119	07 Nov 2017	933	6	<2	<2	<2	1.00	14.9	82.97	7.2	33.36	8.0	ns	4.4
119	07 Nov 2017	933	11	<2	<2	<2	1.00	14.9	78.75	7.1	33.37	8.0	ns	9.1
119	14 Nov 2017	1001	2	<2	<2	<2	1.00	14.9	68.06	7.3	33.37	8.0	ns	ns
119	14 Nov 2017	1001	6	<2	<2	<2	1.00	14.4	77.17	6.5	33.38	8.0	ns	ns
119	14 Nov 2017	1001	11	<2	<2	<2	1.00	14.2	70.32	6.2	33.37	8.0	ns	ns
119	20 Nov 2017	1026	2	<2	<2	<2	1.00	14.5	79.56	7.4	33.39	8.0	ns	ns
119	20 Nov 2017	1026	6	<2	<2	<2	1.00	13.9	75.51	6.8	33.39	8.0	ns	ns
119	20 Nov 2017	1026	11	<2	<2	<2	1.00	13.8	72.41	6.6	33.39	8.0	ns	ns
119	29 Nov 2017	1043	2	2e	<2	4e	1.00	16.1	77.93	8.5	33.40	8.1	ns	ns
119	29 Nov 2017	1043	6	10e	8e	10e	0.80	15.9	58.45	8.2	33.39	8.1	ns	ns
119	29 Nov 2017	1043	11	4e	<2	<2	0.50	15.7	69.18	7.9	33.40	8.1	ns	ns
124	07 Nov 2017	911	2	<2	<2	<2	1.00	16.7	78.47	7.6	33.41	8.1	1.36	3.6
124	07 Nov 2017	911	2	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	2.9*
124	07 Nov 2017	911	6	<2	<2	<2	1.00	15.3	84.83	7.1	33.37	8.0	ns	4.9
124	07 Nov 2017	911	11	<2	<2	<2	1.00	14.8	83.11	6.8	33.37	8.0	ns	2.8
124	14 Nov 2017	1027	2	<2	<2	<2	1.00	15.6	75.61	7.8	33.39	8.1	ns	ns
124	14 Nov 2017	1027	6	2e	<2	<2	1.00	14.6	78.59	6.7	33.37	8.0	ns	ns
124	14 Nov 2017	1027	11	<2	2e	<2	1.00	14.6	78.32	6.6	33.37	8.0	ns	ns
124	20 Nov 2017	1046	2	<2	<2	<2	1.00	14.5	77.21	7.4	33.39	8.0	ns	ns
124	20 Nov 2017	1046	6	<2	<2	<2	1.00	14.0	71.77	6.5	33.39	8.0	ns	ns
124	20 Nov 2017	1046	11	<2	<2	<2	1.00	13.7	70.75	5.8	33.38	7.9	ns	ns
124	29 Nov 2017	1101	2	<2	<2	<2	1.00	16.2	82.85	8.6	33.40	8.1	ns	ns
124	29 Nov 2017	1101	6	<2	<2	<2	1.00	15.9	82.28	8.3	33.40	8.1	ns	ns
124	29 Nov 2017	1101	11	2e	<2	<2	1.00	15.7	72.60	8.0	33.40	8.1	ns	ns
125	07 Nov 2017	901	2	<2	<2	<2	1.00	16.9	80.21	7.8	33.40	8.1	8.75	7.0
125	07 Nov 2017	901	6	2e	<2	<2	1.00	15.4	83.72	7.2	33.43	8.1	ns	5.2
125	07 Nov 2017	901	9	<2	<2	<2	1.00	14.9	85.20	6.9	33.37	8.0	ns	5.3
125	14 Nov 2017	1033	2	<2	<2	<2	1.00	15.7	75.77	7.8	33.38	8.1	ns	ns
125	14 Nov 2017	1033	6	<2	<2	<2	1.00	14.3	80.44	6.6	33.37	8.0	ns	ns
125	14 Nov 2017	1033	9	2e	<2	<2	1.00	14.2	80.39	6.6	33.36	8.0	ns	ns
125	20 Nov 2017	1053	2	<2	<2	<2	1.00	14.6	77.54	7.5	33.39	8.0	ns	ns
125	20 Nov 2017	1053	6	<2	<2	<2	1.00	13.9	83.37	6.4	33.38	8.0	ns	ns
125	20 Nov 2017	1053	9	2e	<2	<2	1.00	13.9	83.28	6.3	33.38	8.0	ns	ns
125	29 Nov 2017	1108	2	<2	<2	<2	1.00	16.1	81.23	8.2	33.43	8.1	ns	ns

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I25	29 Nov 2017	1108	6	<2	<2	<2	1.00	16.0	80.61	8.0	33.43	8.1	ns	ns
I25	29 Nov 2017	1108	9	2e	<2	<2	1.00	15.8	64.06	7.3	33.45	8.1	ns	ns
I26	07 Nov 2017	852	2	<2	<2	<2	1.00	16.7	79.37	7.7	33.41	8.1	11.3	4.5
I26	07 Nov 2017	852	6	<2	<2	<2	1.00	14.9	84.94	7.1	33.40	8.0	ns	5.1
I26	07 Nov 2017	852	9	<2	<2	<2	1.00	14.6	86.77	6.9	33.36	8.0	ns	4.9
I26	14 Nov 2017	1045	2	<2	<2	<2	1.00	15.3	72.54	7.3	33.39	8.0	ns	ns
I26	14 Nov 2017	1045	6	<2	<2	<2	1.00	14.1	77.30	6.3	33.37	8.0	ns	ns
I26	14 Nov 2017	1045	9	4e	2e	<2	0.50	14.1	77.39	6.3	33.37	8.0	ns	ns
I26	20 Nov 2017	1103	2	<2	<2	<2	1.00	14.6	78.19	7.8	33.39	8.1	ns	ns
I26	20 Nov 2017	1103	6	<2	<2	<2	1.00	14.0	80.42	6.9	33.41	8.0	ns	ns
I26	20 Nov 2017	1103	9	<2	2e	<2	1.00	13.8	84.00	6.5	33.38	8.0	ns	ns
I26	29 Nov 2017	1121	2	<2	<2	<2	1.00	16.1	73.70	8.7	33.40	8.1	ns	ns
I26	29 Nov 2017	1121	6	<2	<2	<2	1.00	15.9	69.55	8.5	33.38	8.1	ns	ns
I26	29 Nov 2017	1121	9	<2	<2	<2	1.00	15.7	69.50	8.1	33.40	8.1	ns	ns
I32	08 Nov 2017	943	2	<2	<2	2e	1.00	16.7	81.51	7.2	33.67	8.1	2.07	5.1
I32	08 Nov 2017	943	6	<2	<2	<2	1.00	14.9	83.19	6.9	33.53	8.0	ns	3.8
I32	08 Nov 2017	943	9	<2	<2	<2	1.00	14.9	80.76	6.8	33.47	8.0	ns	6.2
I32	14 Nov 2017	1056	2	<2	<2	<2	1.00	15.5	64.03	7.7	33.38	8.0	ns	ns
I32	14 Nov 2017	1056	6	2e	<2	<2	1.00	14.6	61.73	6.6	33.36	8.0	ns	ns
I32	14 Nov 2017	1056	9	<20	<2	<2	0.10	14.4	61.83	6.4	33.36	8.0	ns	ns
I32	20 Nov 2017	1115	2	<2	<2	<2	1.00	14.8	77.34	7.8	33.41	8.1	ns	ns
I32	20 Nov 2017	1115	6	2e	<2	<2	1.00	14.1	75.87	7.2	33.38	8.0	ns	ns
I32	20 Nov 2017	1115	9	<2	<2	<2	1.00	14.0	76.05	7.0	33.38	8.0	ns	ns
I32	29 Nov 2017	1132	2	<2	<2	<2	1.00	16.1	70.23	8.8	33.40	8.1	ns	ns
I32	29 Nov 2017	1132	6	2e	2e	<2	1.00	15.9	62.10	8.5	33.39	8.1	ns	ns
I32	29 Nov 2017	1132	9	<2	<2	<2	1.00	15.9	60.00	8.4	33.39	8.1	ns	ns
I39	07 Nov 2017	839	2	<2	<2	<2	1.00	17.2	85.33	8.0	33.41	8.1	1.84	<0.2
I39	07 Nov 2017	839	12	<2	<2	<2	1.00	15.9	87.32	7.5	33.38	8.1	ns	<0.2
I39	07 Nov 2017	839	18	4e	<2	<2	0.50	14.2	87.80	6.8	33.38	8.0	ns	3.2
I39	14 Nov 2017	943	2	<2	<2	<2	1.00	15.9	85.62	8.0	33.40	8.1	ns	ns
I39	14 Nov 2017	943	12	<2	<2	<2	1.00	15.8	86.62	7.8	33.39	8.1	ns	ns
I39	14 Nov 2017	943	18	<2	<2	<2	1.00	14.2	85.12	6.8	33.36	8.0	ns	ns
I39	20 Nov 2017	1008	2	<2	<2	<2	1.00	15.1	84.78	7.9	33.40	8.1	ns	ns
I39	20 Nov 2017	1008	12	<2	<2	<2	1.00	14.8	84.48	7.8	33.39	8.1	ns	ns
I39	20 Nov 2017	1008	18	<2	<2	<2	1.00	13.6	87.07	6.4	33.39	8.0	ns	ns
I39	29 Nov 2017	1009	2	<2	<2	<2	1.00	16.1	84.07	8.7	33.40	8.1	ns	ns
I39	29 Nov 2017	1009	12	2e	<2	<2	1.00	15.7	77.37	8.1	33.39	8.1	ns	ns
I39	29 Nov 2017	1009	18	<2	<2	2e	1.00	14.8	55.12	7.5	33.38	8.0	ns	ns
I40	07 Nov 2017	921	2	2e	<2	2e	1.00	16.0	79.12	7.5	33.39	8.0	2.23	4.8
I40	07 Nov 2017	921	6	<2	<2	<2	1.00	15.2	83.09	7.2	33.37	8.0	ns	4.6
I40	07 Nov 2017	921	9	<2	<2	<2	1.00	15.0	74.77	7.1	33.36	8.0	ns	7.8

Station	Date	Time	Depth	Total	Fecal	Enteroc	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I40	14 Nov 2017	1011	2	<20	<2	<2	0.10	15.2	64.51	7.3	33.37	8.0	ns	ns
I40	14 Nov 2017	1011	6	80e	<2	2e	0.02	14.8	54.93	7.0	33.37	8.0	ns	ns
I40	14 Nov 2017	1011	9	8e	<2	<2	0.25	14.4	60.95	6.3	33.38	8.0	ns	ns
I40	20 Nov 2017	1037	2	<2	2e	<2	1.00	14.1	74.88	7.0	33.38	8.0	ns	ns
I40	20 Nov 2017	1037	6	<2	2e	<2	1.00	13.9	69.94	7.0	33.39	8.0	ns	ns
I40	20 Nov 2017	1037	9	<20	<2	2e	0.10	13.8	68.23	6.3	33.39	8.0	ns	ns
I40	29 Nov 2017	1054	2	2e	2e	4e	1.00	16.1	49.20	8.0	33.39	8.1	ns	ns
I40	29 Nov 2017	1054	6	<2	<2	4e	1.00	15.9	43.20	8.0	33.39	8.1	ns	ns
I40	29 Nov 2017	1054	9	2e	<2	4e	1.00	15.8	45.71	7.8	33.39	8.1	ns	ns

ns = not sampled

ND = no data

Table 3.9

Summary of visual observations made during the month for each SBOO kelp station by sample date.

Station	Date	Parameter	Value
I19	07 Nov 2017	Depth (m)	12
I19	07 Nov 2017	Arrive Time	933
I19	07 Nov 2017	Depart Time	938
I19	07 Nov 2017	Air Temp (C)	20
I19	07 Nov 2017	Weather	Overcast
I19	07 Nov 2017	Visibility (mi)	8
I19	07 Nov 2017	Wind Speed (kts)	4
I19	07 Nov 2017	Wind Dir	S
I19	07 Nov 2017	Water Color	Greenish-Brown
I19	07 Nov 2017	Wave Ht Low (ft)	2
I19	07 Nov 2017	Wave Period (sec)	11
I19	07 Nov 2017	Sea State	Calm
I19	07 Nov 2017	High Tide (ft)	6.1
I19	07 Nov 2017	High Tide Time	1025
I19	07 Nov 2017	Low Tide (ft)	1.9
I19	07 Nov 2017	Low Tide Time	416
I19	07 Nov 2017	Comments	100's of greebes on station
I19	14 Nov 2017	Depth (m)	11
I19	14 Nov 2017	Arrive Time	1001
I19	14 Nov 2017	Depart Time	1002
I19	14 Nov 2017	Air Temp (C)	16
I19	14 Nov 2017	Weather	Haze
I19	14 Nov 2017	Visibility (mi)	11
I19	14 Nov 2017	Wind Speed (kts)	5
I19	14 Nov 2017	Wind Dir	SW
I19	14 Nov 2017	Water Color	Green
I19	14 Nov 2017	Wave Ht Low (ft)	2
I19	14 Nov 2017	Wave Period (sec)	13
I19	14 Nov 2017	Sea State	Calm
I19	14 Nov 2017	High Tide (ft)	5.5
I19	14 Nov 2017	High Tide Time	621
I19	14 Nov 2017	Low Tide (ft)	0.6
I19	14 Nov 2017	Low Tide Time	1251
I19	14 Nov 2017	Comments	none
I19	20 Nov 2017	Depth (m)	12
I19	20 Nov 2017	Arrive Time	1026
I19	20 Nov 2017	Depart Time	1029
I19	20 Nov 2017	Air Temp (C)	16
I19	20 Nov 2017	Weather	Partly Cloudy
I19	20 Nov 2017	Visibility (mi)	7
I19	20 Nov 2017	Wind Speed (kts)	2
I19	20 Nov 2017	Wind Dir	SW
I19	20 Nov 2017	Water Color	Green
I19	20 Nov 2017	Wave Ht Low (ft)	3
I19	20 Nov 2017	Wave Period (sec)	11
I19	20 Nov 2017	Sea State	Calm
I19	20 Nov 2017	High Tide (ft)	5.6
I19	20 Nov 2017	High Tide Time	907
I19	20 Nov 2017	Low Tide (ft)	-0.1

Station	Date	Parameter	Value
I19	20 Nov 2017	Low Tide Time	1621
I19	20 Nov 2017	Comments	none
I19	29 Nov 2017	Depth (m)	11
I19	29 Nov 2017	Arrive Time	1043
I19	29 Nov 2017	Depart Time	1045
I19	29 Nov 2017	Air Temp (C)	17
I19	29 Nov 2017	Weather	Partly Cloudy
I19	29 Nov 2017	Visibility (mi)	7
I19	29 Nov 2017	Wind Speed (kts)	3
I19	29 Nov 2017	Wind Dir	S
I19	29 Nov 2017	Water Color	Green
I19	29 Nov 2017	Wave Ht Low (ft)	3
I19	29 Nov 2017	Wave Period (sec)	9
I19	29 Nov 2017	Sea State	Calm
I19	29 Nov 2017	High Tide (ft)	5.2
I19	29 Nov 2017	High Tide Time	532
I19	29 Nov 2017	Low Tide (ft)	0.9
I19	29 Nov 2017	Low Tide Time	1209
I19	29 Nov 2017	Comments	none
I24	07 Nov 2017	Depth (m)	12
I24	07 Nov 2017	Arrive Time	911
I24	07 Nov 2017	Depart Time	916
I24	07 Nov 2017	Air Temp (C)	18
I24	07 Nov 2017	Weather	Overcast
I24	07 Nov 2017	Visibility (mi)	8
I24	07 Nov 2017	Wind Speed (kts)	2
I24	07 Nov 2017	Wind Dir	SW
I24	07 Nov 2017	Water Color	Greenish-Brown
I24	07 Nov 2017	Wave Ht Low (ft)	2
I24	07 Nov 2017	Wave Period (sec)	11
I24	07 Nov 2017	Sea State	Calm
I24	07 Nov 2017	High Tide (ft)	6.1
I24	07 Nov 2017	High Tide Time	1025
I24	07 Nov 2017	Low Tide (ft)	1.9
I24	07 Nov 2017	Low Tide Time	416
I24	07 Nov 2017	Comments	none
I24	14 Nov 2017	Depth (m)	9
I24	14 Nov 2017	Arrive Time	1027
I24	14 Nov 2017	Depart Time	1032
I24	14 Nov 2017	Air Temp (C)	16
I24	14 Nov 2017	Weather	Haze
I24	14 Nov 2017	Visibility (mi)	11
I24	14 Nov 2017	Wind Speed (kts)	6
I24	14 Nov 2017	Wind Dir	NE
I24	14 Nov 2017	Water Color	Greenish-Blue
I24	14 Nov 2017	Wave Ht Low (ft)	10
I24	14 Nov 2017	Wave Period (sec)	13
I24	14 Nov 2017	Sea State	Calm
I24	14 Nov 2017	High Tide (ft)	5.5
I24	14 Nov 2017	High Tide Time	621
I24	14 Nov 2017	Low Tide (ft)	0.6
I24	14 Nov 2017	Low Tide Time	1251

Station	Date	Parameter	Value
I24	14 Nov 2017	Comments	none
I24	20 Nov 2017	Depth (m)	10
I24	20 Nov 2017	Arrive Time	1046
I24	20 Nov 2017	Depart Time	1050
I24	20 Nov 2017	Air Temp (C)	16
I24	20 Nov 2017	Weather	Partly Cloudy
I24	20 Nov 2017	Visibility (mi)	12
I24	20 Nov 2017	Wind Speed (kts)	1
I24	20 Nov 2017	Wind Dir	S
I24	20 Nov 2017	Water Color	Green
I24	20 Nov 2017	Wave Ht Low (ft)	3
I24	20 Nov 2017	Wave Period (sec)	11
I24	20 Nov 2017	Sea State	Calm
I24	20 Nov 2017	High Tide (ft)	5.6
I24	20 Nov 2017	High Tide Time	907
I24	20 Nov 2017	Low Tide (ft)	-0.1
I24	20 Nov 2017	Low Tide Time	1621
I24	20 Nov 2017	Comments	none
I24	29 Nov 2017	Depth (m)	11
I24	29 Nov 2017	Arrive Time	1101
I24	29 Nov 2017	Depart Time	1103
I24	29 Nov 2017	Air Temp (C)	17
I24	29 Nov 2017	Weather	Partly Cloudy
I24	29 Nov 2017	Visibility (mi)	8
I24	29 Nov 2017	Wind Speed (kts)	3
I24	29 Nov 2017	Wind Dir	SE
I24	29 Nov 2017	Water Color	Green
I24	29 Nov 2017	Wave Ht Low (ft)	3
I24	29 Nov 2017	Wave Period (sec)	9
I24	29 Nov 2017	Sea State	Calm
I24	29 Nov 2017	High Tide (ft)	5.2
I24	29 Nov 2017	High Tide Time	532
I24	29 Nov 2017	Low Tide (ft)	0.9
I24	29 Nov 2017	Low Tide Time	1209
I24	29 Nov 2017	Comments	none
I25	07 Nov 2017	Depth (m)	10
I25	07 Nov 2017	Arrive Time	901
I25	07 Nov 2017	Depart Time	905
I25	07 Nov 2017	Air Temp (C)	18
I25	07 Nov 2017	Weather	Overcast
I25	07 Nov 2017	Visibility (mi)	8
I25	07 Nov 2017	Wind Speed (kts)	3
I25	07 Nov 2017	Wind Dir	W
I25	07 Nov 2017	Water Color	Green
I25	07 Nov 2017	Wave Ht Low (ft)	2
I25	07 Nov 2017	Wave Period (sec)	11
I25	07 Nov 2017	Sea State	Calm
I25	07 Nov 2017	High Tide (ft)	6.1
I25	07 Nov 2017	High Tide Time	1025
I25	07 Nov 2017	Low Tide (ft)	1.9
I25	07 Nov 2017	Low Tide Time	416
I25	07 Nov 2017	Comments	none

Station	Date	Parameter	Value
I25	14 Nov 2017	Depth (m)	9
I25	14 Nov 2017	Arrive Time	1033
I25	14 Nov 2017	Depart Time	1037
I25	14 Nov 2017	Air Temp (C)	17
I25	14 Nov 2017	Weather	Haze
I25	14 Nov 2017	Visibility (mi)	11
I25	14 Nov 2017	Wind Speed (kts)	6
I25	14 Nov 2017	Wind Dir	SE
I25	14 Nov 2017	Water Color	Greenish-Blue
I25	14 Nov 2017	Wave Ht Low (ft)	10
I25	14 Nov 2017	Wave Period (sec)	13
I25	14 Nov 2017	Sea State	Calm
I25	14 Nov 2017	High Tide (ft)	5.5
I25	14 Nov 2017	High Tide Time	621
I25	14 Nov 2017	Low Tide (ft)	0.6
I25	14 Nov 2017	Low Tide Time	1251
I25	14 Nov 2017	Comments	none
I25	20 Nov 2017	Depth (m)	10
I25	20 Nov 2017	Arrive Time	1053
I25	20 Nov 2017	Depart Time	1057
I25	20 Nov 2017	Air Temp (C)	16
I25	20 Nov 2017	Weather	Partly Cloudy
I25	20 Nov 2017	Visibility (mi)	12
I25	20 Nov 2017	Wind Speed (kts)	2
I25	20 Nov 2017	Wind Dir	NW
I25	20 Nov 2017	Water Color	Green
I25	20 Nov 2017	Wave Ht Low (ft)	3
I25	20 Nov 2017	Wave Period (sec)	11
I25	20 Nov 2017	Sea State	Calm
I25	20 Nov 2017	High Tide (ft)	5.6
I25	20 Nov 2017	High Tide Time	907
I25	20 Nov 2017	Low Tide (ft)	-0.1
I25	20 Nov 2017	Low Tide Time	1621
I25	20 Nov 2017	Comments	none
I25	29 Nov 2017	Depth (m)	10
I25	29 Nov 2017	Arrive Time	1108
I25	29 Nov 2017	Depart Time	1116
I25	29 Nov 2017	Air Temp (C)	17
I25	29 Nov 2017	Weather	Partly Cloudy
I25	29 Nov 2017	Visibility (mi)	8
I25	29 Nov 2017	Wind Speed (kts)	2
I25	29 Nov 2017	Wind Dir	S
I25	29 Nov 2017	Water Color	Green
I25	29 Nov 2017	Wave Ht Low (ft)	3
I25	29 Nov 2017	Wave Period (sec)	9
I25	29 Nov 2017	Sea State	Calm
I25	29 Nov 2017	High Tide (ft)	5.2
I25	29 Nov 2017	High Tide Time	532
I25	29 Nov 2017	Low Tide (ft)	0.9
I25	29 Nov 2017	Low Tide Time	1209
I25	29 Nov 2017	Comments	Dolphins on station

Station	Date	Parameter	Value
I26	07 Nov 2017	Depth (m)	11
I26	07 Nov 2017	Arrive Time	852
I26	07 Nov 2017	Depart Time	901
I26	07 Nov 2017	Air Temp (C)	18
I26	07 Nov 2017	Weather	Overcast
I26	07 Nov 2017	Visibility (mi)	8
I26	07 Nov 2017	Wind Speed (kts)	1
I26	07 Nov 2017	Wind Dir	SW
I26	07 Nov 2017	Water Color	Greenish-Blue
I26	07 Nov 2017	Wave Ht Low (ft)	2
I26	07 Nov 2017	Wave Period (sec)	11
I26	07 Nov 2017	Sea State	Calm
I26	07 Nov 2017	High Tide (ft)	6.1
I26	07 Nov 2017	High Tide Time	1025
I26	07 Nov 2017	Low Tide (ft)	1.9
I26	07 Nov 2017	Low Tide Time	416
I26	07 Nov 2017	Comments	none
I26	14 Nov 2017	Depth (m)	9
I26	14 Nov 2017	Arrive Time	1045
I26	14 Nov 2017	Depart Time	1048
I26	14 Nov 2017	Air Temp (C)	17
I26	14 Nov 2017	Weather	Haze
I26	14 Nov 2017	Visibility (mi)	11
I26	14 Nov 2017	Wind Speed (kts)	8
I26	14 Nov 2017	Wind Dir	S
I26	14 Nov 2017	Water Color	Greenish-Blue
I26	14 Nov 2017	Wave Ht Low (ft)	10
I26	14 Nov 2017	Wave Period (sec)	13
I26	14 Nov 2017	Sea State	Calm
I26	14 Nov 2017	High Tide (ft)	5.5
I26	14 Nov 2017	High Tide Time	621
I26	14 Nov 2017	Low Tide (ft)	0.6
I26	14 Nov 2017	Low Tide Time	1251
I26	14 Nov 2017	Comments	none
I26	20 Nov 2017	Depth (m)	10
I26	20 Nov 2017	Arrive Time	1103
I26	20 Nov 2017	Depart Time	1106
I26	20 Nov 2017	Air Temp (C)	16
I26	20 Nov 2017	Weather	Partly Cloudy
I26	20 Nov 2017	Visibility (mi)	12
I26	20 Nov 2017	Wind Speed (kts)	0
I26	20 Nov 2017	Wind Dir	
I26	20 Nov 2017	Water Color	Green
I26	20 Nov 2017	Wave Ht Low (ft)	3
I26	20 Nov 2017	Wave Period (sec)	11
I26	20 Nov 2017	Sea State	Calm
I26	20 Nov 2017	High Tide (ft)	5.6
I26	20 Nov 2017	High Tide Time	907
I26	20 Nov 2017	Low Tide (ft)	-0.1
I26	20 Nov 2017	Low Tide Time	1621
I26	20 Nov 2017	Comments	none
I26	29 Nov 2017	Depth (m)	11

Station	Date	Parameter	Value
I26	29 Nov 2017	Arrive Time	1121
I26	29 Nov 2017	Depart Time	1125
I26	29 Nov 2017	Air Temp (C)	17
I26	29 Nov 2017	Weather	Partly Cloudy
I26	29 Nov 2017	Visibility (mi)	8
I26	29 Nov 2017	Wind Speed (kts)	1
I26	29 Nov 2017	Wind Dir	SE
I26	29 Nov 2017	Water Color	Green
I26	29 Nov 2017	Wave Ht Low (ft)	3
I26	29 Nov 2017	Wave Period (sec)	9
I26	29 Nov 2017	Sea State	Calm
I26	29 Nov 2017	High Tide (ft)	5.2
I26	29 Nov 2017	High Tide Time	532
I26	29 Nov 2017	Low Tide (ft)	0.9
I26	29 Nov 2017	Low Tide Time	1209
I26	29 Nov 2017	Comments	none
I32	08 Nov 2017	Depth (m)	11
I32	08 Nov 2017	Arrive Time	943
I32	08 Nov 2017	Depart Time	947
I32	08 Nov 2017	Air Temp (C)	18
I32	08 Nov 2017	Weather	Overcast
I32	08 Nov 2017	Visibility (mi)	13
I32	08 Nov 2017	Wind Speed (kts)	1
I32	08 Nov 2017	Wind Dir	S
I32	08 Nov 2017	Water Color	Bluish-Green
I32	08 Nov 2017	Wave Ht Low (ft)	3
I32	08 Nov 2017	Wave Period (sec)	13
I32	08 Nov 2017	Sea State	Wind ripples
I32	08 Nov 2017	High Tide (ft)	5.6
I32	08 Nov 2017	High Tide Time	1120
I32	08 Nov 2017	Low Tide (ft)	2.4
I32	08 Nov 2017	Low Tide Time	513
I32	08 Nov 2017	Comments	none
I32	14 Nov 2017	Depth (m)	9
I32	14 Nov 2017	Arrive Time	1056
I32	14 Nov 2017	Depart Time	1058
I32	14 Nov 2017	Air Temp (C)	17
I32	14 Nov 2017	Weather	Haze
I32	14 Nov 2017	Visibility (mi)	11
I32	14 Nov 2017	Wind Speed (kts)	6
I32	14 Nov 2017	Wind Dir	SW
I32	14 Nov 2017	Water Color	Green
I32	14 Nov 2017	Wave Ht Low (ft)	10
I32	14 Nov 2017	Wave Period (sec)	13
I32	14 Nov 2017	Sea State	Calm
I32	14 Nov 2017	High Tide (ft)	5.5
I32	14 Nov 2017	High Tide Time	621
I32	14 Nov 2017	Low Tide (ft)	0.6
I32	14 Nov 2017	Low Tide Time	1251
I32	14 Nov 2017	Comments	none
I32	20 Nov 2017	Depth (m)	10
I32	20 Nov 2017	Arrive Time	1115

Station	Date	Parameter	Value
I32	20 Nov 2017	Depart Time	1118
I32	20 Nov 2017	Air Temp (C)	17
I32	20 Nov 2017	Weather	Partly Cloudy
I32	20 Nov 2017	Visibility (mi)	12
I32	20 Nov 2017	Wind Speed (kts)	1
I32	20 Nov 2017	Wind Dir	SW
I32	20 Nov 2017	Water Color	Green
I32	20 Nov 2017	Wave Ht Low (ft)	3
I32	20 Nov 2017	Wave Period (sec)	11
I32	20 Nov 2017	Sea State	Calm
I32	20 Nov 2017	High Tide (ft)	5.6
I32	20 Nov 2017	High Tide Time	907
I32	20 Nov 2017	Low Tide (ft)	-0.1
I32	20 Nov 2017	Low Tide Time	1621
I32	20 Nov 2017	Comments	
I32	29 Nov 2017	Depth (m)	11
I32	29 Nov 2017	Arrive Time	1132
I32	29 Nov 2017	Depart Time	1134
I32	29 Nov 2017	Air Temp (C)	17
I32	29 Nov 2017	Weather	Partly Cloudy
I32	29 Nov 2017	Visibility (mi)	8
I32	29 Nov 2017	Wind Speed (kts)	1
I32	29 Nov 2017	Wind Dir	W
I32	29 Nov 2017	Water Color	Green
I32	29 Nov 2017	Wave Ht Low (ft)	3
I32	29 Nov 2017	Wave Period (sec)	9
I32	29 Nov 2017	Sea State	Calm
I32	29 Nov 2017	High Tide (ft)	5.2
I32	29 Nov 2017	High Tide Time	532
I32	29 Nov 2017	Low Tide (ft)	0.9
I32	29 Nov 2017	Low Tide Time	1209
I32	29 Nov 2017	Comments	none
I39	07 Nov 2017	Depth (m)	20
I39	07 Nov 2017	Arrive Time	839
I39	07 Nov 2017	Depart Time	843
I39	07 Nov 2017	Air Temp (C)	17
I39	07 Nov 2017	Weather	Overcast
I39	07 Nov 2017	Visibility (mi)	8
I39	07 Nov 2017	Wind Speed (kts)	6
I39	07 Nov 2017	Wind Dir	NE
I39	07 Nov 2017	Water Color	Greenish-Blue
I39	07 Nov 2017	Wave Ht Low (ft)	2
I39	07 Nov 2017	Wave Period (sec)	11
I39	07 Nov 2017	Sea State	Calm
I39	07 Nov 2017	High Tide (ft)	6.1
I39	07 Nov 2017	High Tide Time	1025
I39	07 Nov 2017	Low Tide (ft)	1.9
I39	07 Nov 2017	Low Tide Time	416
I39	07 Nov 2017	Comments	none
I39	14 Nov 2017	Depth (m)	18
I39	14 Nov 2017	Arrive Time	943
I39	14 Nov 2017	Depart Time	945

Station	Date	Parameter	Value
I39	14 Nov 2017	Air Temp (C)	16
I39	14 Nov 2017	Weather	Haze
I39	14 Nov 2017	Visibility (mi)	11
I39	14 Nov 2017	Wind Speed (kts)	5
I39	14 Nov 2017	Wind Dir	W
I39	14 Nov 2017	Water Color	Bluish-Green
I39	14 Nov 2017	Wave Ht Low (ft)	2
I39	14 Nov 2017	Wave Period (sec)	13
I39	14 Nov 2017	Sea State	Calm
I39	14 Nov 2017	High Tide (ft)	5.5
I39	14 Nov 2017	High Tide Time	621
I39	14 Nov 2017	Low Tide (ft)	0.6
I39	14 Nov 2017	Low Tide Time	1251
I39	14 Nov 2017	Comments	none
I39	20 Nov 2017	Depth (m)	18
I39	20 Nov 2017	Arrive Time	1008
I39	20 Nov 2017	Depart Time	1012
I39	20 Nov 2017	Air Temp (C)	16
I39	20 Nov 2017	Weather	Partly Cloudy
I39	20 Nov 2017	Visibility (mi)	7
I39	20 Nov 2017	Wind Speed (kts)	1
I39	20 Nov 2017	Wind Dir	S
I39	20 Nov 2017	Water Color	Green
I39	20 Nov 2017	Wave Ht Low (ft)	3
I39	20 Nov 2017	Wave Period (sec)	11
I39	20 Nov 2017	Sea State	Calm
I39	20 Nov 2017	High Tide (ft)	5.6
I39	20 Nov 2017	High Tide Time	907
I39	20 Nov 2017	Low Tide (ft)	-0.1
I39	20 Nov 2017	Low Tide Time	1621
I39	20 Nov 2017	Comments	none
I39	29 Nov 2017	Depth (m)	18
I39	29 Nov 2017	Arrive Time	1009
I39	29 Nov 2017	Depart Time	1020
I39	29 Nov 2017	Air Temp (C)	16
I39	29 Nov 2017	Weather	Partly Cloudy
I39	29 Nov 2017	Visibility (mi)	8
I39	29 Nov 2017	Wind Speed (kts)	2
I39	29 Nov 2017	Wind Dir	SW
I39	29 Nov 2017	Water Color	Green
I39	29 Nov 2017	Wave Ht Low (ft)	3
I39	29 Nov 2017	Wave Period (sec)	9
I39	29 Nov 2017	Sea State	Calm
I39	29 Nov 2017	High Tide (ft)	5.2
I39	29 Nov 2017	High Tide Time	532
I39	29 Nov 2017	Low Tide (ft)	0.9
I39	29 Nov 2017	Low Tide Time	1209
I39	29 Nov 2017	Comments	none
I40	07 Nov 2017	Depth (m)	11
I40	07 Nov 2017	Arrive Time	921
I40	07 Nov 2017	Depart Time	924
I40	07 Nov 2017	Air Temp (C)	19

Station	Date	Parameter	Value
I40	07 Nov 2017	Weather	Overcast
I40	07 Nov 2017	Visibility (mi)	8
I40	07 Nov 2017	Wind Speed (kts)	6
I40	07 Nov 2017	Wind Dir	SW
I40	07 Nov 2017	Water Color	Greenish-Brown
I40	07 Nov 2017	Wave Ht Low (ft)	2
I40	07 Nov 2017	Wave Period (sec)	11
I40	07 Nov 2017	Sea State	Calm
I40	07 Nov 2017	High Tide (ft)	6.1
I40	07 Nov 2017	High Tide Time	1025
I40	07 Nov 2017	Low Tide (ft)	1.9
I40	07 Nov 2017	Low Tide Time	416
I40	07 Nov 2017	Comments	none
I40	14 Nov 2017	Depth (m)	10
I40	14 Nov 2017	Arrive Time	1011
I40	14 Nov 2017	Depart Time	1013
I40	14 Nov 2017	Air Temp (C)	16
I40	14 Nov 2017	Weather	Haze
I40	14 Nov 2017	Visibility (mi)	11
I40	14 Nov 2017	Wind Speed (kts)	4
I40	14 Nov 2017	Wind Dir	W
I40	14 Nov 2017	Water Color	Green
I40	14 Nov 2017	Wave Ht Low (ft)	2
I40	14 Nov 2017	Wave Period (sec)	13
I40	14 Nov 2017	Sea State	Calm
I40	14 Nov 2017	High Tide (ft)	5.5
I40	14 Nov 2017	High Tide Time	621
I40	14 Nov 2017	Low Tide (ft)	0.6
I40	14 Nov 2017	Low Tide Time	1251
I40	14 Nov 2017	Comments	none
I40	20 Nov 2017	Depth (m)	11
I40	20 Nov 2017	Arrive Time	1037
I40	20 Nov 2017	Depart Time	1041
I40	20 Nov 2017	Air Temp (C)	16
I40	20 Nov 2017	Weather	Partly Cloudy
I40	20 Nov 2017	Visibility (mi)	12
I40	20 Nov 2017	Wind Speed (kts)	3
I40	20 Nov 2017	Wind Dir	SW
I40	20 Nov 2017	Water Color	Green
I40	20 Nov 2017	Wave Ht Low (ft)	3
I40	20 Nov 2017	Wave Period (sec)	11
I40	20 Nov 2017	Sea State	Calm
I40	20 Nov 2017	High Tide (ft)	5.6
I40	20 Nov 2017	High Tide Time	907
I40	20 Nov 2017	Low Tide (ft)	-0.1
I40	20 Nov 2017	Low Tide Time	1621
I40	20 Nov 2017	Comments	none
I40	29 Nov 2017	Depth (m)	11
I40	29 Nov 2017	Arrive Time	1054
I40	29 Nov 2017	Depart Time	1056
I40	29 Nov 2017	Air Temp (C)	17
I40	29 Nov 2017	Weather	Partly Cloudy

Station	Date	Parameter	Value
I40	29 Nov 2017	Visibility (mi)	8
I40	29 Nov 2017	Wind Speed (kts)	3
I40	29 Nov 2017	Wind Dir	E
I40	29 Nov 2017	Water Color	Green
I40	29 Nov 2017	Wave Ht Low (ft)	3
I40	29 Nov 2017	Wave Period (sec)	9
I40	29 Nov 2017	Sea State	Calm
I40	29 Nov 2017	High Tide (ft)	5.2
I40	29 Nov 2017	High Tide Time	532
I40	29 Nov 2017	Low Tide (ft)	0.9
I40	29 Nov 2017	Low Tide Time	1209
I40	29 Nov 2017	Comments	none

Table 3.10

Summary of CTD profile data from the SBOO kelp stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I19	07 Nov 2017	1	16.24	77.48	7.7	33.38	8.0	24.4	1.62
I19	07 Nov 2017	2	16.05	76.82	7.5	33.40	8.0	24.5	1.74
I19	07 Nov 2017	3	15.41	75.57	7.3	33.40	8.0	24.6	1.85
I19	07 Nov 2017	4	15.30	78.99	7.2	33.37	8.0	24.6	1.75
I19	07 Nov 2017	5	14.97	82.74	7.2	33.38	8.0	24.7	1.65
I19	07 Nov 2017	6	14.93	82.97	7.2	33.36	8.0	24.7	1.59
I19	07 Nov 2017	7	14.90	82.00	7.1	33.36	8.0	24.7	1.60
I19	07 Nov 2017	8	14.88	81.12	7.1	33.36	8.0	24.7	1.63
I19	07 Nov 2017	9	14.89	80.30	7.1	33.36	8.0	24.7	1.64
I19	07 Nov 2017	10	14.88	78.75	7.1	33.37	8.0	24.7	1.66
I19	14 Nov 2017	1	14.90	68.05	7.3	33.37	8.0	24.7	1.29
I19	14 Nov 2017	2	14.88	68.06	7.3	33.37	8.0	24.7	1.35
I19	14 Nov 2017	3	14.72	67.91	7.0	33.38	8.0	24.8	1.58
I19	14 Nov 2017	4	14.53	65.93	6.6	33.37	8.0	24.8	1.93
I19	14 Nov 2017	5	14.45	69.91	6.6	33.38	8.0	24.8	1.96
I19	14 Nov 2017	6	14.36	77.17	6.5	33.38	8.0	24.9	1.84
I19	14 Nov 2017	7	14.32	78.99	6.4	33.37	8.0	24.9	1.72
I19	14 Nov 2017	8	14.31	78.55	6.4	33.37	8.0	24.9	1.71
I19	14 Nov 2017	9	14.24	77.61	6.3	33.38	8.0	24.9	1.67
I19	14 Nov 2017	10	14.22	70.32	6.2	33.37	8.0	24.9	1.77
I19	20 Nov 2017	1	14.54	80.19	7.4	33.39	8.0	24.8	0.86
I19	20 Nov 2017	2	14.53	79.56	7.4	33.39	8.0	24.8	0.91
I19	20 Nov 2017	3	14.36	79.59	7.2	33.41	8.0	24.9	0.97
I19	20 Nov 2017	4	14.12	77.85	7.0	33.40	8.0	24.9	1.14
I19	20 Nov 2017	5	13.97	77.35	6.8	33.40	8.0	25.0	1.44
I19	20 Nov 2017	6	13.90	75.51	6.8	33.39	8.0	25.0	1.82
I19	20 Nov 2017	7	13.86	75.48	6.7	33.39	8.0	25.0	2.14
I19	20 Nov 2017	8	13.81	75.21	6.6	33.39	8.0	25.0	2.28
I19	20 Nov 2017	9	13.80	73.71	6.6	33.39	8.0	25.0	2.31
I19	20 Nov 2017	10	13.79	72.41	6.6	33.39	8.0	25.0	2.33
I19	29 Nov 2017	1	16.14	78.63	8.5	33.40	8.1	24.5	1.51
I19	29 Nov 2017	2	16.10	77.93	8.5	33.40	8.1	24.5	1.60
I19	29 Nov 2017	3	16.01	75.53	8.4	33.40	8.1	24.5	2.03
I19	29 Nov 2017	4	15.92	71.79	8.3	33.39	8.1	24.5	2.46
I19	29 Nov 2017	5	15.90	61.04	8.3	33.39	8.1	24.5	2.55
I19	29 Nov 2017	6	15.87	58.45	8.2	33.39	8.1	24.5	2.58
I19	29 Nov 2017	7	15.86	62.78	8.3	33.39	8.1	24.5	2.46
I19	29 Nov 2017	8	15.85	67.79	8.2	33.39	8.1	24.5	2.33
I19	29 Nov 2017	9	15.80	75.35	8.1	33.40	8.1	24.6	2.14
I19	29 Nov 2017	10	15.66	69.18	7.9	33.40	8.1	24.6	2.24
I24	07 Nov 2017	1	16.83	78.44	7.8	33.40	8.1	24.3	2.10
I24	07 Nov 2017	2	16.72	78.47	7.6	33.41	8.1	24.4	2.30
I24	07 Nov 2017	3	16.33	78.49	7.4	33.40	8.1	24.4	2.59
I24	07 Nov 2017	4	15.91	80.43	7.3	33.38	8.1	24.5	2.22
I24	07 Nov 2017	5	15.58	82.95	7.2	33.40	8.0	24.6	1.75
I24	07 Nov 2017	6	15.34	84.83	7.1	33.37	8.0	24.6	1.31
I24	07 Nov 2017	7	15.29	84.73	7.0	33.37	8.0	24.7	1.22

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I24	07 Nov 2017	8	15.07	84.30	6.9	33.38	8.0	24.7	1.21
I24	07 Nov 2017	9	14.86	84.16	6.8	33.37	8.0	24.7	1.16
I24	07 Nov 2017	10	14.83	83.39	6.8	33.37	8.0	24.8	1.13
I24	07 Nov 2017	11	14.82	83.11	6.8	33.37	8.0	24.8	1.12
I24	14 Nov 2017	1	15.65	75.98	7.8	33.38	8.1	24.6	1.13
I24	14 Nov 2017	2	15.60	75.61	7.8	33.39	8.1	24.6	1.16
I24	14 Nov 2017	3	15.35	72.62	7.5	33.40	8.1	24.7	1.43
I24	14 Nov 2017	4	14.87	72.34	7.1	33.41	8.0	24.8	1.82
I24	14 Nov 2017	5	14.64	75.18	6.8	33.38	8.0	24.8	1.74
I24	14 Nov 2017	6	14.61	78.59	6.7	33.37	8.0	24.8	1.56
I24	14 Nov 2017	7	14.56	79.04	6.7	33.37	8.0	24.8	1.48
I24	14 Nov 2017	8	14.56	79.42	6.7	33.37	8.0	24.8	1.44
I24	14 Nov 2017	9	14.55	78.80	6.6	33.37	8.0	24.8	1.42
I24	14 Nov 2017	10	14.56	78.32	6.6	33.37	8.0	24.8	1.39
I24	20 Nov 2017	1	14.54	77.36	7.4	33.39	8.0	24.8	1.03
I24	20 Nov 2017	2	14.49	77.21	7.4	33.39	8.0	24.8	1.06
I24	20 Nov 2017	3	14.53	78.17	7.3	33.39	8.0	24.8	1.10
I24	20 Nov 2017	4	14.34	76.94	7.2	33.41	8.0	24.9	1.21
I24	20 Nov 2017	5	14.06	72.37	6.9	33.39	8.0	24.9	1.52
I24	20 Nov 2017	6	13.97	71.77	6.5	33.39	8.0	24.9	1.64
I24	20 Nov 2017	7	13.94	72.63	6.3	33.38	8.0	25.0	1.61
I24	20 Nov 2017	8	13.87	74.83	6.0	33.39	8.0	25.0	1.42
I24	20 Nov 2017	9	13.82	75.77	5.9	33.39	7.9	25.0	1.39
I24	20 Nov 2017	10	13.75	72.07	5.9	33.39	7.9	25.0	1.45
I24	20 Nov 2017	11	13.74	70.75	5.8	33.38	7.9	25.0	1.54
I24	29 Nov 2017	1	16.18	82.15	8.6	33.40	8.1	24.5	1.55
I24	29 Nov 2017	2	16.17	82.85	8.6	33.40	8.1	24.5	1.56
I24	29 Nov 2017	3	16.03	82.12	8.6	33.40	8.1	24.5	1.89
I24	29 Nov 2017	4	16.00	81.35	8.5	33.40	8.1	24.5	2.50
I24	29 Nov 2017	5	15.98	81.08	8.5	33.40	8.1	24.5	2.52
I24	29 Nov 2017	6	15.94	82.28	8.3	33.40	8.1	24.5	2.18
I24	29 Nov 2017	7	15.89	81.91	8.2	33.40	8.1	24.5	1.93
I24	29 Nov 2017	8	15.74	79.60	8.0	33.40	8.1	24.6	2.03
I24	29 Nov 2017	9	15.72	78.09	8.0	33.39	8.1	24.6	1.97
I24	29 Nov 2017	10	15.72	72.60	8.0	33.40	8.1	24.6	1.93
I25	07 Nov 2017	1	16.90	80.46	7.8	33.40	8.1	24.3	1.84
I25	07 Nov 2017	2	16.89	80.21	7.8	33.40	8.1	24.3	1.88
I25	07 Nov 2017	3	16.74	80.52	7.6	33.41	8.1	24.4	1.97
I25	07 Nov 2017	4	16.30	80.72	7.4	33.41	8.1	24.5	2.14
I25	07 Nov 2017	5	16.17	82.04	7.4	33.39	8.1	24.5	2.15
I25	07 Nov 2017	6	15.45	83.72	7.2	33.43	8.1	24.7	2.03
I25	07 Nov 2017	7	15.06	85.14	7.0	33.37	8.0	24.7	1.60
I25	07 Nov 2017	8	14.95	85.27	6.9	33.37	8.0	24.7	1.33
I25	07 Nov 2017	9	14.94	85.20	6.9	33.37	8.0	24.7	1.17
I25	14 Nov 2017	1	15.72	75.97	7.9	33.38	8.1	24.6	1.08
I25	14 Nov 2017	2	15.72	75.77	7.8	33.38	8.1	24.6	1.11
I25	14 Nov 2017	3	15.19	75.50	7.3	33.41	8.1	24.7	1.38
I25	14 Nov 2017	4	14.46	77.73	6.8	33.40	8.0	24.9	1.39
I25	14 Nov 2017	5	14.30	79.90	6.6	33.37	8.0	24.9	1.25
I25	14 Nov 2017	6	14.27	80.44	6.6	33.37	8.0	24.9	1.20

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I25	14 Nov 2017	7	14.26	80.37	6.6	33.36	8.0	24.9	1.22
I25	14 Nov 2017	8	14.25	80.40	6.6	33.36	8.0	24.9	1.28
I25	14 Nov 2017	9	14.25	80.39	6.6	33.36	8.0	24.9	1.29
I25	20 Nov 2017	1	14.54	79.33	7.5	33.38	8.0	24.8	1.21
I25	20 Nov 2017	2	14.56	77.54	7.5	33.39	8.0	24.8	1.30
I25	20 Nov 2017	3	14.51	78.79	7.3	33.39	8.0	24.8	1.29
I25	20 Nov 2017	4	14.14	79.37	6.9	33.41	8.0	24.9	1.14
I25	20 Nov 2017	5	13.99	81.70	6.5	33.39	8.0	24.9	0.98
I25	20 Nov 2017	6	13.94	83.37	6.4	33.38	8.0	24.9	0.90
I25	20 Nov 2017	7	13.90	83.35	6.3	33.38	8.0	25.0	0.95
I25	20 Nov 2017	8	13.89	83.23	6.3	33.38	8.0	25.0	0.95
I25	20 Nov 2017	9	13.89	83.28	6.3	33.38	8.0	25.0	0.98
I25	29 Nov 2017	1	16.20	81.97	8.0	33.44	8.1	24.5	0.93
I25	29 Nov 2017	2	16.14	81.23	8.2	33.43	8.1	24.5	0.91
I25	29 Nov 2017	3	16.01	79.81	8.2	33.43	8.1	24.5	0.93
I25	29 Nov 2017	4	15.98	79.51	8.0	33.43	8.1	24.5	1.62
I25	29 Nov 2017	5	15.97	79.90	7.9	33.43	8.1	24.5	1.75
I25	29 Nov 2017	6	15.96	80.61	8.0	33.43	8.1	24.6	1.36
I25	29 Nov 2017	7	15.92	81.07	8.1	33.44	8.1	24.6	1.82
I25	29 Nov 2017	8	15.69	70.46	7.8	33.58	8.1	24.7	1.75
I25	29 Nov 2017	9	15.81	64.06	7.3	33.45	8.1	24.6	1.69
I26	07 Nov 2017	1	16.96	78.04	7.9	33.40	8.1	24.3	2.57
I26	07 Nov 2017	2	16.73	79.37	7.7	33.41	8.1	24.4	2.69
I26	07 Nov 2017	3	16.17	80.63	7.6	33.40	8.1	24.5	2.81
I26	07 Nov 2017	4	15.84	82.23	7.6	33.38	8.1	24.5	2.77
I26	07 Nov 2017	5	15.73	83.22	7.4	33.38	8.1	24.6	2.39
I26	07 Nov 2017	6	14.94	84.94	7.1	33.40	8.0	24.8	1.75
I26	07 Nov 2017	7	14.68	86.45	6.9	33.37	8.0	24.8	1.30
I26	07 Nov 2017	8	14.66	86.72	6.9	33.36	8.0	24.8	1.18
I26	07 Nov 2017	9	14.65	86.77	6.9	33.36	8.0	24.8	1.16
I26	14 Nov 2017	1	15.41	71.31	7.5	33.38	8.0	24.6	1.15
I26	14 Nov 2017	2	15.26	72.54	7.3	33.39	8.0	24.7	1.22
I26	14 Nov 2017	3	14.67	74.77	6.9	33.40	8.0	24.8	1.29
I26	14 Nov 2017	4	14.37	77.18	6.6	33.39	8.0	24.9	1.31
I26	14 Nov 2017	5	14.14	77.19	6.4	33.38	8.0	24.9	1.23
I26	14 Nov 2017	6	14.12	77.30	6.3	33.37	8.0	24.9	1.28
I26	14 Nov 2017	7	14.12	77.28	6.3	33.37	8.0	24.9	1.36
I26	14 Nov 2017	8	14.13	77.08	6.3	33.37	8.0	24.9	1.40
I26	14 Nov 2017	9	14.13	77.39	6.3	33.37	8.0	24.9	1.45
I26	20 Nov 2017	1	14.64	76.49	7.8	33.39	8.1	24.8	1.43
I26	20 Nov 2017	2	14.65	78.19	7.8	33.39	8.1	24.8	1.46
I26	20 Nov 2017	3	14.62	78.08	7.8	33.39	8.1	24.8	1.57
I26	20 Nov 2017	4	14.53	78.26	7.7	33.39	8.1	24.8	1.82
I26	20 Nov 2017	5	14.42	78.35	7.4	33.39	8.1	24.9	2.02
I26	20 Nov 2017	6	13.97	80.42	6.9	33.41	8.0	25.0	1.71
I26	20 Nov 2017	7	13.92	83.66	6.7	33.38	8.0	25.0	1.32
I26	20 Nov 2017	8	13.86	84.01	6.6	33.38	8.0	25.0	1.27
I26	20 Nov 2017	9	13.85	84.00	6.5	33.38	8.0	25.0	1.24
I26	29 Nov 2017	1	16.22	76.18	8.7	33.39	8.1	24.5	1.83

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I26	29 Nov 2017	2	16.10	73.70	8.7	33.40	8.1	24.5	2.07
I26	29 Nov 2017	3	16.02	68.61	8.6	33.39	8.1	24.5	2.58
I26	29 Nov 2017	4	15.99	68.64	8.6	33.38	8.1	24.5	3.18
I26	29 Nov 2017	5	15.97	68.42	8.6	33.38	8.1	24.5	3.47
I26	29 Nov 2017	6	15.95	69.55	8.5	33.38	8.1	24.5	3.00
I26	29 Nov 2017	7	15.93	70.86	8.4	33.38	8.1	24.5	2.52
I26	29 Nov 2017	8	15.89	71.06	8.3	33.39	8.1	24.5	2.20
I26	29 Nov 2017	9	15.72	69.50	8.1	33.40	8.1	24.6	2.02
I32	08 Nov 2017	1	16.71	81.71	7.6	33.72	8.1	24.6	2.13
I32	08 Nov 2017	2	16.66	81.51	7.2	33.67	8.1	24.6	1.84
I32	08 Nov 2017	3	16.21	80.28	7.0	33.62	8.1	24.6	1.63
I32	08 Nov 2017	4	15.60	78.69	6.9	33.59	8.1	24.8	1.60
I32	08 Nov 2017	5	15.26	79.93	6.9	33.56	8.1	24.8	1.68
I32	08 Nov 2017	6	14.95	83.19	6.9	33.53	8.0	24.9	1.69
I32	08 Nov 2017	7	14.90	83.40	6.9	33.51	8.0	24.8	1.69
I32	08 Nov 2017	8	14.90	81.84	6.9	33.49	8.0	24.8	1.67
I32	08 Nov 2017	9	14.91	80.76	6.8	33.47	8.0	24.8	1.68
I32	08 Nov 2017	10	14.91	79.88	6.8	33.46	8.0	24.8	1.68
I32	14 Nov 2017	1	15.64	68.38	7.8	33.38	8.0	24.6	1.14
I32	14 Nov 2017	2	15.48	64.03	7.7	33.38	8.0	24.6	1.30
I32	14 Nov 2017	3	15.06	59.48	7.3	33.38	8.0	24.7	1.78
I32	14 Nov 2017	4	14.71	58.49	6.9	33.37	8.0	24.8	1.92
I32	14 Nov 2017	5	14.65	60.79	6.7	33.36	8.0	24.8	2.17
I32	14 Nov 2017	6	14.55	61.73	6.6	33.36	8.0	24.8	2.42
I32	14 Nov 2017	7	14.48	63.95	6.5	33.36	8.0	24.8	2.58
I32	14 Nov 2017	8	14.46	65.15	6.5	33.36	8.0	24.8	2.63
I32	14 Nov 2017	9	14.43	61.83	6.4	33.36	8.0	24.8	2.59
I32	14 Nov 2017	10	14.43	52.55	6.4	33.36	8.0	24.8	2.63
I32	20 Nov 2017	1	15.01	78.25	7.9	33.40	8.1	24.7	1.00
I32	20 Nov 2017	2	14.83	77.34	7.8	33.41	8.1	24.8	1.19
I32	20 Nov 2017	3	14.64	75.80	7.6	33.41	8.0	24.8	1.57
I32	20 Nov 2017	4	14.24	74.08	7.4	33.40	8.0	24.9	1.72
I32	20 Nov 2017	5	14.13	74.96	7.2	33.39	8.0	24.9	1.90
I32	20 Nov 2017	6	14.10	75.87	7.2	33.38	8.0	24.9	2.14
I32	20 Nov 2017	7	14.08	76.44	7.2	33.38	8.0	24.9	2.26
I32	20 Nov 2017	8	14.02	76.69	7.1	33.38	8.0	24.9	2.31
I32	20 Nov 2017	9	14.00	76.05	7.0	33.38	8.0	24.9	2.20
I32	20 Nov 2017	10	13.98	75.43	7.0	33.38	8.0	24.9	2.23
I32	29 Nov 2017	1	16.22	70.42	8.8	33.39	8.1	24.5	2.06
I32	29 Nov 2017	2	16.15	70.23	8.8	33.40	8.1	24.5	2.28
I32	29 Nov 2017	3	16.07	69.97	8.8	33.39	8.1	24.5	2.75
I32	29 Nov 2017	4	15.98	67.50	8.7	33.40	8.1	24.5	3.23
I32	29 Nov 2017	5	15.96	65.37	8.6	33.39	8.1	24.5	3.39
I32	29 Nov 2017	6	15.93	62.10	8.5	33.39	8.1	24.5	3.28
I32	29 Nov 2017	7	15.92	60.45	8.5	33.39	8.1	24.5	3.20
I32	29 Nov 2017	8	15.91	60.28	8.4	33.39	8.1	24.5	3.13
I32	29 Nov 2017	9	15.91	60.00	8.4	33.39	8.1	24.5	2.70
I32	29 Nov 2017	10	15.91	58.51	8.4	33.39	8.1	24.5	2.48
I39	07 Nov 2017	1	17.17	85.40	8.0	33.41	8.1	24.3	1.42
I39	07 Nov 2017	2	17.17	85.33	8.0	33.41	8.1	24.3	1.47

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I39	07 Nov 2017	3	17.17	85.40	8.0	33.41	8.1	24.3	1.55
I39	07 Nov 2017	4	17.16	85.36	7.9	33.41	8.1	24.3	1.63
I39	07 Nov 2017	5	17.08	85.54	7.9	33.42	8.1	24.3	1.63
I39	07 Nov 2017	6	16.91	86.18	7.7	33.42	8.1	24.3	1.57
I39	07 Nov 2017	7	16.34	86.83	7.5	33.42	8.1	24.5	1.53
I39	07 Nov 2017	8	16.06	87.22	7.5	33.39	8.1	24.5	1.43
I39	07 Nov 2017	9	16.02	87.35	7.5	33.38	8.1	24.5	1.39
I39	07 Nov 2017	10	16.01	87.32	7.5	33.38	8.1	24.5	1.39
I39	07 Nov 2017	11	15.98	87.29	7.5	33.39	8.1	24.5	1.39
I39	07 Nov 2017	12	15.91	87.32	7.5	33.38	8.1	24.5	1.39
I39	07 Nov 2017	13	15.89	87.34	7.4	33.39	8.1	24.5	1.36
I39	07 Nov 2017	14	15.74	87.28	7.4	33.39	8.1	24.6	1.39
I39	07 Nov 2017	15	15.60	87.20	7.3	33.39	8.1	24.6	1.41
I39	07 Nov 2017	16	15.41	87.21	7.2	33.38	8.0	24.6	1.36
I39	07 Nov 2017	17	14.97	87.41	6.9	33.42	8.0	24.8	1.30
I39	07 Nov 2017	18	14.24	87.80	6.8	33.38	8.0	24.9	1.07
I39	14 Nov 2017	1	15.90	85.10	8.0	33.40	8.1	24.5	0.93
I39	14 Nov 2017	2	15.87	85.62	8.0	33.40	8.1	24.5	0.95
I39	14 Nov 2017	3	15.85	85.71	7.9	33.40	8.1	24.6	1.05
I39	14 Nov 2017	4	15.83	85.74	7.9	33.40	8.1	24.6	1.15
I39	14 Nov 2017	5	15.82	86.02	7.9	33.40	8.1	24.6	1.27
I39	14 Nov 2017	6	15.82	86.05	7.9	33.39	8.1	24.6	1.30
I39	14 Nov 2017	7	15.82	86.33	7.9	33.39	8.1	24.6	1.31
I39	14 Nov 2017	8	15.82	86.56	7.9	33.39	8.1	24.6	1.40
I39	14 Nov 2017	9	15.81	86.60	7.9	33.39	8.1	24.6	1.43
I39	14 Nov 2017	10	15.80	86.87	7.8	33.39	8.1	24.6	1.47
I39	14 Nov 2017	11	15.80	86.54	7.8	33.39	8.1	24.6	1.51
I39	14 Nov 2017	12	15.79	86.62	7.8	33.39	8.1	24.6	1.52
I39	14 Nov 2017	13	15.79	86.52	7.8	33.39	8.1	24.6	1.56
I39	14 Nov 2017	14	15.79	86.75	7.8	33.39	8.1	24.6	1.51
I39	14 Nov 2017	15	15.76	86.98	7.6	33.39	8.1	24.6	1.48
I39	14 Nov 2017	16	15.17	86.77	7.3	33.42	8.1	24.7	1.55
I39	14 Nov 2017	17	14.42	85.85	7.1	33.39	8.0	24.9	1.50
I39	14 Nov 2017	18	14.22	85.12	6.8	33.36	8.0	24.9	1.57
I39	20 Nov 2017	1	15.15	85.25	8.0	33.40	8.1	24.7	1.02
I39	20 Nov 2017	2	15.12	84.78	7.9	33.40	8.1	24.7	0.96
I39	20 Nov 2017	3	15.05	84.92	8.0	33.40	8.1	24.7	1.14
I39	20 Nov 2017	4	15.03	84.36	8.0	33.40	8.1	24.7	1.31
I39	20 Nov 2017	5	14.99	84.30	8.0	33.40	8.1	24.7	1.55
I39	20 Nov 2017	6	14.98	84.56	8.0	33.40	8.1	24.7	1.59
I39	20 Nov 2017	7	14.96	84.27	7.9	33.40	8.1	24.7	1.79
I39	20 Nov 2017	8	14.93	84.09	7.9	33.40	8.1	24.8	1.86
I39	20 Nov 2017	9	14.88	83.86	7.9	33.40	8.1	24.8	2.12
I39	20 Nov 2017	10	14.86	83.13	7.9	33.39	8.1	24.8	2.39
I39	20 Nov 2017	11	14.84	83.89	7.9	33.39	8.1	24.8	2.46
I39	20 Nov 2017	12	14.76	84.48	7.8	33.39	8.1	24.8	2.29
I39	20 Nov 2017	13	14.56	84.59	7.6	33.40	8.1	24.8	2.06
I39	20 Nov 2017	14	14.45	86.25	7.5	33.38	8.1	24.8	1.74
I39	20 Nov 2017	15	13.97	87.59	7.0	33.41	8.0	25.0	1.65
I39	20 Nov 2017	16	13.62	87.18	6.6	33.40	8.0	25.0	1.38
I39	20 Nov 2017	17	13.60	87.24	6.4	33.38	8.0	25.0	1.41
I39	20 Nov 2017	18	13.56	87.07	6.4	33.39	8.0	25.0	1.24

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I39	29 Nov 2017	1	16.18	84.33	8.7	33.40	8.1	24.5	1.27
I39	29 Nov 2017	2	16.15	84.07	8.7	33.40	8.1	24.5	1.18
I39	29 Nov 2017	3	16.11	83.82	8.7	33.40	8.1	24.5	1.28
I39	29 Nov 2017	4	16.05	83.26	8.7	33.40	8.1	24.5	1.54
I39	29 Nov 2017	5	16.05	83.47	8.7	33.40	8.1	24.5	1.82
I39	29 Nov 2017	6	16.04	83.41	8.7	33.40	8.1	24.5	2.09
I39	29 Nov 2017	7	16.02	83.44	8.7	33.40	8.1	24.5	2.19
I39	29 Nov 2017	8	15.99	83.34	8.7	33.40	8.1	24.5	2.52
I39	29 Nov 2017	9	15.94	81.61	8.5	33.40	8.1	24.5	2.42
I39	29 Nov 2017	10	15.83	79.90	8.3	33.40	8.1	24.6	2.15
I39	29 Nov 2017	11	15.76	79.28	8.2	33.40	8.1	24.6	2.02
I39	29 Nov 2017	12	15.66	77.37	8.1	33.39	8.1	24.6	2.00
I39	29 Nov 2017	13	15.53	78.53	8.0	33.41	8.1	24.6	1.92
I39	29 Nov 2017	14	15.31	78.71	8.0	33.40	8.1	24.7	1.72
I39	29 Nov 2017	15	15.21	78.52	7.9	33.39	8.1	24.7	1.54
I39	29 Nov 2017	16	15.12	78.01	7.8	33.39	8.1	24.7	1.45
I39	29 Nov 2017	17	14.89	68.98	7.6	33.39	8.1	24.8	1.50
I39	29 Nov 2017	18	14.81	55.12	7.5	33.38	8.0	24.8	1.52
I40	07 Nov 2017	1	16.19	79.33	7.7	33.37	8.0	24.5	1.32
I40	07 Nov 2017	2	16.03	79.12	7.5	33.39	8.0	24.5	1.39
I40	07 Nov 2017	3	15.68	78.27	7.4	33.37	8.0	24.6	1.58
I40	07 Nov 2017	4	15.58	77.95	7.3	33.37	8.0	24.6	1.66
I40	07 Nov 2017	5	15.37	81.58	7.3	33.37	8.0	24.6	1.59
I40	07 Nov 2017	6	15.17	83.09	7.2	33.37	8.0	24.7	1.53
I40	07 Nov 2017	7	15.02	84.11	7.2	33.37	8.0	24.7	1.45
I40	07 Nov 2017	8	14.99	80.11	7.1	33.36	8.0	24.7	1.48
I40	07 Nov 2017	9	14.99	74.77	7.1	33.36	8.0	24.7	1.54
I40	07 Nov 2017	10	14.97	72.11	7.1	33.37	8.0	24.7	1.50
I40	14 Nov 2017	1	15.24	65.99	7.4	33.37	8.0	24.7	1.41
I40	14 Nov 2017	2	15.20	64.51	7.3	33.37	8.0	24.7	1.50
I40	14 Nov 2017	3	15.06	62.79	7.2	33.37	8.0	24.7	1.77
I40	14 Nov 2017	4	14.97	60.30	7.2	33.36	8.0	24.7	2.00
I40	14 Nov 2017	5	14.88	58.18	7.0	33.36	8.0	24.7	2.18
I40	14 Nov 2017	6	14.75	54.93	7.0	33.37	8.0	24.8	2.44
I40	14 Nov 2017	7	14.71	58.59	7.0	33.36	8.0	24.8	2.50
I40	14 Nov 2017	8	14.64	59.18	6.6	33.37	8.0	24.8	2.40
I40	14 Nov 2017	9	14.42	60.95	6.3	33.38	8.0	24.8	2.15
I40	14 Nov 2017	10	14.32	59.56	6.0	33.38	8.0	24.9	1.99
I40	20 Nov 2017	1	14.20	75.84	7.1	33.38	8.0	24.9	0.97
I40	20 Nov 2017	2	14.14	74.88	7.0	33.38	8.0	24.9	1.04
I40	20 Nov 2017	3	14.02	73.79	6.9	33.39	8.0	24.9	1.22
I40	20 Nov 2017	4	14.02	72.19	6.9	33.38	8.0	24.9	1.40
I40	20 Nov 2017	5	13.95	70.59	6.9	33.39	8.0	25.0	1.75
I40	20 Nov 2017	6	13.91	69.94	7.0	33.39	8.0	25.0	2.06
I40	20 Nov 2017	7	13.89	68.84	6.8	33.39	8.0	25.0	2.24
I40	20 Nov 2017	8	13.83	68.38	6.6	33.39	8.0	25.0	2.34
I40	20 Nov 2017	9	13.79	68.23	6.3	33.39	8.0	25.0	2.53
I40	20 Nov 2017	10	13.77	61.06	6.0	33.39	8.0	25.0	2.78
I40	29 Nov 2017	1	16.08	50.43	8.0	33.39	8.1	24.5	1.57
I40	29 Nov 2017	2	16.07	49.20	8.0	33.39	8.1	24.5	1.73
I40	29 Nov 2017	3	15.97	44.63	8.0	33.40	8.1	24.5	2.09

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I40	29 Nov 2017	4	15.94	43.04	8.0	33.39	8.1	24.5	2.34
I40	29 Nov 2017	5	15.89	42.17	8.0	33.40	8.1	24.5	2.35
I40	29 Nov 2017	6	15.87	43.20	8.0	33.39	8.1	24.5	2.32
I40	29 Nov 2017	7	15.83	43.74	7.9	33.39	8.1	24.6	2.31
I40	29 Nov 2017	8	15.79	45.92	7.9	33.39	8.1	24.6	2.34
I40	29 Nov 2017	9	15.75	45.71	7.8	33.39	8.1	24.6	2.21
I40	29 Nov 2017	10	15.73	42.71	7.8	33.39	8.1	24.6	2.22

NA = not available

This page intentionally left blank

Offshore Stations

Table 4.1

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria at the SBOO offshore stations within three nautical miles of shore. Total coliform density shall not exceed 10,000 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
07 Nov 2017	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
08 Nov 2017	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.2

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria at the SBOO offshore stations within three nautical miles of shore. Fecal coliform density shall not exceed 400 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
07 Nov 2017	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
08 Nov 2017	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.3

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria at the SBOO offshore stations within three nautical miles of shore. *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
07 Nov 2017	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
08 Nov 2017	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.4

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T) at the SBOO offshore stations within three nautical miles of shore. Total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
07 Nov 2017	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
08 Nov 2017	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.5

Summary of water quality parameters at the SBOO offshore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected; oil and grease samples (OG) and suspended solids (SUSO) data are reported as mg/L. Duplicates are indicated by *. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I3	06 Nov 2017	930	2	<2	<2	4e	1.000	17.6	86.53	8.0	33.42	8.1	2.21	ns
I3	06 Nov 2017	930	18	<2	<2	<2	1.000	15.2	89.32	7.7	33.37	8.1	ns	ns
I3	06 Nov 2017	930	27	<2	<2	<2	1.000	14.3	90.48	6.6	33.38	8.0	ns	ns
I5	06 Nov 2017	951	2	<2	<2	<2	1.000	16.3	81.21	7.7	33.40	8.1	1.89	ns
I5	06 Nov 2017	951	6	2e	<2	<2	1.000	15.5	83.67	7.4	33.37	8.1	ns	ns
I5	06 Nov 2017	951	11	<2	<2	<2	1.000	15.1	86.38	7.2	33.36	8.0	ns	ns
I7	06 Nov 2017	830	2	<2	<2	<2	1.000	18.1	87.01	8.0	33.44	8.1	1.46	ns
I7	06 Nov 2017	830	18	<2	<2	<2	1.000	16.9	87.38	7.9	33.41	8.1	ns	ns
I7	06 Nov 2017	830	52	8e	<2	<2	0.250	12.9	89.19	5.8	33.44	7.9	ns	ns
I8	06 Nov 2017	1103	2	<2	<2	<2	1.000	17.8	84.81	8.0	33.43	8.1	2.06	ns
I8	06 Nov 2017	1103	18	<2	<2	<2	1.000	15.6	87.03	7.8	33.38	8.1	ns	ns
I8	06 Nov 2017	1103	37	<2	<2	<2	1.000	13.9	89.34	6.5	33.38	8.0	ns	ns
I9	06 Nov 2017	1050	2	<2	<2	<2	1.000	17.7	84.45	8.1	33.43	8.1	1.62	ns
I9	06 Nov 2017	1050	18	<2	<2	<2	1.000	14.6	88.65	7.3	33.37	8.1	ns	ns
I9	06 Nov 2017	1050	27	<2	<2	<2	1.000	14.2	89.02	6.7	33.38	8.0	ns	ns
I10	06 Nov 2017	1037	2	<2	<2	<2	1.000	17.6	85.15	8.0	33.42	8.1	1.38	ns
I10	06 Nov 2017	1037	12	2e	<2	<2	1.000	15.2	87.39	7.5	33.37	8.1	ns	ns
I10	06 Nov 2017	1037	18	<2	<2	<2	1.000	14.7	88.13	7.2	33.37	8.1	ns	ns
I11	06 Nov 2017	1024	2	<2	<2	<2	1.000	16.9	79.16	7.8	33.39	8.1	1.94	ns
I11	06 Nov 2017	1024	6	<2	<2	<2	1.000	16.3	85.76	7.8	33.39	8.1	ns	ns
I11	06 Nov 2017	1024	11	1600e	<2	<2	0.001	15.1	86.71	7.4	33.36	8.1	ns	ns
I12	07 Nov 2017	1020	2	<2	<2	<2	1.000	17.5	83.77	7.9	33.43	8.1	3.39	5.3
I12	07 Nov 2017	1020	18	88	18e	4e	0.205	14.2	88.02	6.6	33.27	8.0	ns	10.2
I12	07 Nov 2017	1020	27	6e	2e	<2	0.333	13.9	87.94	6.4	33.38	8.0	ns	<0.2
I13	06 Nov 2017	1117	2	12e	<2	<2	0.167	17.7	84.38	8.0	33.43	8.1	1.6	ns
I13	06 Nov 2017	1117	18	<2	<2	<2	1.000	16.3	85.66	7.9	33.38	8.1	ns	ns
I13	06 Nov 2017	1117	37	2e	<2	<2	1.000	14.2	89.27	6.7	33.37	8.0	ns	ns
I14	07 Nov 2017	1041	2	<2	<2	<2	1.000	17.5	84.01	7.9	33.44	8.1	3.22	<0.2
I14	07 Nov 2017	1041	18	2e	<2	<2	1.000	14.5	88.77	7.0	33.36	8.0	ns	3.1
I14	07 Nov 2017	1041	27	4e	<2	<2	0.500	13.9	88.18	6.5	33.38	8.0	ns	4.9
I16	07 Nov 2017	1011	2	<2	<2	2e	1.000	17.5	84.26	7.9	33.44	8.1	2.51	6.1
I16	07 Nov 2017	1011	2	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	4.8*
I16	07 Nov 2017	1011	18	<2	<2	<2	1.000	14.6	88.53	7.0	33.37	8.0	ns	4.7
I16	07 Nov 2017	1011	27	4e	2e	<2	0.500	13.9	88.04	6.4	33.38	8.0	ns	5.3
I18	07 Nov 2017	950	2	<2	<2	<2	1.000	17.0	84.64	8.0	33.41	8.1	2.04	3.2

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I18	07 Nov 2017	950	12	<2	<2	<2	1.000	15.8	87.06	7.4	33.38	8.1	ns	7.4
I18	07 Nov 2017	950	18	2e	<2	<2	1.000	14.5	87.97	6.9	33.37	8.0	ns	4.0
I20	06 Nov 2017	812	2	<2	<2	<2	1.000	18.0	87.49	8.0	33.44	8.1	1.42	ns
I20	06 Nov 2017	812	18	<2	<2	<2	1.000	15.9	87.48	8.0	33.39	8.1	ns	ns
I20	06 Nov 2017	812	55	72	8e	2e	0.111	12.5	89.03	5.4	33.46	7.9	ns	ns
I21	06 Nov 2017	1132	2	<2	<2	<2	1.000	17.8	82.33	7.9	33.45	8.1	1.52	ns
I21	06 Nov 2017	1132	18	<2	<2	<2	1.000	14.7	87.35	7.6	33.36	8.1	ns	ns
I21	06 Nov 2017	1132	37	4e	<2	<2	0.500	13.8	89.14	6.5	33.38	8.0	ns	ns
I22	07 Nov 2017	1056	2	<2	<2	<2	1.000	17.5	82.89	8.0	33.43	8.1	2.42	5.8
I22	07 Nov 2017	1056	18	<2	<2	<2	1.000	14.5	88.96	7.0	33.37	8.0	ns	6.5
I22	07 Nov 2017	1056	27	6e	4e	<2	0.667	13.9	88.40	6.5	33.38	8.0	ns	4.4
I23	07 Nov 2017	1123	2	<2	<2	<2	1.000	17.2	85.12	8.1	33.41	8.1	<0.2	8.9
I23	07 Nov 2017	1123	12	<2	<2	<2	1.000	15.2	87.66	7.2	33.37	8.1	ns	3.5
I23	07 Nov 2017	1123	18	2e	<2	<2	1.000	14.6	87.80	6.8	33.39	8.0	ns	4.4
I30	08 Nov 2017	909	2	<2	<2	<2	1.000	17.0	86.18	7.9	33.41	8.1	1.81	<0.2
I30	08 Nov 2017	909	2	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	<0.2*
I30	08 Nov 2017	909	18	2e	<2	<2	1.000	14.5	88.70	7.0	33.36	8.0	ns	2.6
I30	08 Nov 2017	909	27	<2	<2	<2	1.000	13.9	88.72	6.3	33.38	8.0	ns	<0.2
I33	08 Nov 2017	813	2	<2	<2	<2	1.000	17.3	83.75	7.3	33.46	8.1	1.22	2.9
I33	08 Nov 2017	813	18	4e	<2	<2	0.500	14.9	86.99	6.7	33.38	8.0	ns	3.5
I33	08 Nov 2017	813	27	36e	<2	<2	0.056	13.7	88.26	6.2	33.38	8.0	ns	2.6
I36	08 Nov 2017	1007	2	<2	<2	<2	1.000	16.9	78.91	7.5	33.40	8.1	1.77	4.4
I36	08 Nov 2017	1007	6	<2	<2	<2	1.000	15.2	80.67	7.0	33.38	8.1	ns	4.3
I36	08 Nov 2017	1007	11	<20	<2	<2	0.100	14.8	80.46	6.7	33.37	8.0	ns	4.5
I37	08 Nov 2017	745	2	<2	<2	<2	1.000	17.2	85.68	7.8	33.42	8.1	3.06	4.4
I37	08 Nov 2017	745	2	ns	ns	ns	ns	ns	ns	ns	ns	ns	ns	4.1*
I37	08 Nov 2017	745	6	<2	<2	<2	1.000	16.9	83.80	6.8	33.42	8.1	ns	3.7
I37	08 Nov 2017	745	11	<2	<2	2e	1.000	14.8	83.13	6.5	33.37	8.0	ns	3.2
I38	08 Nov 2017	1046	2	4e	<2	<2	0.500	17.5	82.64	7.7	33.42	8.2	3.39	4.3
I38	08 Nov 2017	1046	6	<2	<2	<2	1.000	15.7	82.85	7.1	33.36	8.1	ns	3.4
I38	08 Nov 2017	1046	11	<2	<2	<2	1.000	15.2	81.26	6.9	33.36	8.1	ns	5.6

ns = not sampled

ND = no data

Table 4.6

Summary of visual observations made during the month for each SBOO offshore station by sample date.

Station	Date	Parameter	Value
I1	06 Nov 2017	Depth (m)	63
I1	06 Nov 2017	Arrive Time	853
I1	06 Nov 2017	Depart Time	858
I1	06 Nov 2017	Air Temp (C)	17
I1	06 Nov 2017	Weather	Clear
I1	06 Nov 2017	Visibility (mi)	12
I1	06 Nov 2017	Wind Speed (kts)	1
I1	06 Nov 2017	Wind Dir	E
I1	06 Nov 2017	Water Color	Green
I1	06 Nov 2017	Wave Ht Low (ft)	4
I1	06 Nov 2017	Wave Period (sec)	13
I1	06 Nov 2017	Sea State	Calm
I1	06 Nov 2017	High Tide (ft)	6.4
I1	06 Nov 2017	High Tide Time	938
I1	06 Nov 2017	Low Tide (ft)	1.5
I1	06 Nov 2017	Low Tide Time	330
I1	06 Nov 2017	Comments	none
I2	06 Nov 2017	Depth (m)	36
I2	06 Nov 2017	Arrive Time	917
I2	06 Nov 2017	Depart Time	921
I2	06 Nov 2017	Air Temp (C)	17
I2	06 Nov 2017	Weather	Clear
I2	06 Nov 2017	Visibility (mi)	12
I2	06 Nov 2017	Wind Speed (kts)	3
I2	06 Nov 2017	Wind Dir	E
I2	06 Nov 2017	Water Color	Green
I2	06 Nov 2017	Wave Ht Low (ft)	3
I2	06 Nov 2017	Wave Period (sec)	13
I2	06 Nov 2017	Sea State	Calm
I2	06 Nov 2017	High Tide (ft)	6.4
I2	06 Nov 2017	High Tide Time	938
I2	06 Nov 2017	Low Tide (ft)	1.5
I2	06 Nov 2017	Low Tide Time	330
I2	06 Nov 2017	Comments	none
I3	06 Nov 2017	Depth (m)	29
I3	06 Nov 2017	Arrive Time	930
I3	06 Nov 2017	Depart Time	933
I3	06 Nov 2017	Air Temp (C)	17
I3	06 Nov 2017	Weather	Clear
I3	06 Nov 2017	Visibility (mi)	12
I3	06 Nov 2017	Wind Speed (kts)	3
I3	06 Nov 2017	Wind Dir	SW
I3	06 Nov 2017	Water Color	Green
I3	06 Nov 2017	Wave Ht Low (ft)	3
I3	06 Nov 2017	Wave Period (sec)	13
I3	06 Nov 2017	Sea State	Calm
I3	06 Nov 2017	High Tide (ft)	6.4
I3	06 Nov 2017	High Tide Time	938
I3	06 Nov 2017	Low Tide (ft)	1.5

Station	Date	Parameter	Value
I3	06 Nov 2017	Low Tide Time	330
I3	06 Nov 2017	Comments	none
I4	06 Nov 2017	Depth (m)	21
I4	06 Nov 2017	Arrive Time	943
I4	06 Nov 2017	Depart Time	946
I4	06 Nov 2017	Air Temp (C)	18
I4	06 Nov 2017	Weather	Clear
I4	06 Nov 2017	Visibility (mi)	12
I4	06 Nov 2017	Wind Speed (kts)	4
I4	06 Nov 2017	Wind Dir	E
I4	06 Nov 2017	Water Color	Green
I4	06 Nov 2017	Wave Ht Low (ft)	3
I4	06 Nov 2017	Wave Period (sec)	13
I4	06 Nov 2017	Sea State	Calm
I4	06 Nov 2017	High Tide (ft)	6.4
I4	06 Nov 2017	High Tide Time	938
I4	06 Nov 2017	Low Tide (ft)	1.5
I4	06 Nov 2017	Low Tide Time	330
I4	06 Nov 2017	Comments	none
I5	06 Nov 2017	Depth (m)	16
I5	06 Nov 2017	Arrive Time	951
I5	06 Nov 2017	Depart Time	955
I5	06 Nov 2017	Air Temp (C)	18
I5	06 Nov 2017	Weather	Clear
I5	06 Nov 2017	Visibility (mi)	12
I5	06 Nov 2017	Wind Speed (kts)	6
I5	06 Nov 2017	Wind Dir	NE
I5	06 Nov 2017	Water Color	Green
I5	06 Nov 2017	Wave Ht Low (ft)	3
I5	06 Nov 2017	Wave Period (sec)	13
I5	06 Nov 2017	Sea State	Calm
I5	06 Nov 2017	High Tide (ft)	6.4
I5	06 Nov 2017	High Tide Time	938
I5	06 Nov 2017	Low Tide (ft)	1.5
I5	06 Nov 2017	Low Tide Time	330
I5	06 Nov 2017	Comments	none
I6	06 Nov 2017	Depth (m)	26
I6	06 Nov 2017	Arrive Time	1008
I6	06 Nov 2017	Depart Time	1010
I6	06 Nov 2017	Air Temp (C)	18
I6	06 Nov 2017	Weather	Clear
I6	06 Nov 2017	Visibility (mi)	12
I6	06 Nov 2017	Wind Speed (kts)	9
I6	06 Nov 2017	Wind Dir	NW
I6	06 Nov 2017	Water Color	Green
I6	06 Nov 2017	Wave Ht Low (ft)	3
I6	06 Nov 2017	Wave Period (sec)	13
I6	06 Nov 2017	Sea State	Calm
I6	06 Nov 2017	High Tide (ft)	6.4
I6	06 Nov 2017	High Tide Time	938
I6	06 Nov 2017	Low Tide (ft)	1.5
I6	06 Nov 2017	Low Tide Time	330

Station	Date	Parameter	Value
16	06 Nov 2017	Comments	none
17	06 Nov 2017	Depth (m)	53
17	06 Nov 2017	Arrive Time	830
17	06 Nov 2017	Depart Time	835
17	06 Nov 2017	Air Temp (C)	17
17	06 Nov 2017	Weather	Clear
17	06 Nov 2017	Visibility (mi)	12
17	06 Nov 2017	Wind Speed (kts)	3
17	06 Nov 2017	Wind Dir	NE
17	06 Nov 2017	Water Color	Green
17	06 Nov 2017	Wave Ht Low (ft)	3
17	06 Nov 2017	Wave Period (sec)	13
17	06 Nov 2017	Sea State	Calm
17	06 Nov 2017	High Tide (ft)	6.4
17	06 Nov 2017	High Tide Time	938
17	06 Nov 2017	Low Tide (ft)	1.5
17	06 Nov 2017	Low Tide Time	330
17	06 Nov 2017	Comments	none
18	06 Nov 2017	Depth (m)	37
18	06 Nov 2017	Arrive Time	1103
18	06 Nov 2017	Depart Time	1107
18	06 Nov 2017	Air Temp (C)	18
18	06 Nov 2017	Weather	Partly Cloudy
18	06 Nov 2017	Visibility (mi)	12
18	06 Nov 2017	Wind Speed (kts)	3
18	06 Nov 2017	Wind Dir	NE
18	06 Nov 2017	Water Color	Green
18	06 Nov 2017	Wave Ht Low (ft)	3
18	06 Nov 2017	Wave Period (sec)	13
18	06 Nov 2017	Sea State	Calm
18	06 Nov 2017	High Tide (ft)	6.4
18	06 Nov 2017	High Tide Time	938
18	06 Nov 2017	Low Tide (ft)	1.5
18	06 Nov 2017	Low Tide Time	330
18	06 Nov 2017	Comments	none
19	06 Nov 2017	Depth (m)	31
19	06 Nov 2017	Arrive Time	1050
19	06 Nov 2017	Depart Time	1053
19	06 Nov 2017	Air Temp (C)	18
19	06 Nov 2017	Weather	Partly Cloudy
19	06 Nov 2017	Visibility (mi)	12
19	06 Nov 2017	Wind Speed (kts)	2
19	06 Nov 2017	Wind Dir	SE
19	06 Nov 2017	Water Color	Green
19	06 Nov 2017	Wave Ht Low (ft)	3
19	06 Nov 2017	Wave Period (sec)	13
19	06 Nov 2017	Sea State	Calm
19	06 Nov 2017	High Tide (ft)	6.4
19	06 Nov 2017	High Tide Time	938
19	06 Nov 2017	Low Tide (ft)	1.5
19	06 Nov 2017	Low Tide Time	330
19	06 Nov 2017	Comments	none

Station	Date	Parameter	Value
I10	06 Nov 2017	Depth (m)	21
I10	06 Nov 2017	Arrive Time	1037
I10	06 Nov 2017	Depart Time	1040
I10	06 Nov 2017	Air Temp (C)	18
I10	06 Nov 2017	Weather	Partly Cloudy
I10	06 Nov 2017	Visibility (mi)	12
I10	06 Nov 2017	Wind Speed (kts)	1
I10	06 Nov 2017	Wind Dir	NE
I10	06 Nov 2017	Water Color	Green
I10	06 Nov 2017	Wave Ht Low (ft)	3
I10	06 Nov 2017	Wave Period (sec)	13
I10	06 Nov 2017	Sea State	Calm
I10	06 Nov 2017	High Tide (ft)	6.4
I10	06 Nov 2017	High Tide Time	938
I10	06 Nov 2017	Low Tide (ft)	1.5
I10	06 Nov 2017	Low Tide Time	330
I10	06 Nov 2017	Comments	none
I11	06 Nov 2017	Depth (m)	15
I11	06 Nov 2017	Arrive Time	1024
I11	06 Nov 2017	Depart Time	1027
I11	06 Nov 2017	Air Temp (C)	18
I11	06 Nov 2017	Weather	Partly Cloudy
I11	06 Nov 2017	Visibility (mi)	12
I11	06 Nov 2017	Wind Speed (kts)	5
I11	06 Nov 2017	Wind Dir	SE
I11	06 Nov 2017	Water Color	Green
I11	06 Nov 2017	Wave Ht Low (ft)	3
I11	06 Nov 2017	Wave Period (sec)	13
I11	06 Nov 2017	Sea State	Calm
I11	06 Nov 2017	High Tide (ft)	6.4
I11	06 Nov 2017	High Tide Time	938
I11	06 Nov 2017	Low Tide (ft)	1.5
I11	06 Nov 2017	Low Tide Time	330
I11	06 Nov 2017	Comments	Boats
I12	07 Nov 2017	Depth (m)	30
I12	07 Nov 2017	Arrive Time	1020
I12	07 Nov 2017	Depart Time	1025
I12	07 Nov 2017	Air Temp (C)	18
I12	07 Nov 2017	Weather	Overcast
I12	07 Nov 2017	Visibility (mi)	6
I12	07 Nov 2017	Wind Speed (kts)	5
I12	07 Nov 2017	Wind Dir	SW
I12	07 Nov 2017	Water Color	Green
I12	07 Nov 2017	Wave Ht Low (ft)	2
I12	07 Nov 2017	Wave Period (sec)	11
I12	07 Nov 2017	Sea State	Calm
I12	07 Nov 2017	High Tide (ft)	6.1
I12	07 Nov 2017	High Tide Time	1025
I12	07 Nov 2017	Low Tide (ft)	1.9
I12	07 Nov 2017	Low Tide Time	416
I12	07 Nov 2017	Comments	none

Station	Date	Parameter	Value
I13	06 Nov 2017	Depth (m)	39
I13	06 Nov 2017	Arrive Time	1117
I13	06 Nov 2017	Depart Time	1120
I13	06 Nov 2017	Air Temp (C)	18
I13	06 Nov 2017	Weather	Partly Cloudy
I13	06 Nov 2017	Visibility (mi)	12
I13	06 Nov 2017	Wind Speed (kts)	4
I13	06 Nov 2017	Wind Dir	SE
I13	06 Nov 2017	Water Color	Green
I13	06 Nov 2017	Wave Ht Low (ft)	3
I13	06 Nov 2017	Wave Period (sec)	13
I13	06 Nov 2017	Sea State	Calm
I13	06 Nov 2017	High Tide (ft)	6.4
I13	06 Nov 2017	High Tide Time	938
I13	06 Nov 2017	Low Tide (ft)	1.5
I13	06 Nov 2017	Low Tide Time	330
I13	06 Nov 2017	Comments	none
I14	07 Nov 2017	Depth (m)	29
I14	07 Nov 2017	Arrive Time	1041
I14	07 Nov 2017	Depart Time	1053
I14	07 Nov 2017	Air Temp (C)	18
I14	07 Nov 2017	Weather	Overcast
I14	07 Nov 2017	Visibility (mi)	6
I14	07 Nov 2017	Wind Speed (kts)	4
I14	07 Nov 2017	Wind Dir	N
I14	07 Nov 2017	Water Color	Green
I14	07 Nov 2017	Wave Ht Low (ft)	2
I14	07 Nov 2017	Wave Period (sec)	11
I14	07 Nov 2017	Sea State	Calm
I14	07 Nov 2017	High Tide (ft)	6.1
I14	07 Nov 2017	High Tide Time	1025
I14	07 Nov 2017	Low Tide (ft)	1.9
I14	07 Nov 2017	Low Tide Time	416
I14	07 Nov 2017	Comments	none
I15	07 Nov 2017	Depth (m)	30
I15	07 Nov 2017	Arrive Time	1039
I15	07 Nov 2017	Depart Time	1039
I15	07 Nov 2017	Air Temp (C)	18
I15	07 Nov 2017	Weather	Overcast
I15	07 Nov 2017	Visibility (mi)	6
I15	07 Nov 2017	Wind Speed (kts)	18
I15	07 Nov 2017	Wind Dir	NW
I15	07 Nov 2017	Water Color	Green
I15	07 Nov 2017	Wave Ht Low (ft)	2
I15	07 Nov 2017	Wave Period (sec)	11
I15	07 Nov 2017	Sea State	Calm
I15	07 Nov 2017	High Tide (ft)	6.1
I15	07 Nov 2017	High Tide Time	1025
I15	07 Nov 2017	Low Tide (ft)	1.9
I15	07 Nov 2017	Low Tide Time	416
I15	07 Nov 2017	Comments	none
I16	07 Nov 2017	Depth (m)	29

Station	Date	Parameter	Value
I16	07 Nov 2017	Arrive Time	1011
I16	07 Nov 2017	Depart Time	1017
I16	07 Nov 2017	Air Temp (C)	18
I16	07 Nov 2017	Weather	Overcast
I16	07 Nov 2017	Visibility (mi)	6
I16	07 Nov 2017	Wind Speed (kts)	4
I16	07 Nov 2017	Wind Dir	SE
I16	07 Nov 2017	Water Color	Green
I16	07 Nov 2017	Wave Ht Low (ft)	2
I16	07 Nov 2017	Wave Period (sec)	11
I16	07 Nov 2017	Sea State	Calm
I16	07 Nov 2017	High Tide (ft)	6.1
I16	07 Nov 2017	High Tide Time	1025
I16	07 Nov 2017	Low Tide (ft)	1.9
I16	07 Nov 2017	Low Tide Time	416
I16	07 Nov 2017	Comments	none
I17	07 Nov 2017	Depth (m)	27
I17	07 Nov 2017	Arrive Time	1003
I17	07 Nov 2017	Depart Time	1007
I17	07 Nov 2017	Air Temp (C)	18
I17	07 Nov 2017	Weather	Overcast
I17	07 Nov 2017	Visibility (mi)	6
I17	07 Nov 2017	Wind Speed (kts)	6
I17	07 Nov 2017	Wind Dir	E
I17	07 Nov 2017	Water Color	Green
I17	07 Nov 2017	Wave Ht Low (ft)	2
I17	07 Nov 2017	Wave Period (sec)	11
I17	07 Nov 2017	Sea State	Calm
I17	07 Nov 2017	High Tide (ft)	6.1
I17	07 Nov 2017	High Tide Time	1025
I17	07 Nov 2017	Low Tide (ft)	1.9
I17	07 Nov 2017	Low Tide Time	416
I17	07 Nov 2017	Comments	none
I18	07 Nov 2017	Depth (m)	22
I18	07 Nov 2017	Arrive Time	950
I18	07 Nov 2017	Depart Time	955
I18	07 Nov 2017	Air Temp (C)	18
I18	07 Nov 2017	Weather	Overcast
I18	07 Nov 2017	Visibility (mi)	8
I18	07 Nov 2017	Wind Speed (kts)	6
I18	07 Nov 2017	Wind Dir	SE
I18	07 Nov 2017	Water Color	Green
I18	07 Nov 2017	Wave Ht Low (ft)	2
I18	07 Nov 2017	Wave Period (sec)	11
I18	07 Nov 2017	Sea State	Calm
I18	07 Nov 2017	High Tide (ft)	6.1
I18	07 Nov 2017	High Tide Time	1025
I18	07 Nov 2017	Low Tide (ft)	1.9
I18	07 Nov 2017	Low Tide Time	416
I18	07 Nov 2017	Comments	none
I20	06 Nov 2017	Depth (m)	57
I20	06 Nov 2017	Arrive Time	812

Station	Date	Parameter	Value
I20	06 Nov 2017	Depart Time	817
I20	06 Nov 2017	Air Temp (C)	17
I20	06 Nov 2017	Weather	Clear
I20	06 Nov 2017	Visibility (mi)	12
I20	06 Nov 2017	Wind Speed (kts)	2
I20	06 Nov 2017	Wind Dir	E
I20	06 Nov 2017	Water Color	Green
I20	06 Nov 2017	Wave Ht Low (ft)	3
I20	06 Nov 2017	Wave Period (sec)	9
I20	06 Nov 2017	Sea State	Calm
I20	06 Nov 2017	High Tide (ft)	6.4
I20	06 Nov 2017	High Tide Time	938
I20	06 Nov 2017	Low Tide (ft)	1.5
I20	06 Nov 2017	Low Tide Time	330
I20	06 Nov 2017	Comments	none
I21	06 Nov 2017	Depth (m)	44
I21	06 Nov 2017	Arrive Time	1132
I21	06 Nov 2017	Depart Time	1137
I21	06 Nov 2017	Air Temp (C)	18
I21	06 Nov 2017	Weather	Partly Cloudy
I21	06 Nov 2017	Visibility (mi)	12
I21	06 Nov 2017	Wind Speed (kts)	5
I21	06 Nov 2017	Wind Dir	E
I21	06 Nov 2017	Water Color	Green
I21	06 Nov 2017	Wave Ht Low (ft)	3
I21	06 Nov 2017	Wave Period (sec)	13
I21	06 Nov 2017	Sea State	Calm
I21	06 Nov 2017	High Tide (ft)	6.4
I21	06 Nov 2017	High Tide Time	938
I21	06 Nov 2017	Low Tide (ft)	1.5
I21	06 Nov 2017	Low Tide Time	330
I21	06 Nov 2017	Comments	none
I22	07 Nov 2017	Depth (m)	30
I22	07 Nov 2017	Arrive Time	1056
I22	07 Nov 2017	Depart Time	1115
I22	07 Nov 2017	Air Temp (C)	18
I22	07 Nov 2017	Weather	Overcast
I22	07 Nov 2017	Visibility (mi)	6
I22	07 Nov 2017	Wind Speed (kts)	11
I22	07 Nov 2017	Wind Dir	N
I22	07 Nov 2017	Water Color	Green
I22	07 Nov 2017	Wave Ht Low (ft)	2
I22	07 Nov 2017	Wave Period (sec)	11
I22	07 Nov 2017	Sea State	Calm
I22	07 Nov 2017	High Tide (ft)	6.1
I22	07 Nov 2017	High Tide Time	1025
I22	07 Nov 2017	Low Tide (ft)	1.9
I22	07 Nov 2017	Low Tide Time	416
I22	07 Nov 2017	Comments	none
I23	07 Nov 2017	Depth (m)	22
I23	07 Nov 2017	Arrive Time	1123
I23	07 Nov 2017	Depart Time	1127

Station	Date	Parameter	Value
I23	07 Nov 2017	Air Temp (C)	18
I23	07 Nov 2017	Weather	Overcast
I23	07 Nov 2017	Visibility (mi)	6
I23	07 Nov 2017	Wind Speed (kts)	4
I23	07 Nov 2017	Wind Dir	NE
I23	07 Nov 2017	Water Color	Green
I23	07 Nov 2017	Wave Ht Low (ft)	2
I23	07 Nov 2017	Wave Period (sec)	11
I23	07 Nov 2017	Sea State	Calm
I23	07 Nov 2017	High Tide (ft)	6.1
I23	07 Nov 2017	High Tide Time	1025
I23	07 Nov 2017	Low Tide (ft)	1.9
I23	07 Nov 2017	Low Tide Time	416
I23	07 Nov 2017	Comments	none
I27	07 Nov 2017	Depth (m)	30
I27	07 Nov 2017	Arrive Time	821
I27	07 Nov 2017	Depart Time	830
I27	07 Nov 2017	Air Temp (C)	17
I27	07 Nov 2017	Weather	Overcast
I27	07 Nov 2017	Visibility (mi)	8
I27	07 Nov 2017	Wind Speed (kts)	4
I27	07 Nov 2017	Wind Dir	SE
I27	07 Nov 2017	Water Color	Greenish-Blue
I27	07 Nov 2017	Wave Ht Low (ft)	2
I27	07 Nov 2017	Wave Period (sec)	11
I27	07 Nov 2017	Sea State	Calm
I27	07 Nov 2017	High Tide (ft)	6.1
I27	07 Nov 2017	High Tide Time	1025
I27	07 Nov 2017	Low Tide (ft)	1.9
I27	07 Nov 2017	Low Tide Time	416
I27	07 Nov 2017	Comments	none
I28	08 Nov 2017	Depth (m)	57
I28	08 Nov 2017	Arrive Time	835
I28	08 Nov 2017	Depart Time	840
I28	08 Nov 2017	Air Temp (C)	18
I28	08 Nov 2017	Weather	Partly Cloudy
I28	08 Nov 2017	Visibility (mi)	12
I28	08 Nov 2017	Wind Speed (kts)	1
I28	08 Nov 2017	Wind Dir	SE
I28	08 Nov 2017	Water Color	Bluish-Green
I28	08 Nov 2017	Wave Ht Low (ft)	3
I28	08 Nov 2017	Wave Period (sec)	13
I28	08 Nov 2017	Sea State	Wind ripples
I28	08 Nov 2017	High Tide (ft)	5.6
I28	08 Nov 2017	High Tide Time	1120
I28	08 Nov 2017	Low Tide (ft)	2.4
I28	08 Nov 2017	Low Tide Time	513
I28	08 Nov 2017	Comments	none
I29	08 Nov 2017	Depth (m)	38
I29	08 Nov 2017	Arrive Time	854
I29	08 Nov 2017	Depart Time	859
I29	08 Nov 2017	Air Temp (C)	17

Station	Date	Parameter	Value
I29	08 Nov 2017	Weather	Partly Cloudy
I29	08 Nov 2017	Visibility (mi)	12
I29	08 Nov 2017	Wind Speed (kts)	2
I29	08 Nov 2017	Wind Dir	E
I29	08 Nov 2017	Water Color	Bluish-Green
I29	08 Nov 2017	Wave Ht Low (ft)	3
I29	08 Nov 2017	Wave Period (sec)	13
I29	08 Nov 2017	Sea State	Wind ripples
I29	08 Nov 2017	High Tide (ft)	5.6
I29	08 Nov 2017	High Tide Time	1120
I29	08 Nov 2017	Low Tide (ft)	2.4
I29	08 Nov 2017	Low Tide Time	513
I29	08 Nov 2017	Comments	none
I30	08 Nov 2017	Depth (m)	29
I30	08 Nov 2017	Arrive Time	909
I30	08 Nov 2017	Depart Time	915
I30	08 Nov 2017	Air Temp (C)	17
I30	08 Nov 2017	Weather	Partly Cloudy
I30	08 Nov 2017	Visibility (mi)	13
I30	08 Nov 2017	Wind Speed (kts)	5
I30	08 Nov 2017	Wind Dir	NE
I30	08 Nov 2017	Water Color	Bluish-Green
I30	08 Nov 2017	Wave Ht Low (ft)	3
I30	08 Nov 2017	Wave Period (sec)	13
I30	08 Nov 2017	Sea State	Wind ripples
I30	08 Nov 2017	High Tide (ft)	5.6
I30	08 Nov 2017	High Tide Time	1120
I30	08 Nov 2017	Low Tide (ft)	2.4
I30	08 Nov 2017	Low Tide Time	513
I30	08 Nov 2017	Comments	none
I31	08 Nov 2017	Depth (m)	20
I31	08 Nov 2017	Arrive Time	926
I31	08 Nov 2017	Depart Time	930
I31	08 Nov 2017	Air Temp (C)	17
I31	08 Nov 2017	Weather	Partly Cloudy
I31	08 Nov 2017	Visibility (mi)	13
I31	08 Nov 2017	Wind Speed (kts)	3
I31	08 Nov 2017	Wind Dir	N
I31	08 Nov 2017	Water Color	Bluish-Green
I31	08 Nov 2017	Wave Ht Low (ft)	3
I31	08 Nov 2017	Wave Period (sec)	13
I31	08 Nov 2017	Sea State	Wind ripples
I31	08 Nov 2017	High Tide (ft)	5.6
I31	08 Nov 2017	High Tide Time	1120
I31	08 Nov 2017	Low Tide (ft)	2.4
I31	08 Nov 2017	Low Tide Time	513
I31	08 Nov 2017	Comments	none
I33	08 Nov 2017	Depth (m)	31
I33	08 Nov 2017	Arrive Time	813
I33	08 Nov 2017	Depart Time	819
I33	08 Nov 2017	Air Temp (C)	18
I33	08 Nov 2017	Weather	Partly Cloudy

Station	Date	Parameter	Value
I33	08 Nov 2017	Visibility (mi)	12
I33	08 Nov 2017	Wind Speed (kts)	0
I33	08 Nov 2017	Wind Dir	
I33	08 Nov 2017	Water Color	Bluish-Green
I33	08 Nov 2017	Wave Ht Low (ft)	3
I33	08 Nov 2017	Wave Period (sec)	13
I33	08 Nov 2017	Sea State	Wind ripples
I33	08 Nov 2017	High Tide (ft)	5.6
I33	08 Nov 2017	High Tide Time	1120
I33	08 Nov 2017	Low Tide (ft)	2.4
I33	08 Nov 2017	Low Tide Time	513
I33	08 Nov 2017	Comments	none
I34	08 Nov 2017	Depth (m)	21
I34	08 Nov 2017	Arrive Time	759
I34	08 Nov 2017	Depart Time	804
I34	08 Nov 2017	Air Temp (C)	17
I34	08 Nov 2017	Weather	Partly Cloudy
I34	08 Nov 2017	Visibility (mi)	12
I34	08 Nov 2017	Wind Speed (kts)	0
I34	08 Nov 2017	Wind Dir	
I34	08 Nov 2017	Water Color	Bluish-Green
I34	08 Nov 2017	Wave Ht Low (ft)	3
I34	08 Nov 2017	Wave Period (sec)	13
I34	08 Nov 2017	Sea State	Wind ripples
I34	08 Nov 2017	High Tide (ft)	5.6
I34	08 Nov 2017	High Tide Time	1120
I34	08 Nov 2017	Low Tide (ft)	2.4
I34	08 Nov 2017	Low Tide Time	513
I34	08 Nov 2017	Comments	none
I35	08 Nov 2017	Depth (m)	20
I35	08 Nov 2017	Arrive Time	1027
I35	08 Nov 2017	Depart Time	1032
I35	08 Nov 2017	Air Temp (C)	19
I35	08 Nov 2017	Weather	Overcast
I35	08 Nov 2017	Visibility (mi)	13
I35	08 Nov 2017	Wind Speed (kts)	3
I35	08 Nov 2017	Wind Dir	W
I35	08 Nov 2017	Water Color	Bluish-Green
I35	08 Nov 2017	Wave Ht Low (ft)	3
I35	08 Nov 2017	Wave Period (sec)	13
I35	08 Nov 2017	Sea State	Wind ripples
I35	08 Nov 2017	High Tide (ft)	5.6
I35	08 Nov 2017	High Tide Time	1120
I35	08 Nov 2017	Low Tide (ft)	2.4
I35	08 Nov 2017	Low Tide Time	513
I35	08 Nov 2017	Comments	none
I36	08 Nov 2017	Depth (m)	13
I36	08 Nov 2017	Arrive Time	1007
I36	08 Nov 2017	Depart Time	1016
I36	08 Nov 2017	Air Temp (C)	19
I36	08 Nov 2017	Weather	Overcast
I36	08 Nov 2017	Visibility (mi)	13

Station	Date	Parameter	Value
I36	08 Nov 2017	Wind Speed (kts)	6
I36	08 Nov 2017	Wind Dir	W
I36	08 Nov 2017	Water Color	Bluish-Green
I36	08 Nov 2017	Wave Ht Low (ft)	3
I36	08 Nov 2017	Wave Period (sec)	13
I36	08 Nov 2017	Sea State	Wind ripples
I36	08 Nov 2017	High Tide (ft)	5.6
I36	08 Nov 2017	High Tide Time	1120
I36	08 Nov 2017	Low Tide (ft)	2.4
I36	08 Nov 2017	Low Tide Time	513
I36	08 Nov 2017	Comments	~150 birds on station
I37	08 Nov 2017	Depth (m)	13
I37	08 Nov 2017	Arrive Time	745
I37	08 Nov 2017	Depart Time	752
I37	08 Nov 2017	Air Temp (C)	16
I37	08 Nov 2017	Weather	Partly Cloudy
I37	08 Nov 2017	Visibility (mi)	12
I37	08 Nov 2017	Wind Speed (kts)	3
I37	08 Nov 2017	Wind Dir	E
I37	08 Nov 2017	Water Color	Bluish-Green
I37	08 Nov 2017	Wave Ht Low (ft)	3
I37	08 Nov 2017	Wave Period (sec)	13
I37	08 Nov 2017	Sea State	Wind ripples
I37	08 Nov 2017	High Tide (ft)	5.6
I37	08 Nov 2017	High Tide Time	1120
I37	08 Nov 2017	Low Tide (ft)	2.4
I37	08 Nov 2017	Low Tide Time	513
I37	08 Nov 2017	Comments	none
I38	08 Nov 2017	Depth (m)	13
I38	08 Nov 2017	Arrive Time	1046
I38	08 Nov 2017	Depart Time	1052
I38	08 Nov 2017	Air Temp (C)	20
I38	08 Nov 2017	Weather	Overcast
I38	08 Nov 2017	Visibility (mi)	13
I38	08 Nov 2017	Wind Speed (kts)	5
I38	08 Nov 2017	Wind Dir	S
I38	08 Nov 2017	Water Color	Bluish-Green
I38	08 Nov 2017	Wave Ht Low (ft)	3
I38	08 Nov 2017	Wave Period (sec)	13
I38	08 Nov 2017	Sea State	Wind ripples
I38	08 Nov 2017	High Tide (ft)	5.6
I38	08 Nov 2017	High Tide Time	1120
I38	08 Nov 2017	Low Tide (ft)	2.4
I38	08 Nov 2017	Low Tide Time	513
I38	08 Nov 2017	Comments	none

Table 4.7

Summary of CTD profile data from the SBOO offshore stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I1	06 Nov 2017	1	18.21	82.32	7.9	33.41	8.1	23.8	0.72
I1	06 Nov 2017	2	18.21	87.48	7.9	33.45	8.1	24.0	0.75
I1	06 Nov 2017	3	18.19	88.22	8.0	33.45	8.1	24.0	0.74
I1	06 Nov 2017	4	18.18	88.31	8.0	33.45	8.1	24.0	0.76
I1	06 Nov 2017	5	18.13	88.42	8.0	33.45	8.1	24.1	0.79
I1	06 Nov 2017	6	18.11	88.24	8.0	33.44	8.1	24.1	0.82
I1	06 Nov 2017	7	18.03	88.17	8.0	33.45	8.1	24.1	0.86
I1	06 Nov 2017	8	17.92	87.97	8.1	33.43	8.1	24.1	0.97
I1	06 Nov 2017	9	17.88	87.88	8.1	33.43	8.1	24.1	1.02
I1	06 Nov 2017	10	17.83	87.73	8.1	33.43	8.1	24.1	1.05
I1	06 Nov 2017	11	17.76	87.76	8.1	33.42	8.1	24.1	1.13
I1	06 Nov 2017	12	17.74	87.66	8.1	33.42	8.1	24.1	1.17
I1	06 Nov 2017	13	17.59	87.71	8.1	33.42	8.1	24.2	1.24
I1	06 Nov 2017	14	17.57	87.83	8.1	33.41	8.1	24.2	1.27
I1	06 Nov 2017	15	17.43	87.67	8.0	33.43	8.1	24.2	1.28
I1	06 Nov 2017	16	17.02	87.69	8.1	33.42	8.1	24.3	1.43
I1	06 Nov 2017	17	17.18	87.69	7.9	33.43	8.1	24.3	1.53
I1	06 Nov 2017	18	15.93	87.81	7.8	33.45	8.1	24.6	1.62
I1	06 Nov 2017	19	15.49	88.18	7.8	33.40	8.1	24.6	1.74
I1	06 Nov 2017	20	15.04	88.65	7.6	33.40	8.1	24.7	1.78
I1	06 Nov 2017	21	14.85	88.91	7.5	33.38	8.1	24.8	1.76
I1	06 Nov 2017	22	14.77	88.93	7.5	33.37	8.1	24.8	1.77
I1	06 Nov 2017	23	14.73	89.04	7.5	33.37	8.1	24.8	1.74
I1	06 Nov 2017	24	14.73	89.09	7.5	33.37	8.1	24.8	1.69
I1	06 Nov 2017	25	14.78	89.15	7.5	33.37	8.1	24.8	1.70
I1	06 Nov 2017	26	14.66	89.24	7.4	33.38	8.1	24.8	1.66
I1	06 Nov 2017	27	14.65	89.30	7.3	33.38	8.0	24.8	1.59
I1	06 Nov 2017	28	14.58	89.43	7.3	33.38	8.0	24.8	1.55
I1	06 Nov 2017	29	14.53	89.45	7.2	33.39	8.0	24.8	1.51
I1	06 Nov 2017	30	14.41	89.48	7.1	33.38	8.0	24.9	1.47
I1	06 Nov 2017	31	14.41	89.51	7.1	33.38	8.0	24.9	1.44
I1	06 Nov 2017	32	14.37	89.56	7.0	33.39	8.0	24.9	1.40
I1	06 Nov 2017	33	14.28	89.60	7.0	33.39	8.0	24.9	1.35
I1	06 Nov 2017	34	14.27	89.62	7.0	33.38	8.0	24.9	1.35
I1	06 Nov 2017	35	14.21	89.65	6.9	33.39	8.0	24.9	1.28
I1	06 Nov 2017	36	14.16	89.70	6.9	33.39	8.0	24.9	1.23
I1	06 Nov 2017	37	14.09	89.73	6.8	33.39	8.0	24.9	1.17
I1	06 Nov 2017	38	14.00	89.85	6.7	33.39	8.0	24.9	1.09
I1	06 Nov 2017	39	13.92	89.90	6.7	33.39	8.0	25.0	1.04
I1	06 Nov 2017	40	13.90	89.94	6.6	33.39	8.0	25.0	1.02
I1	06 Nov 2017	41	13.89	89.94	6.6	33.39	8.0	25.0	1.03
I1	06 Nov 2017	42	13.88	89.95	6.6	33.40	8.0	25.0	1.06
I1	06 Nov 2017	43	13.87	89.93	6.6	33.40	8.0	25.0	1.05
I1	06 Nov 2017	44	13.84	89.91	6.6	33.40	8.0	25.0	1.07
I1	06 Nov 2017	45	13.81	89.91	6.6	33.41	8.0	25.0	1.10
I1	06 Nov 2017	46	13.69	90.01	6.5	33.42	8.0	25.0	1.09
I1	06 Nov 2017	47	13.53	90.04	6.4	33.43	8.0	25.1	1.03
I1	06 Nov 2017	48	13.43	90.03	6.3	33.43	8.0	25.1	0.97
I1	06 Nov 2017	49	13.27	90.07	6.1	33.45	8.0	25.1	0.91
I1	06 Nov 2017	50	13.14	90.23	6.0	33.45	8.0	25.2	0.84
I1	06 Nov 2017	51	13.03	90.20	6.0	33.45	7.9	25.2	0.79

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I1	06 Nov 2017	52	12.97	90.33	5.9	33.45	7.9	25.2	0.75
I1	06 Nov 2017	53	12.86	90.38	5.8	33.46	7.9	25.2	0.70
I1	06 Nov 2017	54	12.76	90.35	5.7	33.47	7.9	25.3	0.66
I1	06 Nov 2017	55	12.60	90.41	5.6	33.49	7.9	25.3	0.60
I1	06 Nov 2017	56	12.51	90.43	5.5	33.49	7.9	25.3	0.55
I1	06 Nov 2017	57	12.47	90.48	5.4	33.49	7.9	25.3	0.53
I1	06 Nov 2017	58	12.42	90.49	5.4	33.49	7.9	25.3	0.50
I1	06 Nov 2017	59	12.40	90.50	5.4	33.49	7.9	25.3	0.49
I1	06 Nov 2017	60	12.35	90.48	5.3	33.50	7.9	25.4	0.48
I2	06 Nov 2017	1	17.98	84.36	8.0	33.44	8.1	24.1	0.99
I2	06 Nov 2017	2	17.98	86.47	8.0	33.44	8.1	24.1	1.00
I2	06 Nov 2017	3	17.98	86.32	8.1	33.44	8.1	24.1	1.06
I2	06 Nov 2017	4	17.97	86.15	8.1	33.44	8.1	24.1	1.08
I2	06 Nov 2017	5	17.93	86.23	8.0	33.44	8.1	24.1	1.11
I2	06 Nov 2017	6	17.86	86.20	8.0	33.44	8.1	24.1	1.14
I2	06 Nov 2017	7	17.77	86.51	8.1	33.44	8.1	24.1	1.16
I2	06 Nov 2017	8	17.65	86.78	8.1	33.43	8.1	24.2	1.18
I2	06 Nov 2017	9	17.57	86.97	8.1	33.42	8.1	24.2	1.22
I2	06 Nov 2017	10	17.52	87.04	8.1	33.42	8.1	24.2	1.24
I2	06 Nov 2017	11	17.46	87.18	8.0	33.42	8.1	24.2	1.31
I2	06 Nov 2017	12	17.33	87.42	8.1	33.41	8.1	24.2	1.36
I2	06 Nov 2017	13	17.27	87.56	8.1	33.41	8.1	24.2	1.45
I2	06 Nov 2017	14	17.22	87.65	8.0	33.40	8.1	24.2	1.50
I2	06 Nov 2017	15	16.96	87.77	8.0	33.42	8.1	24.3	1.62
I2	06 Nov 2017	16	16.29	87.72	8.0	33.40	8.1	24.4	1.90
I2	06 Nov 2017	17	16.07	87.85	8.0	33.36	8.1	24.5	1.85
I2	06 Nov 2017	18	15.87	88.30	8.0	33.37	8.1	24.5	1.73
I2	06 Nov 2017	19	15.77	88.89	8.0	33.35	8.1	24.5	1.56
I2	06 Nov 2017	20	15.71	88.90	7.9	33.36	8.1	24.5	1.52
I2	06 Nov 2017	21	15.52	88.98	7.8	33.37	8.1	24.6	1.52
I2	06 Nov 2017	22	15.35	88.84	7.7	33.37	8.1	24.6	1.52
I2	06 Nov 2017	23	15.22	88.97	7.7	33.36	8.1	24.7	1.46
I2	06 Nov 2017	24	15.11	88.91	7.6	33.36	8.1	24.7	1.47
I2	06 Nov 2017	25	15.03	88.94	7.6	33.36	8.1	24.7	1.42
I2	06 Nov 2017	26	15.01	89.00	7.6	33.36	8.1	24.7	1.41
I2	06 Nov 2017	27	14.97	88.93	7.5	33.37	8.1	24.7	1.46
I2	06 Nov 2017	28	14.88	89.19	7.4	33.37	8.1	24.7	1.45
I2	06 Nov 2017	29	14.74	88.39	7.3	33.37	8.0	24.8	1.55
I2	06 Nov 2017	30	14.67	89.20	7.2	33.37	8.0	24.8	1.42
I2	06 Nov 2017	31	14.61	89.33	7.1	33.37	8.0	24.8	1.36
I2	06 Nov 2017	32	14.34	89.32	6.9	33.40	8.0	24.9	1.28
I3	06 Nov 2017	1	17.59	87.41	8.0	33.42	8.1	24.2	0.76
I3	06 Nov 2017	2	17.59	86.53	8.0	33.42	8.1	24.2	0.79
I3	06 Nov 2017	3	17.58	87.28	8.0	33.42	8.1	24.2	0.84
I3	06 Nov 2017	4	17.57	87.13	8.0	33.42	8.1	24.2	0.89
I3	06 Nov 2017	5	17.54	86.96	8.0	33.42	8.1	24.2	0.96
I3	06 Nov 2017	6	17.45	85.91	8.0	33.43	8.1	24.2	1.12
I3	06 Nov 2017	7	17.25	85.32	7.9	33.45	8.1	24.3	1.38
I3	06 Nov 2017	8	16.29	87.64	8.0	33.45	8.1	24.5	1.50
I3	06 Nov 2017	9	16.17	87.88	8.0	33.38	8.1	24.5	1.53
I3	06 Nov 2017	10	16.11	88.03	7.9	33.38	8.1	24.5	1.61
I3	06 Nov 2017	11	15.56	88.36	7.9	33.40	8.1	24.6	1.61
I3	06 Nov 2017	12	15.51	88.98	7.9	33.35	8.1	24.6	1.56

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I3	06 Nov 2017	13	15.55	89.16	7.9	33.35	8.1	24.6	1.53
I3	06 Nov 2017	14	15.50	89.08	7.9	33.35	8.1	24.6	1.50
I3	06 Nov 2017	15	15.48	89.07	7.9	33.36	8.1	24.6	1.53
I3	06 Nov 2017	16	15.47	89.11	7.8	33.36	8.1	24.6	1.50
I3	06 Nov 2017	17	15.36	89.16	7.8	33.37	8.1	24.6	1.47
I3	06 Nov 2017	18	15.25	89.32	7.7	33.37	8.1	24.7	1.39
I3	06 Nov 2017	19	15.18	89.36	7.6	33.36	8.1	24.7	1.30
I3	06 Nov 2017	20	15.13	89.51	7.6	33.36	8.1	24.7	1.26
I3	06 Nov 2017	21	15.09	89.43	7.6	33.36	8.1	24.7	1.26
I3	06 Nov 2017	22	15.05	89.56	7.5	33.36	8.1	24.7	1.27
I3	06 Nov 2017	23	14.92	89.56	7.3	33.38	8.1	24.7	1.22
I3	06 Nov 2017	24	14.71	89.80	7.1	33.38	8.0	24.8	1.09
I3	06 Nov 2017	25	14.54	89.92	6.9	33.39	8.0	24.8	0.98
I3	06 Nov 2017	26	14.33	90.28	6.7	33.38	8.0	24.9	0.84
I3	06 Nov 2017	27	14.32	90.48	6.6	33.38	8.0	24.9	0.74
I4	06 Nov 2017	1	17.10	82.84	8.0	33.39	8.1	24.3	1.21
I4	06 Nov 2017	2	17.09	82.85	8.0	33.39	8.1	24.3	1.25
I4	06 Nov 2017	3	17.07	82.65	7.9	33.40	8.1	24.3	1.33
I4	06 Nov 2017	4	16.95	82.63	7.9	33.41	8.1	24.3	1.55
I4	06 Nov 2017	5	16.46	84.52	7.9	33.42	8.1	24.4	1.65
I4	06 Nov 2017	6	16.18	87.05	7.9	33.40	8.1	24.5	1.61
I4	06 Nov 2017	7	15.95	87.98	7.9	33.38	8.1	24.5	1.48
I4	06 Nov 2017	8	15.88	88.31	7.8	33.37	8.1	24.5	1.39
I4	06 Nov 2017	9	15.80	88.10	7.7	33.37	8.1	24.5	1.36
I4	06 Nov 2017	10	15.60	87.78	7.6	33.37	8.1	24.6	1.36
I4	06 Nov 2017	11	15.32	88.02	7.5	33.38	8.1	24.7	1.30
I4	06 Nov 2017	12	15.02	88.29	7.4	33.37	8.1	24.7	1.27
I4	06 Nov 2017	13	14.96	88.32	7.4	33.36	8.1	24.7	1.28
I4	06 Nov 2017	14	14.92	88.55	7.3	33.36	8.0	24.7	1.22
I4	06 Nov 2017	15	14.88	88.50	7.2	33.36	8.0	24.7	1.20
I4	06 Nov 2017	16	14.85	88.23	7.2	33.36	8.0	24.7	1.15
I4	06 Nov 2017	17	14.83	88.43	7.2	33.36	8.0	24.7	1.11
I4	06 Nov 2017	18	14.78	88.23	7.1	33.37	8.0	24.8	1.08
I5	06 Nov 2017	1	16.51	80.80	7.8	33.38	8.1	24.4	1.48
I5	06 Nov 2017	2	16.33	81.21	7.7	33.40	8.1	24.4	1.52
I5	06 Nov 2017	3	15.74	81.39	7.6	33.39	8.1	24.6	1.78
I5	06 Nov 2017	4	15.63	82.73	7.5	33.37	8.1	24.6	1.78
I5	06 Nov 2017	5	15.56	83.39	7.4	33.37	8.1	24.6	1.69
I5	06 Nov 2017	6	15.48	83.67	7.4	33.37	8.1	24.6	1.71
I5	06 Nov 2017	7	15.38	84.62	7.4	33.37	8.1	24.6	1.73
I5	06 Nov 2017	8	15.31	85.61	7.3	33.37	8.0	24.6	1.70
I5	06 Nov 2017	9	15.24	86.09	7.3	33.37	8.0	24.7	1.55
I5	06 Nov 2017	10	15.15	86.40	7.2	33.37	8.0	24.7	1.43
I5	06 Nov 2017	11	15.10	86.38	7.2	33.36	8.0	24.7	1.29
I5	06 Nov 2017	12	15.05	86.13	7.2	33.36	8.0	24.7	1.28
I5	06 Nov 2017	13	15.03	84.19	7.1	33.36	8.0	24.7	1.30
I5	06 Nov 2017	14	14.99	81.92	7.0	33.36	8.0	24.7	1.35
I6	06 Nov 2017	1	17.51	85.69	8.1	33.42	8.1	24.2	0.83
I6	06 Nov 2017	2	17.49	85.60	8.1	33.42	8.1	24.2	0.84
I6	06 Nov 2017	3	17.48	85.84	8.1	33.42	8.1	24.2	0.88
I6	06 Nov 2017	4	17.43	85.68	8.0	33.42	8.1	24.2	0.99
I6	06 Nov 2017	5	17.26	85.39	7.9	33.42	8.1	24.2	1.22

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
16	06 Nov 2017	6	16.48	85.27	7.8	33.43	8.1	24.4	1.44
16	06 Nov 2017	7	15.56	86.40	7.8	33.37	8.1	24.6	1.54
16	06 Nov 2017	8	15.39	86.95	7.8	33.33	8.1	24.6	1.57
16	06 Nov 2017	9	15.35	87.27	7.8	33.32	8.1	24.6	1.65
16	06 Nov 2017	10	15.35	87.41	7.8	33.32	8.1	24.6	1.76
16	06 Nov 2017	11	15.36	87.54	7.8	33.33	8.1	24.6	1.81
16	06 Nov 2017	12	15.31	87.44	7.7	33.33	8.1	24.6	1.83
16	06 Nov 2017	13	15.30	87.56	7.8	33.34	8.1	24.6	1.95
16	06 Nov 2017	14	15.31	87.76	7.8	33.35	8.1	24.6	2.01
16	06 Nov 2017	15	15.28	87.78	7.7	33.36	8.1	24.6	2.04
16	06 Nov 2017	16	15.14	88.04	7.7	33.37	8.1	24.7	1.98
16	06 Nov 2017	17	15.09	88.34	7.6	33.36	8.1	24.7	1.96
16	06 Nov 2017	18	15.03	88.49	7.6	33.36	8.1	24.7	1.94
16	06 Nov 2017	19	14.95	88.46	7.5	33.37	8.1	24.7	1.88
16	06 Nov 2017	20	14.82	88.76	7.4	33.37	8.1	24.8	1.61
16	06 Nov 2017	21	14.79	88.96	7.3	33.37	8.1	24.8	1.45
16	06 Nov 2017	22	14.76	88.93	7.2	33.37	8.0	24.8	1.34
16	06 Nov 2017	23	14.69	89.20	7.1	33.37	8.0	24.8	1.23
16	06 Nov 2017	24	14.58	89.17	7.0	33.37	8.0	24.8	1.13
16	06 Nov 2017	25	14.56	89.20	6.9	33.37	8.0	24.8	1.09
16	06 Nov 2017	26	14.53	89.09	6.9	33.37	8.0	24.8	1.06
17	06 Nov 2017	1	18.08	86.08	8.1	33.44	8.1	24.1	0.79
17	06 Nov 2017	2	18.08	87.01	8.0	33.44	8.1	24.1	0.79
17	06 Nov 2017	3	18.03	87.35	8.1	33.44	8.1	24.1	1.08
17	06 Nov 2017	4	18.01	87.23	8.1	33.44	8.1	24.1	0.90
17	06 Nov 2017	5	17.96	87.28	8.1	33.44	8.1	24.1	0.92
17	06 Nov 2017	6	17.96	87.36	8.1	33.44	8.1	24.1	0.93
17	06 Nov 2017	7	17.91	87.44	8.0	33.44	8.1	24.1	0.96
17	06 Nov 2017	8	17.85	87.72	8.1	33.43	8.1	24.1	1.01
17	06 Nov 2017	9	17.74	87.69	8.1	33.44	8.1	24.1	1.05
17	06 Nov 2017	10	17.66	87.81	8.1	33.42	8.1	24.1	1.04
17	06 Nov 2017	11	17.66	88.00	8.1	33.42	8.1	24.1	1.05
17	06 Nov 2017	12	17.66	88.01	8.0	33.42	8.1	24.1	1.06
17	06 Nov 2017	13	17.55	88.01	8.0	33.42	8.1	24.2	1.11
17	06 Nov 2017	14	17.47	88.04	8.1	33.42	8.1	24.2	1.17
17	06 Nov 2017	15	17.42	87.94	8.0	33.42	8.1	24.2	1.20
17	06 Nov 2017	16	17.28	87.94	8.0	33.42	8.1	24.2	1.32
17	06 Nov 2017	17	17.03	87.47	8.0	33.41	8.1	24.3	1.54
17	06 Nov 2017	18	16.94	87.38	7.9	33.41	8.1	24.3	1.66
17	06 Nov 2017	19	16.44	87.31	7.7	33.42	8.1	24.4	1.84
17	06 Nov 2017	20	15.59	87.28	7.7	33.41	8.1	24.6	1.91
17	06 Nov 2017	21	15.64	88.07	7.7	33.36	8.1	24.6	1.84
17	06 Nov 2017	22	15.01	88.73	7.5	33.38	8.1	24.7	1.77
17	06 Nov 2017	23	14.95	88.70	7.5	33.36	8.0	24.7	1.70
17	06 Nov 2017	24	14.93	88.77	7.5	33.36	8.0	24.7	1.66
17	06 Nov 2017	25	14.92	88.77	7.5	33.36	8.0	24.7	1.65
17	06 Nov 2017	26	14.90	88.71	7.4	33.37	8.0	24.7	1.65
17	06 Nov 2017	27	14.88	88.70	7.4	33.36	8.0	24.7	1.62
17	06 Nov 2017	28	14.82	88.78	7.4	33.37	8.0	24.8	1.59
17	06 Nov 2017	29	14.74	89.00	7.4	33.37	8.0	24.8	1.50
17	06 Nov 2017	30	14.72	89.27	7.3	33.37	8.0	24.8	1.46
17	06 Nov 2017	31	14.64	89.33	7.3	33.37	8.0	24.8	1.45
17	06 Nov 2017	32	14.51	89.41	7.2	33.38	8.0	24.8	1.35
17	06 Nov 2017	33	14.41	89.57	7.2	33.37	8.0	24.8	1.28

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
17	06 Nov 2017	34	14.35	89.50	7.2	33.37	8.0	24.9	1.24
17	06 Nov 2017	35	14.28	89.58	7.1	33.37	8.0	24.9	1.24
17	06 Nov 2017	36	14.22	89.80	7.1	33.38	8.0	24.9	1.20
17	06 Nov 2017	37	14.09	89.86	7.0	33.38	8.0	24.9	1.15
17	06 Nov 2017	38	13.84	89.86	6.8	33.39	8.0	25.0	1.02
17	06 Nov 2017	39	13.76	89.72	6.6	33.38	8.0	25.0	0.92
17	06 Nov 2017	40	13.71	89.65	6.6	33.38	8.0	25.0	0.89
17	06 Nov 2017	41	13.68	89.68	6.6	33.38	8.0	25.0	0.84
17	06 Nov 2017	42	13.65	89.61	6.5	33.38	8.0	25.0	0.81
17	06 Nov 2017	43	13.62	89.87	6.5	33.38	8.0	25.0	0.79
17	06 Nov 2017	44	13.60	89.75	6.5	33.39	8.0	25.0	0.77
17	06 Nov 2017	45	13.56	89.82	6.4	33.39	8.0	25.0	0.75
17	06 Nov 2017	46	13.55	89.60	6.4	33.39	8.0	25.0	0.73
17	06 Nov 2017	47	13.54	89.76	6.4	33.39	8.0	25.0	0.71
17	06 Nov 2017	48	13.38	89.52	6.2	33.41	8.0	25.1	0.68
17	06 Nov 2017	49	13.24	89.55	6.1	33.41	7.9	25.1	0.61
17	06 Nov 2017	50	13.11	89.37	6.0	33.42	7.9	25.1	0.58
17	06 Nov 2017	51	13.07	89.43	5.9	33.42	7.9	25.2	0.58
17	06 Nov 2017	52	12.88	89.19	5.8	33.44	7.9	25.2	0.53
18	06 Nov 2017	1	17.91	85.06	8.1	33.43	8.1	24.1	1.27
18	06 Nov 2017	2	17.83	84.81	8.0	33.43	8.1	24.1	1.29
18	06 Nov 2017	3	17.70	84.49	8.0	33.44	8.1	24.2	1.39
18	06 Nov 2017	4	17.43	84.52	8.0	33.43	8.1	24.2	1.62
18	06 Nov 2017	5	17.25	84.38	8.0	33.41	8.1	24.2	1.91
18	06 Nov 2017	6	17.27	84.64	8.0	33.42	8.1	24.2	1.93
18	06 Nov 2017	7	17.06	84.91	8.0	33.41	8.1	24.3	1.95
18	06 Nov 2017	8	17.03	85.36	8.0	33.40	8.1	24.3	1.90
18	06 Nov 2017	9	17.01	85.90	8.0	33.40	8.1	24.3	1.85
18	06 Nov 2017	10	17.00	85.97	8.1	33.40	8.1	24.3	1.83
18	06 Nov 2017	11	16.97	86.31	8.1	33.40	8.1	24.3	1.74
18	06 Nov 2017	12	16.92	86.62	8.0	33.40	8.1	24.3	1.68
18	06 Nov 2017	13	16.88	86.95	8.0	33.40	8.1	24.3	1.64
18	06 Nov 2017	14	16.77	87.16	8.0	33.40	8.1	24.3	1.77
18	06 Nov 2017	15	16.51	87.19	8.0	33.41	8.1	24.4	1.80
18	06 Nov 2017	16	16.04	87.16	8.0	33.38	8.1	24.5	2.04
18	06 Nov 2017	17	15.94	86.97	7.9	33.38	8.1	24.5	2.17
18	06 Nov 2017	18	15.56	87.03	7.8	33.38	8.1	24.6	2.31
18	06 Nov 2017	19	15.25	87.17	7.8	33.37	8.1	24.7	2.40
18	06 Nov 2017	20	15.12	87.38	7.7	33.36	8.1	24.7	2.47
18	06 Nov 2017	21	14.97	87.98	7.6	33.38	8.1	24.7	2.31
18	06 Nov 2017	22	14.83	88.38	7.5	33.36	8.1	24.7	2.07
18	06 Nov 2017	23	14.77	88.58	7.4	33.37	8.1	24.8	1.95
18	06 Nov 2017	24	14.68	88.57	7.3	33.37	8.1	24.8	1.89
18	06 Nov 2017	25	14.62	88.64	7.2	33.37	8.1	24.8	1.86
18	06 Nov 2017	26	14.57	88.63	7.2	33.37	8.1	24.8	1.83
18	06 Nov 2017	27	14.52	88.84	7.1	33.37	8.0	24.8	1.72
18	06 Nov 2017	28	14.52	89.11	7.1	33.37	8.0	24.8	1.63
18	06 Nov 2017	29	14.41	89.14	7.0	33.38	8.0	24.9	1.58
18	06 Nov 2017	30	14.33	89.29	6.9	33.38	8.0	24.9	1.47
18	06 Nov 2017	31	14.34	89.49	6.9	33.38	8.0	24.9	1.42
18	06 Nov 2017	32	14.23	89.36	6.8	33.38	8.0	24.9	1.34
18	06 Nov 2017	33	14.20	89.38	6.8	33.37	8.0	24.9	1.26
18	06 Nov 2017	34	14.00	89.28	6.6	33.40	8.0	24.9	1.19
18	06 Nov 2017	35	13.92	89.29	6.5	33.38	8.0	25.0	1.11

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I8	06 Nov 2017	36	13.92	89.34	6.5	33.38	8.0	25.0	1.05
I9	06 Nov 2017	1	17.65	84.24	8.1	33.43	8.1	24.2	1.41
I9	06 Nov 2017	2	17.66	84.45	8.1	33.43	8.1	24.2	1.43
I9	06 Nov 2017	3	17.63	84.26	8.0	33.43	8.1	24.2	1.45
I9	06 Nov 2017	4	17.36	84.41	8.0	33.44	8.1	24.2	1.55
I9	06 Nov 2017	5	17.02	84.41	7.9	33.43	8.1	24.3	1.61
I9	06 Nov 2017	6	16.17	84.89	8.0	33.40	8.1	24.5	1.68
I9	06 Nov 2017	7	16.01	85.64	8.0	33.37	8.1	24.5	1.76
I9	06 Nov 2017	8	15.96	86.30	8.1	33.36	8.1	24.5	1.91
I9	06 Nov 2017	9	15.92	86.28	8.0	33.37	8.1	24.5	2.05
I9	06 Nov 2017	10	15.66	86.49	7.9	33.38	8.1	24.6	2.24
I9	06 Nov 2017	11	15.41	86.64	7.8	33.37	8.1	24.6	2.52
I9	06 Nov 2017	12	15.10	86.57	7.7	33.37	8.1	24.7	2.43
I9	06 Nov 2017	13	14.90	87.34	7.6	33.37	8.1	24.7	2.25
I9	06 Nov 2017	14	14.81	87.81	7.5	33.36	8.1	24.8	1.96
I9	06 Nov 2017	15	14.81	87.52	7.5	33.36	8.1	24.7	1.85
I9	06 Nov 2017	16	14.77	88.00	7.4	33.36	8.1	24.8	1.88
I9	06 Nov 2017	17	14.72	88.28	7.4	33.37	8.1	24.8	1.80
I9	06 Nov 2017	18	14.64	88.65	7.3	33.37	8.1	24.8	1.81
I9	06 Nov 2017	19	14.57	88.54	7.2	33.37	8.1	24.8	1.73
I9	06 Nov 2017	20	14.46	88.90	7.1	33.38	8.0	24.8	1.61
I9	06 Nov 2017	21	14.37	89.21	7.0	33.37	8.0	24.9	1.47
I9	06 Nov 2017	22	14.33	89.10	6.9	33.37	8.0	24.9	1.40
I9	06 Nov 2017	23	14.29	89.15	6.9	33.37	8.0	24.9	1.34
I9	06 Nov 2017	24	14.26	89.42	6.9	33.37	8.0	24.9	1.30
I9	06 Nov 2017	25	14.23	89.22	6.8	33.38	8.0	24.9	1.28
I9	06 Nov 2017	26	14.18	89.29	6.7	33.38	8.0	24.9	1.26
I9	06 Nov 2017	27	14.15	89.02	6.7	33.38	8.0	24.9	1.20
I9	06 Nov 2017	28	14.14	89.24	6.7	33.38	8.0	24.9	1.17
I9	06 Nov 2017	29	14.14	89.15	6.7	33.38	8.0	24.9	1.17
I10	06 Nov 2017	1	17.69	85.23	8.0	33.41	8.1	24.1	0.77
I10	06 Nov 2017	2	17.62	85.15	8.0	33.42	8.1	24.2	0.80
I10	06 Nov 2017	3	17.51	84.41	8.1	33.41	8.1	24.2	0.87
I10	06 Nov 2017	4	17.52	84.71	8.1	33.41	8.1	24.2	0.96
I10	06 Nov 2017	5	17.45	85.43	8.1	33.41	8.1	24.2	1.00
I10	06 Nov 2017	6	17.45	85.74	8.0	33.41	8.1	24.2	1.07
I10	06 Nov 2017	7	17.22	86.28	8.0	33.44	8.1	24.3	1.12
I10	06 Nov 2017	8	16.91	86.22	7.8	33.41	8.1	24.3	1.29
I10	06 Nov 2017	9	15.73	86.54	7.7	33.41	8.1	24.6	1.35
I10	06 Nov 2017	10	15.55	87.18	7.6	33.38	8.1	24.6	1.35
I10	06 Nov 2017	11	15.30	87.37	7.5	33.37	8.1	24.7	1.36
I10	06 Nov 2017	12	15.20	87.39	7.5	33.37	8.1	24.7	1.35
I10	06 Nov 2017	13	14.88	87.88	7.3	33.38	8.1	24.8	1.34
I10	06 Nov 2017	14	14.77	87.74	7.3	33.37	8.1	24.8	1.30
I10	06 Nov 2017	15	14.75	88.03	7.3	33.36	8.1	24.8	1.29
I10	06 Nov 2017	16	14.76	88.05	7.3	33.36	8.1	24.8	1.39
I10	06 Nov 2017	17	14.72	87.93	7.2	33.37	8.1	24.8	1.36
I10	06 Nov 2017	18	14.70	88.13	7.2	33.37	8.1	24.8	1.39
I10	06 Nov 2017	19	14.70	88.19	7.2	33.37	8.0	24.8	1.41
I11	06 Nov 2017	1	16.94	79.38	7.8	33.38	8.1	24.3	1.50
I11	06 Nov 2017	2	16.90	79.16	7.8	33.39	8.1	24.3	1.55
I11	06 Nov 2017	3	16.59	80.06	7.8	33.41	8.1	24.4	1.81

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I11	06 Nov 2017	4	16.46	83.79	7.9	33.39	8.1	24.4	2.06
I11	06 Nov 2017	5	16.39	85.20	7.9	33.39	8.1	24.4	1.96
I11	06 Nov 2017	6	16.30	85.76	7.8	33.39	8.1	24.4	1.91
I11	06 Nov 2017	7	15.90	86.14	7.7	33.42	8.1	24.6	1.78
I11	06 Nov 2017	8	15.59	86.67	7.6	33.39	8.1	24.6	1.63
I11	06 Nov 2017	9	15.49	85.37	7.4	33.37	8.1	24.6	1.56
I11	06 Nov 2017	10	15.28	84.88	7.4	33.39	8.1	24.7	1.50
I11	06 Nov 2017	11	15.14	86.71	7.4	33.36	8.1	24.7	1.49
I11	06 Nov 2017	12	15.00	86.96	7.4	33.37	8.1	24.7	1.48
I11	06 Nov 2017	13	15.00	86.75	7.3	33.36	8.1	24.7	1.45
I12	07 Nov 2017	1	17.46	83.84	8.0	33.43	8.1	24.2	1.86
I12	07 Nov 2017	2	17.46	83.77	7.9	33.43	8.1	24.2	1.94
I12	07 Nov 2017	3	17.44	83.99	7.9	33.44	8.1	24.2	2.08
I12	07 Nov 2017	4	17.41	84.02	7.8	33.44	8.1	24.2	2.17
I12	07 Nov 2017	5	16.83	84.73	7.6	33.44	8.1	24.4	2.23
I12	07 Nov 2017	6	16.49	85.72	7.5	33.40	8.1	24.4	2.16
I12	07 Nov 2017	7	15.93	87.20	7.3	33.40	8.1	24.5	1.91
I12	07 Nov 2017	8	15.56	87.63	7.2	33.38	8.1	24.6	1.74
I12	07 Nov 2017	9	14.95	87.61	7.0	33.30	8.0	24.7	1.52
I12	07 Nov 2017	10	14.56	87.66	6.8	33.26	8.0	24.7	1.35
I12	07 Nov 2017	11	14.35	87.95	6.7	33.23	8.0	24.7	1.24
I12	07 Nov 2017	12	14.24	88.00	6.7	33.23	8.0	24.8	1.19
I12	07 Nov 2017	13	14.24	87.99	6.6	33.23	8.0	24.8	1.17
I12	07 Nov 2017	14	14.21	88.01	6.6	33.24	8.0	24.8	1.18
I12	07 Nov 2017	15	14.21	87.96	6.6	33.24	8.0	24.8	1.19
I12	07 Nov 2017	16	14.21	87.95	6.6	33.25	8.0	24.8	1.18
I12	07 Nov 2017	17	14.18	87.99	6.6	33.26	8.0	24.8	1.17
I12	07 Nov 2017	18	14.20	88.02	6.6	33.27	8.0	24.8	1.18
I12	07 Nov 2017	19	14.21	88.15	6.6	33.33	8.0	24.9	1.19
I12	07 Nov 2017	20	14.17	88.13	6.6	33.34	8.0	24.9	1.19
I12	07 Nov 2017	21	14.12	88.09	6.6	33.37	8.0	24.9	1.18
I12	07 Nov 2017	22	14.08	88.05	6.5	33.37	8.0	24.9	1.16
I12	07 Nov 2017	23	14.04	88.04	6.5	33.38	8.0	24.9	1.14
I12	07 Nov 2017	24	14.01	88.04	6.5	33.38	8.0	24.9	1.12
I12	07 Nov 2017	25	14.00	88.01	6.5	33.38	8.0	24.9	1.09
I12	07 Nov 2017	26	13.99	88.06	6.5	33.38	8.0	24.9	1.10
I12	07 Nov 2017	27	13.93	87.94	6.4	33.38	8.0	25.0	1.05
I12	07 Nov 2017	28	13.92	87.86	6.4	33.38	8.0	25.0	1.04
I13	06 Nov 2017	1	17.71	84.39	8.0	33.43	8.1	24.1	1.16
I13	06 Nov 2017	2	17.68	84.38	8.0	33.43	8.1	24.2	1.19
I13	06 Nov 2017	3	17.55	84.05	7.9	33.44	8.1	24.2	1.28
I13	06 Nov 2017	4	17.23	84.03	7.9	33.45	8.1	24.3	1.45
I13	06 Nov 2017	5	17.01	83.81	7.8	33.43	8.1	24.3	1.72
I13	06 Nov 2017	6	16.82	83.92	7.8	33.42	8.1	24.3	1.93
I13	06 Nov 2017	7	16.63	84.22	7.7	33.41	8.1	24.4	2.05
I13	06 Nov 2017	8	16.46	84.90	7.7	33.40	8.1	24.4	2.02
I13	06 Nov 2017	9	16.43	85.11	7.7	33.39	8.1	24.4	2.06
I13	06 Nov 2017	10	16.42	85.22	7.7	33.38	8.1	24.4	2.03
I13	06 Nov 2017	11	16.41	85.22	7.7	33.38	8.1	24.4	2.10
I13	06 Nov 2017	12	16.40	85.17	7.8	33.38	8.1	24.4	2.08
I13	06 Nov 2017	13	16.40	85.38	7.8	33.38	8.1	24.4	2.17
I13	06 Nov 2017	14	16.38	85.39	7.8	33.38	8.1	24.4	2.19
I13	06 Nov 2017	15	16.35	85.38	7.8	33.38	8.1	24.4	2.23

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I13	06 Nov 2017	16	16.34	85.27	7.8	33.38	8.1	24.4	2.24
I13	06 Nov 2017	17	16.33	85.56	7.8	33.38	8.1	24.4	2.22
I13	06 Nov 2017	18	16.31	85.66	7.9	33.38	8.1	24.4	2.22
I13	06 Nov 2017	19	16.30	85.78	7.8	33.38	8.1	24.4	2.23
I13	06 Nov 2017	20	16.28	85.89	7.8	33.38	8.1	24.4	2.22
I13	06 Nov 2017	21	16.23	86.01	7.9	33.38	8.1	24.5	2.23
I13	06 Nov 2017	22	16.20	86.20	7.8	33.38	8.1	24.5	2.23
I13	06 Nov 2017	23	15.89	86.20	7.8	33.41	8.1	24.6	2.28
I13	06 Nov 2017	24	15.32	86.34	7.8	33.40	8.1	24.7	2.39
I13	06 Nov 2017	25	15.16	86.74	7.8	33.37	8.1	24.7	2.52
I13	06 Nov 2017	26	15.13	86.81	7.7	33.36	8.1	24.7	2.55
I13	06 Nov 2017	27	14.83	87.02	7.6	33.38	8.1	24.8	2.45
I13	06 Nov 2017	28	14.68	88.15	7.5	33.35	8.1	24.8	2.18
I13	06 Nov 2017	29	14.67	88.35	7.5	33.37	8.1	24.8	2.08
I13	06 Nov 2017	30	14.58	88.52	7.4	33.36	8.1	24.8	1.96
I13	06 Nov 2017	31	14.55	88.65	7.4	33.36	8.1	24.8	1.84
I13	06 Nov 2017	32	14.54	88.91	7.3	33.36	8.1	24.8	1.74
I13	06 Nov 2017	33	14.53	88.74	7.3	33.36	8.1	24.8	1.71
I13	06 Nov 2017	34	14.49	88.73	7.2	33.36	8.1	24.8	1.65
I13	06 Nov 2017	35	14.38	89.16	7.1	33.37	8.1	24.8	1.54
I13	06 Nov 2017	36	14.19	89.33	6.9	33.38	8.0	24.9	1.37
I13	06 Nov 2017	37	14.17	89.27	6.7	33.37	8.0	24.9	1.19
I13	06 Nov 2017	38	13.83	89.13	6.5	33.41	8.0	25.0	1.12
I14	07 Nov 2017	1	17.52	84.04	8.0	33.44	8.1	24.2	1.85
I14	07 Nov 2017	2	17.51	84.01	7.9	33.44	8.1	24.2	1.90
I14	07 Nov 2017	3	17.43	84.20	7.8	33.44	8.1	24.2	2.03
I14	07 Nov 2017	4	16.87	84.37	7.5	33.44	8.1	24.3	2.12
I14	07 Nov 2017	5	16.16	85.94	7.3	33.41	8.1	24.5	1.88
I14	07 Nov 2017	6	15.66	87.58	7.3	33.37	8.1	24.6	1.58
I14	07 Nov 2017	7	15.61	88.04	7.3	33.36	8.1	24.6	1.48
I14	07 Nov 2017	8	15.52	88.15	7.3	33.36	8.1	24.6	1.47
I14	07 Nov 2017	9	15.44	88.12	7.2	33.37	8.1	24.6	1.46
I14	07 Nov 2017	10	15.07	88.22	7.2	33.37	8.1	24.7	1.45
I14	07 Nov 2017	11	15.05	88.32	7.2	33.35	8.1	24.7	1.49
I14	07 Nov 2017	12	14.90	88.29	7.2	33.37	8.1	24.7	1.50
I14	07 Nov 2017	13	14.83	88.40	7.2	33.36	8.0	24.7	1.48
I14	07 Nov 2017	14	14.74	88.59	7.2	33.36	8.0	24.8	1.50
I14	07 Nov 2017	15	14.68	88.61	7.2	33.36	8.0	24.8	1.51
I14	07 Nov 2017	16	14.63	88.59	7.1	33.36	8.0	24.8	1.47
I14	07 Nov 2017	17	14.54	88.75	7.1	33.37	8.0	24.8	1.46
I14	07 Nov 2017	18	14.49	88.77	7.0	33.36	8.0	24.8	1.42
I14	07 Nov 2017	19	14.45	88.80	7.0	33.37	8.0	24.8	1.37
I14	07 Nov 2017	20	14.40	88.86	7.0	33.37	8.0	24.8	1.35
I14	07 Nov 2017	21	14.33	88.85	6.9	33.37	8.0	24.9	1.31
I14	07 Nov 2017	22	14.30	88.84	6.8	33.37	8.0	24.9	1.27
I14	07 Nov 2017	23	14.09	88.75	6.7	33.38	8.0	24.9	1.19
I14	07 Nov 2017	24	14.06	88.27	6.6	33.38	8.0	24.9	1.14
I14	07 Nov 2017	25	13.99	88.19	6.5	33.38	8.0	24.9	1.07
I14	07 Nov 2017	26	13.95	88.14	6.5	33.38	8.0	24.9	1.05
I14	07 Nov 2017	27	13.95	88.18	6.5	33.38	8.0	24.9	1.04
I14	07 Nov 2017	28	13.94	88.17	6.4	33.38	8.0	24.9	1.02
I15	07 Nov 2017	1	17.71	84.97	8.0	33.44	8.1	24.1	1.60
I15	07 Nov 2017	2	17.70	85.02	8.0	33.44	8.1	24.2	1.69

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I15	07 Nov 2017	3	17.41	85.16	7.7	33.45	8.1	24.2	1.79
I15	07 Nov 2017	4	16.55	85.80	7.6	33.42	8.1	24.4	1.84
I15	07 Nov 2017	5	16.30	86.42	7.4	33.39	8.1	24.4	1.83
I15	07 Nov 2017	6	15.83	86.83	7.3	33.38	8.1	24.5	1.74
I15	07 Nov 2017	7	15.67	87.55	7.3	33.36	8.1	24.6	1.59
I15	07 Nov 2017	8	15.52	88.10	7.3	33.37	8.1	24.6	1.48
I15	07 Nov 2017	9	15.22	88.21	7.3	33.37	8.1	24.7	1.47
I15	07 Nov 2017	10	15.14	88.23	7.3	33.35	8.1	24.7	1.52
I15	07 Nov 2017	11	15.07	88.16	7.3	33.36	8.1	24.7	1.55
I15	07 Nov 2017	12	15.01	88.13	7.3	33.35	8.1	24.7	1.57
I15	07 Nov 2017	13	14.95	88.22	7.2	33.36	8.1	24.7	1.61
I15	07 Nov 2017	14	14.85	88.33	7.3	33.36	8.1	24.7	1.59
I15	07 Nov 2017	15	14.83	88.36	7.3	33.36	8.1	24.7	1.61
I15	07 Nov 2017	16	14.80	88.35	7.2	33.36	8.1	24.7	1.61
I15	07 Nov 2017	17	14.78	88.43	7.2	33.36	8.1	24.8	1.61
I15	07 Nov 2017	18	14.67	88.55	7.2	33.37	8.1	24.8	1.63
I15	07 Nov 2017	19	14.47	88.72	7.2	33.37	8.0	24.8	1.62
I15	07 Nov 2017	20	14.45	88.85	7.1	33.36	8.0	24.8	1.59
I15	07 Nov 2017	21	14.36	88.91	7.1	33.37	8.0	24.8	1.52
I15	07 Nov 2017	22	14.32	88.94	7.0	33.37	8.0	24.9	1.45
I15	07 Nov 2017	23	14.29	88.94	6.9	33.37	8.0	24.9	1.37
I15	07 Nov 2017	24	14.22	88.89	6.8	33.37	8.0	24.9	1.29
I15	07 Nov 2017	25	14.03	88.65	6.6	33.38	8.0	24.9	1.18
I15	07 Nov 2017	26	13.99	88.36	6.5	33.38	8.0	24.9	1.12
I15	07 Nov 2017	27	13.93	88.30	6.5	33.38	8.0	24.9	1.07
I15	07 Nov 2017	28	13.92	88.30	6.5	33.38	8.0	24.9	1.06
I15	07 Nov 2017	29	13.92	88.32	6.5	33.38	8.0	25.0	1.04
I15	07 Nov 2017	30	13.91	88.33	6.4	33.38	8.0	25.0	1.03
I15	07 Nov 2017	31	13.91	88.32	6.4	33.38	8.0	25.0	1.03
I16	07 Nov 2017	1	17.50	84.45	7.9	33.44	8.1	24.2	1.76
I16	07 Nov 2017	2	17.49	84.26	7.9	33.44	8.1	24.2	1.84
I16	07 Nov 2017	3	17.47	84.04	7.9	33.44	8.1	24.2	2.06
I16	07 Nov 2017	4	17.37	84.07	7.8	33.44	8.1	24.2	2.46
I16	07 Nov 2017	5	16.93	84.01	7.5	33.47	8.1	24.4	2.37
I16	07 Nov 2017	6	15.87	86.68	7.3	33.42	8.1	24.6	1.97
I16	07 Nov 2017	7	15.59	87.68	7.3	33.38	8.1	24.6	1.71
I16	07 Nov 2017	8	15.38	87.85	7.2	33.38	8.1	24.6	1.62
I16	07 Nov 2017	9	15.11	88.03	7.3	33.37	8.1	24.7	1.57
I16	07 Nov 2017	10	15.01	88.10	7.2	33.36	8.1	24.7	1.56
I16	07 Nov 2017	11	14.95	88.05	7.2	33.36	8.1	24.7	1.56
I16	07 Nov 2017	12	14.87	88.19	7.2	33.37	8.1	24.7	1.59
I16	07 Nov 2017	13	14.79	88.25	7.2	33.36	8.0	24.8	1.56
I16	07 Nov 2017	14	14.72	88.45	7.2	33.36	8.0	24.8	1.56
I16	07 Nov 2017	15	14.69	88.47	7.2	33.36	8.0	24.8	1.58
I16	07 Nov 2017	16	14.66	88.50	7.2	33.36	8.0	24.8	1.54
I16	07 Nov 2017	17	14.61	88.57	7.1	33.37	8.0	24.8	1.52
I16	07 Nov 2017	18	14.55	88.53	7.0	33.37	8.0	24.8	1.47
I16	07 Nov 2017	19	14.49	88.66	7.0	33.37	8.0	24.8	1.45
I16	07 Nov 2017	20	14.42	88.69	7.0	33.37	8.0	24.8	1.39
I16	07 Nov 2017	21	14.34	88.58	6.8	33.37	8.0	24.9	1.36
I16	07 Nov 2017	22	14.28	88.51	6.8	33.37	8.0	24.9	1.29
I16	07 Nov 2017	23	14.21	88.42	6.7	33.38	8.0	24.9	1.26
I16	07 Nov 2017	24	13.99	88.11	6.5	33.38	8.0	24.9	1.16
I16	07 Nov 2017	25	13.97	88.12	6.5	33.38	8.0	24.9	1.11

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I16	07 Nov 2017	26	13.96	88.09	6.5	33.38	8.0	24.9	1.08
I16	07 Nov 2017	27	13.94	88.04	6.4	33.38	8.0	24.9	1.07
I16	07 Nov 2017	28	13.94	88.05	6.4	33.38	8.0	24.9	1.06
I17	07 Nov 2017	1	17.35	84.52	7.9	33.43	8.1	24.2	1.69
I17	07 Nov 2017	2	17.34	84.54	7.9	33.43	8.1	24.2	1.73
I17	07 Nov 2017	3	17.34	84.61	7.9	33.43	8.1	24.2	1.79
I17	07 Nov 2017	4	17.34	84.49	7.9	33.43	8.1	24.2	1.89
I17	07 Nov 2017	5	17.33	84.45	7.9	33.43	8.1	24.2	1.98
I17	07 Nov 2017	6	17.15	84.41	7.7	33.46	8.1	24.3	2.12
I17	07 Nov 2017	7	16.21	86.08	7.4	33.44	8.1	24.5	2.16
I17	07 Nov 2017	8	15.73	87.29	7.3	33.39	8.1	24.6	1.83
I17	07 Nov 2017	9	15.50	87.59	7.3	33.38	8.1	24.6	1.69
I17	07 Nov 2017	10	15.34	87.85	7.3	33.38	8.1	24.6	1.61
I17	07 Nov 2017	11	15.14	87.97	7.2	33.37	8.1	24.7	1.55
I17	07 Nov 2017	12	15.09	88.07	7.2	33.37	8.1	24.7	1.56
I17	07 Nov 2017	13	15.03	88.15	7.2	33.36	8.1	24.7	1.51
I17	07 Nov 2017	14	14.98	88.18	7.2	33.37	8.1	24.7	1.49
I17	07 Nov 2017	15	14.95	88.16	7.2	33.37	8.0	24.7	1.48
I17	07 Nov 2017	16	14.93	88.27	7.1	33.37	8.0	24.7	1.47
I17	07 Nov 2017	17	14.84	88.36	7.1	33.37	8.0	24.8	1.44
I17	07 Nov 2017	18	14.79	88.46	7.1	33.37	8.0	24.8	1.40
I17	07 Nov 2017	19	14.74	88.42	7.0	33.37	8.0	24.8	1.39
I17	07 Nov 2017	20	14.59	88.51	6.9	33.37	8.0	24.8	1.35
I17	07 Nov 2017	21	14.36	88.50	6.8	33.39	8.0	24.9	1.28
I17	07 Nov 2017	22	14.12	88.25	6.6	33.38	8.0	24.9	1.16
I17	07 Nov 2017	23	14.06	88.05	6.5	33.38	8.0	24.9	1.08
I17	07 Nov 2017	24	14.01	87.75	6.4	33.38	8.0	24.9	1.00
I17	07 Nov 2017	25	14.01	87.73	6.4	33.38	8.0	24.9	0.98
I18	07 Nov 2017	1	17.05	84.92	8.0	33.41	8.1	24.3	1.63
I18	07 Nov 2017	2	17.04	84.64	8.0	33.41	8.1	24.3	1.71
I18	07 Nov 2017	3	17.03	84.42	8.0	33.41	8.1	24.3	1.88
I18	07 Nov 2017	4	17.01	84.47	7.9	33.41	8.1	24.3	2.00
I18	07 Nov 2017	5	17.00	84.63	7.9	33.41	8.1	24.3	2.01
I18	07 Nov 2017	6	16.88	85.11	7.8	33.42	8.1	24.3	1.96
I18	07 Nov 2017	7	16.66	85.72	7.7	33.41	8.1	24.4	1.93
I18	07 Nov 2017	8	16.34	86.22	7.5	33.42	8.1	24.5	1.87
I18	07 Nov 2017	9	15.88	86.60	7.5	33.39	8.1	24.5	1.75
I18	07 Nov 2017	10	15.82	87.00	7.4	33.38	8.1	24.5	1.71
I18	07 Nov 2017	11	15.78	86.98	7.4	33.38	8.1	24.6	1.72
I18	07 Nov 2017	12	15.77	87.06	7.4	33.38	8.1	24.6	1.71
I18	07 Nov 2017	13	15.68	87.17	7.3	33.38	8.1	24.6	1.69
I18	07 Nov 2017	14	15.55	87.20	7.3	33.38	8.1	24.6	1.62
I18	07 Nov 2017	15	15.40	87.21	7.1	33.38	8.1	24.6	1.58
I18	07 Nov 2017	16	14.92	87.45	7.1	33.39	8.0	24.7	1.43
I18	07 Nov 2017	17	14.97	87.76	7.0	33.37	8.0	24.7	1.39
I18	07 Nov 2017	18	14.52	87.97	6.9	33.37	8.0	24.8	1.29
I18	07 Nov 2017	19	14.37	87.73	6.7	33.39	8.0	24.9	1.23
I20	06 Nov 2017	1	17.98	87.46	8.0	33.44	8.1	24.1	0.88
I20	06 Nov 2017	2	17.97	87.49	8.0	33.44	8.1	24.1	0.90
I20	06 Nov 2017	3	17.92	87.16	7.9	33.44	8.1	24.1	1.02
I20	06 Nov 2017	4	17.66	87.09	7.8	33.46	8.1	24.2	1.16
I20	06 Nov 2017	5	16.95	87.14	7.8	33.43	8.0	24.3	1.25

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I20	06 Nov 2017	6	16.83	87.11	7.8	33.40	8.0	24.3	1.30
I20	06 Nov 2017	7	16.71	87.13	7.8	33.40	8.0	24.4	1.37
I20	06 Nov 2017	8	16.69	87.12	7.9	33.39	8.0	24.4	1.43
I20	06 Nov 2017	9	16.66	87.09	7.8	33.39	8.0	24.4	1.49
I20	06 Nov 2017	10	16.64	87.18	7.8	33.39	8.0	24.4	1.53
I20	06 Nov 2017	11	16.63	87.24	7.9	33.39	8.0	24.4	1.56
I20	06 Nov 2017	12	16.48	87.30	7.9	33.39	8.0	24.4	1.57
I20	06 Nov 2017	13	16.41	87.47	8.0	33.38	8.1	24.4	1.56
I20	06 Nov 2017	14	16.41	87.55	8.0	33.38	8.1	24.4	1.56
I20	06 Nov 2017	15	16.29	87.60	8.0	33.39	8.1	24.4	1.57
I20	06 Nov 2017	16	16.17	87.67	8.1	33.38	8.1	24.5	1.63
I20	06 Nov 2017	17	16.10	87.59	8.1	33.38	8.1	24.5	1.69
I20	06 Nov 2017	18	15.91	87.48	8.0	33.39	8.1	24.5	1.84
I20	06 Nov 2017	19	15.69	86.97	8.0	33.38	8.1	24.6	2.12
I20	06 Nov 2017	20	15.41	86.56	7.9	33.38	8.0	24.6	2.36
I20	06 Nov 2017	21	15.32	86.41	7.9	33.37	8.0	24.6	2.49
I20	06 Nov 2017	22	15.13	86.41	7.8	33.37	8.0	24.7	2.56
I20	06 Nov 2017	23	14.99	86.86	7.8	33.36	8.0	24.7	2.56
I20	06 Nov 2017	24	14.89	87.08	7.7	33.36	8.0	24.7	2.45
I20	06 Nov 2017	25	14.83	87.31	7.7	33.36	8.0	24.7	2.35
I20	06 Nov 2017	26	14.77	87.51	7.6	33.37	8.0	24.8	2.27
I20	06 Nov 2017	27	14.72	87.78	7.6	33.37	8.0	24.8	2.18
I20	06 Nov 2017	28	14.67	87.96	7.6	33.37	8.0	24.8	2.11
I20	06 Nov 2017	29	14.64	88.15	7.5	33.37	8.0	24.8	2.05
I20	06 Nov 2017	30	14.62	88.30	7.5	33.37	8.0	24.8	1.98
I20	06 Nov 2017	31	14.60	88.33	7.5	33.37	8.0	24.8	1.93
I20	06 Nov 2017	32	14.58	88.54	7.5	33.37	8.0	24.8	1.86
I20	06 Nov 2017	33	14.54	88.72	7.5	33.37	8.0	24.8	1.78
I20	06 Nov 2017	34	14.52	88.78	7.4	33.37	8.0	24.8	1.75
I20	06 Nov 2017	35	14.49	88.88	7.4	33.37	8.0	24.8	1.68
I20	06 Nov 2017	36	14.44	89.01	7.4	33.37	8.0	24.8	1.58
I20	06 Nov 2017	37	14.41	89.23	7.4	33.37	8.0	24.8	1.53
I20	06 Nov 2017	38	14.42	89.35	7.2	33.37	8.0	24.8	1.50
I20	06 Nov 2017	39	14.16	89.41	7.0	33.39	8.0	24.9	1.35
I20	06 Nov 2017	40	13.72	89.92	6.8	33.39	8.0	25.0	1.10
I20	06 Nov 2017	41	13.67	90.27	6.7	33.38	8.0	25.0	0.87
I20	06 Nov 2017	42	13.56	90.39	6.6	33.39	8.0	25.0	0.76
I20	06 Nov 2017	43	13.37	90.34	6.4	33.40	7.9	25.1	0.66
I20	06 Nov 2017	44	13.32	90.35	6.3	33.39	7.9	25.1	0.61
I20	06 Nov 2017	45	13.29	90.22	6.3	33.40	7.9	25.1	0.59
I20	06 Nov 2017	46	13.29	90.26	6.2	33.40	7.9	25.1	0.58
I20	06 Nov 2017	47	13.23	90.04	6.2	33.40	7.9	25.1	0.57
I20	06 Nov 2017	48	13.17	89.76	6.0	33.41	7.9	25.1	0.53
I20	06 Nov 2017	49	13.05	89.50	5.9	33.42	7.9	25.2	0.50
I20	06 Nov 2017	50	12.90	89.27	5.8	33.43	7.9	25.2	0.45
I20	06 Nov 2017	51	12.86	89.17	5.7	33.43	7.9	25.2	0.44
I20	06 Nov 2017	52	12.78	89.16	5.7	33.44	7.9	25.2	0.41
I20	06 Nov 2017	53	12.74	89.07	5.6	33.44	7.9	25.2	0.41
I20	06 Nov 2017	54	12.66	89.05	5.5	33.45	7.9	25.3	0.38
I20	06 Nov 2017	55	12.51	89.03	5.4	33.46	7.9	25.3	0.36
I21	06 Nov 2017	1	17.79	81.92	7.9	33.44	8.1	24.1	1.51
I21	06 Nov 2017	2	17.81	82.33	7.9	33.45	8.1	24.1	1.55
I21	06 Nov 2017	3	17.68	82.20	7.8	33.46	8.1	24.2	1.65
I21	06 Nov 2017	4	17.15	82.55	7.7	33.43	8.1	24.3	1.70

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I21	06 Nov 2017	5	16.45	84.58	7.6	33.44	8.1	24.4	1.66
I21	06 Nov 2017	6	16.01	85.60	7.6	33.38	8.1	24.5	1.74
I21	06 Nov 2017	7	15.95	85.79	7.6	33.37	8.1	24.5	1.83
I21	06 Nov 2017	8	15.91	85.92	7.6	33.36	8.1	24.5	1.94
I21	06 Nov 2017	9	15.89	86.03	7.6	33.36	8.1	24.5	1.99
I21	06 Nov 2017	10	15.88	86.05	7.6	33.37	8.1	24.5	2.04
I21	06 Nov 2017	11	15.85	86.15	7.6	33.37	8.1	24.5	2.11
I21	06 Nov 2017	12	15.82	86.08	7.6	33.37	8.1	24.5	2.16
I21	06 Nov 2017	13	15.80	86.28	7.6	33.37	8.1	24.5	2.22
I21	06 Nov 2017	14	15.70	86.43	7.7	33.37	8.1	24.6	2.28
I21	06 Nov 2017	15	15.65	86.32	7.6	33.37	8.1	24.6	2.28
I21	06 Nov 2017	16	15.27	86.77	7.6	33.40	8.1	24.7	2.32
I21	06 Nov 2017	17	14.74	87.07	7.6	33.37	8.1	24.8	2.41
I21	06 Nov 2017	18	14.68	87.35	7.6	33.36	8.1	24.8	2.38
I21	06 Nov 2017	19	14.64	87.80	7.6	33.36	8.1	24.8	2.25
I21	06 Nov 2017	20	14.61	87.93	7.5	33.36	8.1	24.8	2.11
I21	06 Nov 2017	21	14.59	88.28	7.5	33.36	8.1	24.8	2.07
I21	06 Nov 2017	22	14.56	88.38	7.5	33.36	8.1	24.8	1.97
I21	06 Nov 2017	23	14.53	88.54	7.5	33.36	8.1	24.8	1.87
I21	06 Nov 2017	24	14.52	88.61	7.4	33.36	8.1	24.8	1.82
I21	06 Nov 2017	25	14.51	88.42	7.4	33.36	8.1	24.8	1.82
I21	06 Nov 2017	26	14.48	88.75	7.4	33.36	8.1	24.8	1.80
I21	06 Nov 2017	27	14.42	88.80	7.3	33.37	8.1	24.8	1.69
I21	06 Nov 2017	28	14.36	88.74	7.3	33.37	8.1	24.9	1.62
I21	06 Nov 2017	29	14.17	89.34	7.2	33.37	8.0	24.9	1.49
I21	06 Nov 2017	30	14.09	89.51	7.0	33.37	8.0	24.9	1.38
I21	06 Nov 2017	31	14.00	89.54	6.9	33.38	8.0	24.9	1.24
I21	06 Nov 2017	32	13.92	89.39	6.8	33.38	8.0	24.9	1.12
I21	06 Nov 2017	33	13.90	89.41	6.8	33.38	8.0	25.0	1.07
I21	06 Nov 2017	34	13.86	89.20	6.7	33.38	8.0	25.0	1.03
I21	06 Nov 2017	35	13.82	89.20	6.7	33.38	8.0	25.0	1.01
I21	06 Nov 2017	36	13.83	89.20	6.6	33.38	8.0	25.0	0.99
I21	06 Nov 2017	37	13.75	89.14	6.5	33.38	8.0	25.0	0.95
I21	06 Nov 2017	38	13.71	89.15	6.4	33.38	8.0	25.0	0.91
I21	06 Nov 2017	39	13.64	88.77	6.3	33.39	8.0	25.0	0.89
I21	06 Nov 2017	40	13.57	88.36	6.2	33.39	8.0	25.0	0.84
I21	06 Nov 2017	41	13.55	88.20	6.1	33.39	8.0	25.0	0.84
I22	07 Nov 2017	1	17.43	81.97	7.9	33.43	8.1	24.2	1.86
I22	07 Nov 2017	2	17.48	82.89	8.0	33.43	8.1	24.2	1.96
I22	07 Nov 2017	3	17.47	83.58	7.9	33.43	8.1	24.2	2.02
I22	07 Nov 2017	4	17.09	82.90	7.5	33.47	8.1	24.3	2.01
I22	07 Nov 2017	5	15.70	85.67	7.2	33.41	8.1	24.6	1.62
I22	07 Nov 2017	6	15.37	87.63	7.2	33.37	8.1	24.6	1.35
I22	07 Nov 2017	7	15.12	88.30	7.2	33.36	8.1	24.7	1.27
I22	07 Nov 2017	8	15.10	88.42	7.2	33.35	8.0	24.7	1.28
I22	07 Nov 2017	9	14.96	88.50	7.1	33.36	8.0	24.7	1.26
I22	07 Nov 2017	10	14.81	88.71	7.1	33.36	8.0	24.7	1.23
I22	07 Nov 2017	11	14.75	88.80	7.1	33.35	8.0	24.8	1.24
I22	07 Nov 2017	12	14.72	88.83	7.1	33.36	8.0	24.8	1.27
I22	07 Nov 2017	13	14.68	88.82	7.1	33.36	8.0	24.8	1.27
I22	07 Nov 2017	14	14.64	88.88	7.1	33.36	8.0	24.8	1.27
I22	07 Nov 2017	15	14.61	88.89	7.0	33.36	8.0	24.8	1.30
I22	07 Nov 2017	16	14.55	88.78	7.0	33.36	8.0	24.8	1.33
I22	07 Nov 2017	17	14.50	88.96	7.0	33.36	8.0	24.8	1.32

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I22	07 Nov 2017	18	14.47	88.96	7.0	33.37	8.0	24.8	1.29
I22	07 Nov 2017	19	14.41	89.02	7.0	33.37	8.0	24.8	1.29
I22	07 Nov 2017	20	14.36	89.06	7.0	33.37	8.0	24.9	1.37
I22	07 Nov 2017	21	14.27	89.09	6.9	33.37	8.0	24.9	1.30
I22	07 Nov 2017	22	14.24	89.03	6.9	33.37	8.0	24.9	1.27
I22	07 Nov 2017	23	14.10	88.93	6.7	33.38	8.0	24.9	1.20
I22	07 Nov 2017	24	14.09	88.40	6.7	33.37	8.0	24.9	1.13
I22	07 Nov 2017	25	13.93	88.40	6.5	33.38	8.0	24.9	1.05
I22	07 Nov 2017	26	13.91	88.25	6.5	33.38	8.0	25.0	1.02
I22	07 Nov 2017	27	13.90	88.40	6.5	33.38	8.0	25.0	0.99
I22	07 Nov 2017	28	13.89	88.36	6.5	33.38	8.0	25.0	0.98
I23	07 Nov 2017	1	17.25	85.20	8.1	33.41	8.1	24.2	1.48
I23	07 Nov 2017	2	17.25	85.12	8.1	33.41	8.1	24.2	1.60
I23	07 Nov 2017	3	17.25	85.19	8.0	33.41	8.1	24.2	1.63
I23	07 Nov 2017	4	17.23	85.17	8.0	33.42	8.1	24.2	1.72
I23	07 Nov 2017	5	17.07	85.38	7.8	33.43	8.1	24.3	1.88
I23	07 Nov 2017	6	16.41	86.07	7.6	33.44	8.1	24.5	1.87
I23	07 Nov 2017	7	15.81	86.94	7.4	33.41	8.1	24.6	1.72
I23	07 Nov 2017	8	15.47	87.34	7.4	33.38	8.1	24.6	1.63
I23	07 Nov 2017	9	15.35	87.46	7.3	33.37	8.1	24.6	1.62
I23	07 Nov 2017	10	15.26	87.53	7.3	33.37	8.1	24.7	1.59
I23	07 Nov 2017	11	15.23	87.57	7.3	33.37	8.1	24.7	1.63
I23	07 Nov 2017	12	15.15	87.66	7.2	33.37	8.1	24.7	1.61
I23	07 Nov 2017	13	15.13	87.73	7.2	33.37	8.1	24.7	1.62
I23	07 Nov 2017	14	15.07	87.74	7.2	33.37	8.1	24.7	1.62
I23	07 Nov 2017	15	15.05	87.79	7.2	33.37	8.1	24.7	1.61
I23	07 Nov 2017	16	15.01	87.86	7.1	33.38	8.1	24.7	1.54
I23	07 Nov 2017	17	14.87	87.71	7.0	33.38	8.0	24.8	1.47
I23	07 Nov 2017	18	14.64	87.80	6.8	33.39	8.0	24.8	1.36
I23	07 Nov 2017	19	14.40	87.64	6.8	33.38	8.0	24.8	1.29
I23	07 Nov 2017	20	14.34	87.43	6.7	33.38	8.0	24.9	1.23
I23	07 Nov 2017	21	14.24	87.36	6.6	33.38	8.0	24.9	1.21
I27	07 Nov 2017	1	17.41	85.78	7.9	33.43	8.1	24.2	1.47
I27	07 Nov 2017	2	17.41	84.32	7.9	33.43	8.1	24.2	1.54
I27	07 Nov 2017	3	17.41	85.41	7.9	33.43	8.1	24.2	1.63
I27	07 Nov 2017	4	17.41	85.82	7.9	33.43	8.1	24.2	1.66
I27	07 Nov 2017	5	17.35	85.78	7.8	33.43	8.1	24.2	1.81
I27	07 Nov 2017	6	16.82	85.84	7.4	33.46	8.1	24.4	1.79
I27	07 Nov 2017	7	15.75	87.27	7.2	33.40	8.0	24.6	1.43
I27	07 Nov 2017	8	15.49	88.20	7.1	33.38	8.0	24.6	1.20
I27	07 Nov 2017	9	15.11	88.77	7.1	33.37	8.0	24.7	1.08
I27	07 Nov 2017	10	15.02	88.96	7.1	33.36	8.0	24.7	1.02
I27	07 Nov 2017	11	14.91	88.85	7.1	33.36	8.0	24.7	1.02
I27	07 Nov 2017	12	14.70	88.90	7.1	33.36	8.0	24.8	1.03
I27	07 Nov 2017	13	14.51	89.20	7.0	33.36	8.0	24.8	1.02
I27	07 Nov 2017	14	14.45	89.23	7.0	33.36	8.0	24.8	1.01
I27	07 Nov 2017	15	14.43	89.14	7.0	33.36	8.0	24.8	0.99
I27	07 Nov 2017	16	14.41	89.23	7.0	33.36	8.0	24.8	0.99
I27	07 Nov 2017	17	14.39	89.11	6.9	33.37	8.0	24.8	1.00
I27	07 Nov 2017	18	14.38	89.16	6.9	33.37	8.0	24.8	0.98
I27	07 Nov 2017	19	14.34	89.12	6.9	33.37	8.0	24.9	0.98
I27	07 Nov 2017	20	14.35	89.16	6.9	33.37	8.0	24.9	0.96
I27	07 Nov 2017	21	14.34	89.12	6.9	33.37	8.0	24.9	0.96

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I27	07 Nov 2017	22	14.30	89.10	6.8	33.37	8.0	24.9	0.93
I27	07 Nov 2017	23	14.24	89.10	6.8	33.37	8.0	24.9	0.93
I27	07 Nov 2017	24	14.09	89.09	6.6	33.38	8.0	24.9	0.88
I27	07 Nov 2017	25	13.81	88.53	6.4	33.39	8.0	25.0	0.82
I27	07 Nov 2017	26	13.78	87.98	6.3	33.38	8.0	25.0	0.79
I27	07 Nov 2017	27	13.77	87.97	6.3	33.38	8.0	25.0	0.76
I27	07 Nov 2017	28	13.76	87.83	6.3	33.38	8.0	25.0	0.74
I28	08 Nov 2017	1	18.01	86.09	8.0	33.47	8.2	24.1	1.35
I28	08 Nov 2017	2	18.01	85.96	7.8	33.47	8.2	24.1	1.38
I28	08 Nov 2017	3	17.95	86.03	7.7	33.45	8.2	24.1	1.48
I28	08 Nov 2017	4	17.20	86.27	7.7	33.41	8.1	24.2	1.54
I28	08 Nov 2017	5	16.64	87.01	7.7	33.39	8.1	24.4	1.60
I28	08 Nov 2017	6	16.20	87.45	7.6	33.36	8.1	24.4	1.62
I28	08 Nov 2017	7	15.56	87.70	7.6	33.35	8.1	24.6	1.58
I28	08 Nov 2017	8	15.33	87.72	7.5	33.35	8.1	24.6	1.58
I28	08 Nov 2017	9	15.23	87.84	7.3	33.35	8.1	24.6	1.56
I28	08 Nov 2017	10	15.18	88.09	7.3	33.34	8.1	24.7	1.46
I28	08 Nov 2017	11	14.96	88.23	7.2	33.34	8.1	24.7	1.33
I28	08 Nov 2017	12	14.86	88.36	7.0	33.35	8.1	24.7	1.24
I28	08 Nov 2017	13	14.82	88.37	6.8	33.35	8.1	24.7	1.17
I28	08 Nov 2017	14	14.67	88.31	6.7	33.36	8.0	24.8	1.17
I28	08 Nov 2017	15	14.52	88.23	6.6	33.37	8.0	24.8	1.12
I28	08 Nov 2017	16	14.37	88.22	6.6	33.36	8.0	24.8	1.06
I28	08 Nov 2017	17	14.07	88.30	6.5	33.37	8.0	24.9	1.06
I28	08 Nov 2017	18	13.93	88.48	6.5	33.37	8.0	24.9	1.05
I28	08 Nov 2017	19	13.76	88.60	6.6	33.38	8.0	25.0	1.00
I28	08 Nov 2017	20	13.68	88.77	6.6	33.37	8.0	25.0	0.94
I28	08 Nov 2017	21	13.63	88.97	6.4	33.37	8.0	25.0	0.88
I28	08 Nov 2017	22	13.58	89.19	6.2	33.38	8.0	25.0	0.83
I28	08 Nov 2017	23	13.48	89.12	6.1	33.38	8.0	25.0	0.80
I28	08 Nov 2017	24	13.35	89.10	6.0	33.40	8.0	25.1	0.79
I28	08 Nov 2017	25	13.30	89.23	6.0	33.40	8.0	25.1	0.78
I28	08 Nov 2017	26	13.22	89.35	6.0	33.40	8.0	25.1	0.77
I28	08 Nov 2017	27	13.16	89.45	6.0	33.41	8.0	25.1	0.76
I28	08 Nov 2017	28	13.15	89.38	5.9	33.41	8.0	25.1	0.74
I28	08 Nov 2017	29	13.12	89.62	5.9	33.41	8.0	25.1	0.72
I28	08 Nov 2017	30	13.09	89.56	5.9	33.41	8.0	25.1	0.71
I28	08 Nov 2017	31	13.06	89.68	5.9	33.41	8.0	25.2	0.70
I28	08 Nov 2017	32	13.05	89.65	5.8	33.41	8.0	25.2	0.67
I28	08 Nov 2017	33	13.01	89.75	5.8	33.42	8.0	25.2	0.66
I28	08 Nov 2017	34	12.98	89.75	5.7	33.42	8.0	25.2	0.64
I28	08 Nov 2017	35	12.91	89.79	5.7	33.42	7.9	25.2	0.62
I28	08 Nov 2017	36	12.87	89.75	5.6	33.42	7.9	25.2	0.62
I28	08 Nov 2017	37	12.81	89.67	5.6	33.43	7.9	25.2	0.61
I28	08 Nov 2017	38	12.78	89.66	5.5	33.43	7.9	25.2	0.59
I28	08 Nov 2017	39	12.72	89.60	5.5	33.44	7.9	25.2	0.58
I28	08 Nov 2017	40	12.70	89.59	5.5	33.44	7.9	25.2	0.59
I28	08 Nov 2017	41	12.68	89.55	5.5	33.44	7.9	25.2	0.57
I28	08 Nov 2017	42	12.65	89.39	5.5	33.44	7.9	25.3	0.57
I28	08 Nov 2017	43	12.66	89.45	5.4	33.44	7.9	25.3	0.55
I28	08 Nov 2017	44	12.63	89.45	5.4	33.44	7.9	25.3	0.51
I28	08 Nov 2017	45	12.61	89.42	5.2	33.45	7.9	25.3	0.49
I28	08 Nov 2017	46	12.48	89.30	5.1	33.45	7.9	25.3	0.46
I28	08 Nov 2017	47	12.35	89.18	5.1	33.47	7.9	25.3	0.46

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I28	08 Nov 2017	48	12.29	89.15	5.0	33.47	7.9	25.3	0.46
I28	08 Nov 2017	49	12.25	89.10	5.0	33.48	7.9	25.4	0.45
I28	08 Nov 2017	50	12.22	89.08	5.0	33.48	7.9	25.4	0.45
I28	08 Nov 2017	51	12.21	88.88	5.0	33.48	7.9	25.4	0.45
I28	08 Nov 2017	52	12.20	88.74	5.0	33.48	7.9	25.4	0.45
I28	08 Nov 2017	53	12.20	88.83	5.0	33.48	7.9	25.4	0.45
I28	08 Nov 2017	54	12.20	88.78	5.0	33.48	7.9	25.4	0.44
I28	08 Nov 2017	55	12.20	88.67	5.0	33.48	7.9	25.4	0.44
I29	08 Nov 2017	1	17.31	82.49	7.6	33.45	8.1	24.3	2.14
I29	08 Nov 2017	2	17.31	82.21	7.5	33.45	8.1	24.3	2.21
I29	08 Nov 2017	3	17.23	80.86	7.5	33.45	8.1	24.3	2.18
I29	08 Nov 2017	4	17.21	81.39	7.5	33.45	8.1	24.3	2.11
I29	08 Nov 2017	5	17.17	81.58	7.4	33.45	8.1	24.3	2.05
I29	08 Nov 2017	6	17.13	81.42	7.4	33.45	8.1	24.3	1.98
I29	08 Nov 2017	7	16.98	81.68	7.4	33.44	8.1	24.3	1.88
I29	08 Nov 2017	8	16.86	82.44	7.4	33.43	8.1	24.3	1.69
I29	08 Nov 2017	9	16.77	83.44	7.1	33.42	8.1	24.4	1.52
I29	08 Nov 2017	10	16.67	84.00	7.0	33.41	8.1	24.4	1.35
I29	08 Nov 2017	11	15.94	84.78	6.9	33.37	8.1	24.5	1.20
I29	08 Nov 2017	12	15.21	87.13	6.8	33.36	8.1	24.7	1.14
I29	08 Nov 2017	13	14.82	88.11	6.7	33.35	8.0	24.7	1.11
I29	08 Nov 2017	14	14.40	88.61	6.7	33.35	8.0	24.8	1.11
I29	08 Nov 2017	15	14.12	89.01	6.7	33.36	8.0	24.9	1.10
I29	08 Nov 2017	16	14.07	89.14	6.7	33.36	8.0	24.9	1.11
I29	08 Nov 2017	17	14.05	89.27	6.7	33.36	8.0	24.9	1.10
I29	08 Nov 2017	18	14.03	89.22	6.7	33.36	8.0	24.9	1.10
I29	08 Nov 2017	19	14.02	89.36	6.6	33.36	8.0	24.9	1.11
I29	08 Nov 2017	20	14.00	89.39	6.6	33.37	8.0	24.9	1.09
I29	08 Nov 2017	21	13.99	89.40	6.6	33.37	8.0	24.9	1.09
I29	08 Nov 2017	22	13.99	89.43	6.6	33.37	8.0	24.9	1.08
I29	08 Nov 2017	23	13.97	89.46	6.6	33.37	8.0	24.9	1.08
I29	08 Nov 2017	24	13.95	89.47	6.6	33.37	8.0	24.9	1.05
I29	08 Nov 2017	25	13.95	89.49	6.5	33.37	8.0	24.9	0.98
I29	08 Nov 2017	26	13.90	89.45	6.4	33.37	8.0	25.0	0.94
I29	08 Nov 2017	27	13.82	89.37	6.3	33.38	8.0	25.0	0.93
I29	08 Nov 2017	28	13.65	89.34	6.2	33.38	8.0	25.0	0.90
I29	08 Nov 2017	29	13.57	88.76	6.2	33.39	8.0	25.0	0.87
I29	08 Nov 2017	30	13.57	88.40	6.1	33.39	8.0	25.0	0.85
I29	08 Nov 2017	31	13.49	88.22	6.1	33.39	8.0	25.0	0.83
I29	08 Nov 2017	32	13.43	88.23	6.0	33.40	8.0	25.1	0.82
I29	08 Nov 2017	33	13.38	88.31	6.0	33.40	8.0	25.1	0.82
I29	08 Nov 2017	34	13.32	88.43	6.0	33.40	8.0	25.1	0.81
I29	08 Nov 2017	35	13.28	88.52	5.9	33.40	8.0	25.1	0.79
I29	08 Nov 2017	36	13.24	88.48	5.8	33.40	8.0	25.1	0.79
I29	08 Nov 2017	37	13.16	88.26	5.8	33.41	8.0	25.1	0.81
I29	08 Nov 2017	38	13.11	87.91	5.9	33.41	7.9	25.1	0.81
I30	08 Nov 2017	1	16.99	85.92	7.9	33.41	8.1	24.3	1.08
I30	08 Nov 2017	2	16.99	86.18	7.9	33.41	8.1	24.3	1.20
I30	08 Nov 2017	3	16.96	86.36	7.8	33.41	8.1	24.3	1.30
I30	08 Nov 2017	4	16.94	86.21	7.4	33.41	8.1	24.3	1.44
I30	08 Nov 2017	5	16.76	86.58	7.4	33.40	8.1	24.3	1.47
I30	08 Nov 2017	6	16.05	87.08	7.5	33.39	8.1	24.5	1.54
I30	08 Nov 2017	7	16.06	87.36	7.5	33.38	8.1	24.5	1.57

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I30	08 Nov 2017	8	16.21	87.15	7.5	33.38	8.1	24.5	1.54
I30	08 Nov 2017	9	16.19	87.09	7.4	33.38	8.1	24.5	1.54
I30	08 Nov 2017	10	16.16	87.05	7.3	33.38	8.1	24.5	1.49
I30	08 Nov 2017	11	16.03	87.11	7.2	33.38	8.1	24.5	1.28
I30	08 Nov 2017	12	15.85	87.20	7.0	33.38	8.1	24.5	1.20
I30	08 Nov 2017	13	15.41	87.48	7.0	33.37	8.1	24.6	1.23
I30	08 Nov 2017	14	14.82	88.02	7.0	33.36	8.1	24.7	1.23
I30	08 Nov 2017	15	14.67	88.43	7.0	33.36	8.0	24.8	1.25
I30	08 Nov 2017	16	14.59	88.59	7.0	33.36	8.0	24.8	1.26
I30	08 Nov 2017	17	14.54	88.65	7.0	33.36	8.0	24.8	1.26
I30	08 Nov 2017	18	14.51	88.70	7.0	33.36	8.0	24.8	1.26
I30	08 Nov 2017	19	14.46	88.76	6.9	33.36	8.0	24.8	1.26
I30	08 Nov 2017	20	14.42	88.75	6.9	33.36	8.0	24.8	1.25
I30	08 Nov 2017	21	14.35	88.95	6.9	33.36	8.0	24.8	1.25
I30	08 Nov 2017	22	14.31	89.00	6.8	33.36	8.0	24.9	1.21
I30	08 Nov 2017	23	14.28	89.09	6.8	33.36	8.0	24.9	1.19
I30	08 Nov 2017	24	14.13	89.12	6.8	33.37	8.0	24.9	1.16
I30	08 Nov 2017	25	14.03	89.19	6.6	33.37	8.0	24.9	1.13
I30	08 Nov 2017	26	13.95	89.20	6.4	33.37	8.0	24.9	1.05
I30	08 Nov 2017	27	13.86	88.72	6.3	33.38	8.0	25.0	1.04
I30	08 Nov 2017	28	13.85	88.20	6.3	33.38	8.0	25.0	1.04
I31	08 Nov 2017	1	16.94	85.31	7.9	33.40	8.1	24.3	1.73
I31	08 Nov 2017	2	16.93	85.27	7.9	33.40	8.1	24.3	1.83
I31	08 Nov 2017	3	16.89	85.15	7.9	33.40	8.1	24.3	1.77
I31	08 Nov 2017	4	16.87	85.09	7.8	33.40	8.1	24.3	1.78
I31	08 Nov 2017	5	16.86	84.91	7.6	33.40	8.1	24.3	1.75
I31	08 Nov 2017	6	16.79	85.07	7.4	33.40	8.1	24.3	1.79
I31	08 Nov 2017	7	16.53	85.45	7.3	33.39	8.1	24.4	1.68
I31	08 Nov 2017	8	16.22	85.95	7.2	33.39	8.1	24.5	1.54
I31	08 Nov 2017	9	15.94	86.22	7.0	33.38	8.1	24.5	1.42
I31	08 Nov 2017	10	15.64	86.37	6.9	33.38	8.1	24.6	1.40
I31	08 Nov 2017	11	15.24	86.82	6.9	33.37	8.1	24.7	1.40
I31	08 Nov 2017	12	14.73	87.53	7.0	33.37	8.1	24.8	1.37
I31	08 Nov 2017	13	14.58	88.06	7.0	33.36	8.0	24.8	1.38
I31	08 Nov 2017	14	14.52	88.26	6.9	33.36	8.0	24.8	1.36
I31	08 Nov 2017	15	14.50	88.37	6.8	33.36	8.0	24.8	1.33
I31	08 Nov 2017	16	14.37	88.42	6.6	33.35	8.0	24.8	1.34
I31	08 Nov 2017	17	14.14	88.52	6.5	33.37	8.0	24.9	1.29
I31	08 Nov 2017	18	14.08	88.28	6.5	33.36	8.0	24.9	1.28
I31	08 Nov 2017	19	14.03	87.78	6.5	33.37	8.0	24.9	1.28
I33	08 Nov 2017	1	17.38	83.92	7.6	33.45	8.1	24.2	2.04
I33	08 Nov 2017	2	17.34	83.75	7.3	33.46	8.1	24.2	2.00
I33	08 Nov 2017	3	17.19	81.52	7.2	33.47	8.1	24.3	1.90
I33	08 Nov 2017	4	17.10	80.57	7.2	33.46	8.1	24.3	1.80
I33	08 Nov 2017	5	16.93	80.63	7.3	33.46	8.1	24.3	1.73
I33	08 Nov 2017	6	16.76	81.81	7.3	33.45	8.1	24.4	1.61
I33	08 Nov 2017	7	16.54	83.23	7.3	33.43	8.1	24.4	1.53
I33	08 Nov 2017	8	16.37	85.02	7.2	33.41	8.1	24.4	1.50
I33	08 Nov 2017	9	15.92	86.63	7.1	33.38	8.1	24.5	1.43
I33	08 Nov 2017	10	15.55	87.79	7.0	33.38	8.1	24.6	1.40
I33	08 Nov 2017	11	15.38	88.05	6.9	33.37	8.1	24.6	1.35
I33	08 Nov 2017	12	15.23	87.51	6.9	33.39	8.0	24.7	1.33
I33	08 Nov 2017	13	15.16	86.81	6.8	33.39	8.0	24.7	1.33

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I33	08 Nov 2017	14	15.10	86.61	6.8	33.39	8.0	24.7	1.29
I33	08 Nov 2017	15	15.03	86.85	6.8	33.39	8.0	24.7	1.30
I33	08 Nov 2017	16	14.91	86.94	6.8	33.39	8.0	24.7	1.28
I33	08 Nov 2017	17	14.88	87.07	6.8	33.39	8.0	24.8	1.26
I33	08 Nov 2017	18	14.87	86.99	6.7	33.38	8.0	24.8	1.20
I33	08 Nov 2017	19	14.82	86.86	6.6	33.38	8.0	24.8	1.12
I33	08 Nov 2017	20	14.67	86.86	6.6	33.38	8.0	24.8	1.07
I33	08 Nov 2017	21	14.39	86.96	6.5	33.38	8.0	24.9	1.02
I33	08 Nov 2017	22	14.21	87.37	6.5	33.38	8.0	24.9	0.98
I33	08 Nov 2017	23	14.00	88.02	6.4	33.38	8.0	24.9	0.94
I33	08 Nov 2017	24	13.88	88.28	6.3	33.38	8.0	25.0	0.92
I33	08 Nov 2017	25	13.80	88.36	6.3	33.38	8.0	25.0	0.92
I33	08 Nov 2017	26	13.69	88.32	6.3	33.38	8.0	25.0	0.88
I33	08 Nov 2017	27	13.67	88.26	6.2	33.38	8.0	25.0	0.84
I33	08 Nov 2017	28	13.66	88.40	6.2	33.39	8.0	25.0	0.84
I33	08 Nov 2017	29	13.61	88.23	6.1	33.39	8.0	25.0	0.83
I33	08 Nov 2017	30	13.54	88.18	6.2	33.39	8.0	25.0	0.85
I34	08 Nov 2017	1	17.13	85.84	7.8	33.42	8.1	24.3	1.49
I34	08 Nov 2017	2	17.13	85.83	7.8	33.42	8.1	24.3	1.62
I34	08 Nov 2017	3	17.13	85.99	7.8	33.42	8.1	24.3	1.72
I34	08 Nov 2017	4	17.12	85.96	7.8	33.42	8.1	24.3	1.72
I34	08 Nov 2017	5	17.12	85.78	7.8	33.42	8.1	24.3	1.72
I34	08 Nov 2017	6	17.12	85.88	7.8	33.42	8.1	24.3	1.72
I34	08 Nov 2017	7	17.12	85.92	7.8	33.42	8.1	24.3	1.69
I34	08 Nov 2017	8	17.11	85.88	7.7	33.42	8.1	24.3	1.74
I34	08 Nov 2017	9	17.11	85.81	7.6	33.42	8.1	24.3	1.76
I34	08 Nov 2017	10	17.06	85.71	7.6	33.42	8.1	24.3	1.71
I34	08 Nov 2017	11	17.02	85.53	7.4	33.42	8.1	24.3	1.68
I34	08 Nov 2017	12	16.92	85.24	7.3	33.42	8.1	24.3	1.64
I34	08 Nov 2017	13	16.64	84.40	7.1	33.41	8.1	24.4	1.63
I34	08 Nov 2017	14	16.48	83.88	6.9	33.42	8.1	24.4	1.55
I34	08 Nov 2017	15	16.29	83.66	6.8	33.39	8.1	24.4	1.32
I34	08 Nov 2017	16	15.15	83.53	6.7	33.37	8.1	24.7	1.15
I34	08 Nov 2017	17	14.83	84.51	6.5	33.37	8.0	24.8	1.04
I34	08 Nov 2017	18	14.47	85.29	6.4	33.37	8.0	24.8	0.99
I34	08 Nov 2017	19	14.18	86.33	6.4	33.37	8.0	24.9	0.97
I35	08 Nov 2017	1	17.30	85.43	7.9	33.41	8.1	24.2	1.41
I35	08 Nov 2017	2	17.27	85.42	7.9	33.41	8.1	24.2	1.54
I35	08 Nov 2017	3	17.24	85.07	7.9	33.41	8.1	24.2	1.72
I35	08 Nov 2017	4	17.15	85.04	7.9	33.41	8.1	24.3	1.84
I35	08 Nov 2017	5	17.10	84.78	7.9	33.41	8.1	24.3	1.88
I35	08 Nov 2017	6	17.08	84.86	7.8	33.41	8.1	24.3	1.88
I35	08 Nov 2017	7	17.06	84.84	7.5	33.41	8.1	24.3	1.87
I35	08 Nov 2017	8	16.89	85.01	7.3	33.40	8.1	24.3	1.83
I35	08 Nov 2017	9	16.08	85.56	7.3	33.39	8.1	24.5	1.79
I35	08 Nov 2017	10	15.45	86.57	7.2	33.38	8.1	24.6	1.68
I35	08 Nov 2017	11	15.23	87.00	7.0	33.37	8.1	24.7	1.61
I35	08 Nov 2017	12	15.04	87.12	6.8	33.36	8.1	24.7	1.48
I35	08 Nov 2017	13	14.70	87.23	6.6	33.37	8.1	24.8	1.40
I35	08 Nov 2017	14	14.50	87.33	6.5	33.37	8.0	24.8	1.31
I35	08 Nov 2017	15	14.21	87.22	6.3	33.37	8.0	24.9	1.29
I35	08 Nov 2017	16	13.89	87.40	6.3	33.38	8.0	25.0	1.30
I35	08 Nov 2017	17	13.82	86.83	6.2	33.38	8.0	25.0	1.28

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I35	08 Nov 2017	18	13.82	86.00	6.2	33.38	8.0	25.0	1.26
I35	08 Nov 2017	19	13.82	85.51	6.2	33.38	8.0	25.0	1.25
I36	08 Nov 2017	1	16.97	78.81	7.7	33.40	8.1	24.3	3.03
I36	08 Nov 2017	2	16.86	78.91	7.5	33.40	8.1	24.3	2.55
I36	08 Nov 2017	3	16.38	78.08	7.2	33.39	8.1	24.4	2.26
I36	08 Nov 2017	4	16.19	77.23	7.0	33.39	8.1	24.5	2.07
I36	08 Nov 2017	5	15.74	78.67	7.0	33.39	8.1	24.6	1.98
I36	08 Nov 2017	6	15.15	80.67	7.0	33.38	8.1	24.7	1.92
I36	08 Nov 2017	7	15.01	82.90	6.9	33.38	8.1	24.7	1.87
I36	08 Nov 2017	8	14.91	84.10	6.8	33.37	8.0	24.7	1.83
I36	08 Nov 2017	9	14.80	83.40	6.8	33.37	8.0	24.8	1.82
I36	08 Nov 2017	10	14.77	81.41	6.8	33.37	8.0	24.8	1.81
I36	08 Nov 2017	11	14.75	80.46	6.7	33.37	8.0	24.8	1.81
I37	08 Nov 2017	1	17.18	85.68	7.9	33.42	8.1	24.3	1.53
I37	08 Nov 2017	2	17.18	85.68	7.8	33.42	8.1	24.3	1.65
I37	08 Nov 2017	3	17.18	85.74	7.7	33.42	8.1	24.3	1.79
I37	08 Nov 2017	4	17.17	85.66	7.5	33.42	8.1	24.3	1.67
I37	08 Nov 2017	5	17.07	85.01	7.1	33.42	8.1	24.3	1.62
I37	08 Nov 2017	6	16.91	83.80	6.8	33.42	8.1	24.3	1.62
I37	08 Nov 2017	7	16.17	83.22	6.9	33.40	8.1	24.5	1.52
I37	08 Nov 2017	8	15.67	82.99	6.8	33.39	8.1	24.6	1.34
I37	08 Nov 2017	9	15.43	83.07	6.7	33.37	8.1	24.6	1.16
I37	08 Nov 2017	10	15.16	83.12	6.5	33.38	8.0	24.7	1.12
I37	08 Nov 2017	11	14.78	83.13	6.5	33.37	8.0	24.8	1.10
I37	08 Nov 2017	12	14.36	82.62	6.5	33.37	8.0	24.9	1.11
I38	08 Nov 2017	1	17.54	82.61	8.0	33.42	8.2	24.2	1.49
I38	08 Nov 2017	2	17.53	82.64	7.7	33.42	8.2	24.2	1.71
I38	08 Nov 2017	3	17.52	82.65	7.3	33.42	8.2	24.2	1.76
I38	08 Nov 2017	4	16.55	82.65	7.2	33.38	8.1	24.4	1.80
I38	08 Nov 2017	5	15.85	83.09	7.2	33.38	8.1	24.5	1.87
I38	08 Nov 2017	6	15.69	82.85	7.1	33.36	8.1	24.6	1.93
I38	08 Nov 2017	7	15.55	82.28	7.1	33.36	8.1	24.6	1.98
I38	08 Nov 2017	8	15.46	81.62	7.1	33.36	8.1	24.6	1.95
I38	08 Nov 2017	9	15.40	81.35	7.1	33.36	8.1	24.6	1.90
I38	08 Nov 2017	10	15.33	81.27	7.0	33.36	8.1	24.6	1.89
I38	08 Nov 2017	11	15.24	81.26	6.9	33.36	8.1	24.7	1.86

NA = not available

This page intentionally left blank

APPENDIX A

Quality Assurance

Table A.1

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected SBOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
I3	06 Nov 2017	18	LMA	LAB DUPLICATE	<2	<2	<2
I9	06 Nov 2017	27	AR	LAB DUPLICATE	<20	<2	<2
I12	07 Nov 2017	18	JT	LAB DUPLICATE	52	14e	10e
I13	06 Nov 2017	18	AE	LAB DUPLICATE	<20	<2	<2
I14	07 Nov 2017	2	JT	LAB DUPLICATE	2e	<2	<2
I16	07 Nov 2017	18	JT	LAB DUPLICATE	2e	<2	<2
I19	07 Nov 2017	6	JT	FIELD DUPLICATE	<2	<2	<2
I19	07 Nov 2017	6	JT	LAB DUPLICATE	<2	<2	<2
I19	14 Nov 2017	6	ZV	LAB DUPLICATE	2e	<2	<2
I19	20 Nov 2017	6	JT	LAB DUPLICATE	<2	<2	<2
I19	29 Nov 2017	6	AR	LAB DUPLICATE	2e	6e	10e
I20	06 Nov 2017	55	JT	LAB DUPLICATE	84	2e	4e
I32	08 Nov 2017	9	ZV	LAB DUPLICATE	<2	<2	<2
I36	08 Nov 2017	11	ZV	LAB DUPLICATE	<20	<2	<2
I40	14 Nov 2017	6	ZV	LAB DUPLICATE	<20	<2	<2
I40	20 Nov 2017	6	JT	LAB DUPLICATE	2e	<2	<2
I40	29 Nov 2017	6	AR	LAB DUPLICATE	<2	<2	<2
S12	07 Nov 2017		ZV	FIELD DUPLICATE	<20	<2	4e
S12	07 Nov 2017		ZV	LAB DUPLICATE	20e	<2	6e
S12	14 Nov 2017		AE	FIELD DUPLICATE	<20	<2	<2
S12	14 Nov 2017		AE	LAB DUPLICATE	<20	<2	2e
S12	21 Nov 2017		AE	FIELD DUPLICATE	2e	<2	4e
S12	21 Nov 2017		AE	LAB DUPLICATE	6e	<2	2e
S12	28 Nov 2017		AE	FIELD DUPLICATE	20e	<2	<2
S12	28 Nov 2017		AE	LAB DUPLICATE	2e	<2	2e

ns = not sampled

ND = no data

