



SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

NPDES Permit No. CA0109045
SDRWQCB Order No. R9-2013-0006

AUGUST 2018

Environmental Monitoring and Technical Services
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Public Utilities Department

Environmental Monitoring & Technical Services Division

September 30, 2018

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 August 2018 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, 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 as amended Order Nos. R9-2014-0094 and R9-2017-0024, 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

TDS/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 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045, for the South Bay Water Reclamation Plant (SBWRP), South Bay Ocean Outfall (SBOO). 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 \geq 4 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 chromomorphic 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 analyses were 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 2018 Quality Assurance Report, which will be completed in March 2019.

SUMMARY OF RESULTS

➤ Shoreline Water Quality Sampling

- Because of site access restrictions in Mexico, the South Bay shoreline sampling is typically 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 August, each of the eight shore stations located north of the border was in compliance with various California Ocean Plan (Ocean Plan) water contact standards (see below); 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 seawater samples collected at station S0 on one or more days during the month.
- 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 *Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* 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 during the month (i.e. August 6, 13, 20, 27).
- During August, all seven stations were in compliance with various Ocean Plan water contact standards (see below).
- Water column temperatures ranged from 14.35 to 24.16°C. The difference between surface and bottom waters ranged from 1.07 to 9.19°C, indicating the water column was stratified at some of these sites during the month.
- Chlorophyll *a* concentrations ranged from 0.41 to 11.67 µg/L at the kelp bed stations, suggesting the presence of phytoplankton during the month.
- 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., August 21, 22, 23).
- During August, 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 12.96 to 24.24°C at the offshore sites. The difference between surface and bottom waters ranged from 5.88 to 11.01°C, indicating that the water column was stratified at all of the offshore stations during the month.
- Chlorophyll *a* concentrations ranged from 0 to 5.57 µg/L at the offshore sites, suggesting the presence of phytoplankton blooms during the month.
- CDOM data are available upon request.
- 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 Aug 2018	8	23	8	32	124	23	13	21
02 Aug 2018	11*	24*	11*	36*	112*	24*	11*	26*
03 Aug 2018	11*	24*	11*	36*	112*	24*	11*	26*
04 Aug 2018	11*	24*	11*	36*	112*	24*	11*	26*
05 Aug 2018	11*	24*	11*	36*	112*	24*	11*	26*
06 Aug 2018	11*	24*	11*	36*	112*	24*	11*	26*
07 Aug 2018	13	23	13	32	80	23	13	25
08 Aug 2018	13	23	13	32	80	23	13	25
09 Aug 2018	11*	20*	11*	20*	63*	24*	11*	26*
10 Aug 2018	11*	20*	11*	20*	63*	24*	11*	26*
11 Aug 2018	11*	20*	11*	20*	63*	24*	11*	26*
12 Aug 2018	11*	20*	11*	20*	63*	24*	11*	26*
13 Aug 2018	11*	20*	11*	20*	63*	24*	11*	26*
14 Aug 2018	13	20	13	20	50	23	13	25
15 Aug 2018	13	20	13	20	50	23	13	25
16 Aug 2018	13*	20*	11*	20*	63*	20*	11*	26*
17 Aug 2018	13*	20*	11*	20*	63*	20*	11*	26*
18 Aug 2018	13*	20*	11*	20*	63*	20*	11*	26*
19 Aug 2018	13*	20*	11*	20*	63*	20*	11*	26*
20 Aug 2018	13*	20*	11*	20*	63*	20*	11*	26*
21 Aug 2018	14	20	13	20	80	23	13	25
22 Aug 2018	14	20	13	20	80	23	13	25
23 Aug 2018	13*	20*	11*	11*	63*	24*	11*	26*
24 Aug 2018	13*	20*	11*	11*	63*	24*	11*	26*
25 Aug 2018	13*	20*	11*	11*	63*	24*	11*	26*
26 Aug 2018	13*	20*	11*	11*	63*	24*	11*	26*
27 Aug 2018	13*	20*	11*	11*	63*	24*	11*	26*
28 Aug 2018	9	20	8	11	50	14	8	25
29 Aug 2018	9	20	8	11	50	14	8	25
30 Aug 2018	11*	20*	11*	17*	36*	13*	11*	20*
31 Aug 2018	11*	20*	11*	17*	36*	13*	11*	20*

* 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 Aug 2018	3	2	3	3	5	2	2	4
02 Aug 2018	3*	2*	3*	2*	3*	2*	2*	4*
03 Aug 2018	3*	2*	3*	2*	3*	2*	2*	4*
04 Aug 2018	3*	2*	3*	2*	3*	2*	2*	4*
05 Aug 2018	3*	2*	3*	2*	3*	2*	2*	4*
06 Aug 2018	3*	2*	3*	2*	3*	2*	2*	4*
07 Aug 2018	3	2	3	2	2	2	2	4
08 Aug 2018	3	2	3	2	2	2	2	4
09 Aug 2018	2*	2*	3*	2*	3*	2*	2*	4*
10 Aug 2018	2*	2*	3*	2*	3*	2*	2*	4*
11 Aug 2018	2*	2*	3*	2*	3*	2*	2*	4*
12 Aug 2018	2*	2*	3*	2*	3*	2*	2*	4*
13 Aug 2018	2*	2*	3*	2*	3*	2*	2*	4*
14 Aug 2018	2	2	3	2	2	2	2	4
15 Aug 2018	2	2	3	2	2	2	2	4
16 Aug 2018	2*	2*	3*	2*	3*	2*	2*	3*
17 Aug 2018	2*	2*	3*	2*	3*	2*	2*	3*
18 Aug 2018	2*	2*	3*	2*	3*	2*	2*	3*
19 Aug 2018	2*	2*	3*	2*	3*	2*	2*	3*
20 Aug 2018	2*	2*	3*	2*	3*	2*	2*	3*
21 Aug 2018	2	2	3	2	2	2	2	3
22 Aug 2018	2	2	3	2	2	2	2	3
23 Aug 2018	2*	2*	2*	2*	3*	2*	2*	3*
24 Aug 2018	2*	2*	2*	2*	3*	2*	2*	3*
25 Aug 2018	2*	2*	2*	2*	3*	2*	2*	3*
26 Aug 2018	2*	2*	2*	2*	3*	2*	2*	3*
27 Aug 2018	2*	2*	2*	2*	3*	2*	2*	3*
28 Aug 2018	2	2	2	2	2	2	2	3
29 Aug 2018	2	2	2	2	2	2	2	3
30 Aug 2018	2*	2*	2*	2*	2*	2*	2*	2*
31 Aug 2018	2*	2*	2*	2*	2*	2*	2*	2*

* 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 Aug 2018	5	3	2	4	14	4	3	8
02 Aug 2018	6*	3*	2*	2*	8	4*	4*	7
03 Aug 2018	6*	3*	2*	2*	8	4*	4*	7
04 Aug 2018	6*	3*	2*	2*	7*	4*	4*	7
05 Aug 2018	6*	3*	2*	2*	7*	4*	4*	7
06 Aug 2018	6*	3*	2*	2*	7*	4*	4*	7
07 Aug 2018	6	3	2	2	6	4	3	6
08 Aug 2018	6	3	2	2	6	4	3	6
09 Aug 2018	5*	2*	2*	2*	6*	4*	2*	7
10 Aug 2018	5*	2*	2*	2*	6*	4*	2*	7
11 Aug 2018	5*	2*	2*	2*	6*	4*	2*	7
12 Aug 2018	5*	2*	2*	2*	6*	4*	2*	7
13 Aug 2018	5*	2*	2*	2*	6*	4*	2*	7
14 Aug 2018	5	4	2	2	5	3	2	6
15 Aug 2018	5	4	2	2	5	3	2	6
16 Aug 2018	7*	5*	2*	2*	3*	3*	2*	6
17 Aug 2018	7*	5*	2*	2*	3*	3*	2*	6
18 Aug 2018	7*	5*	2*	2*	3*	3*	2*	6
19 Aug 2018	7*	5*	2*	2*	3*	3*	2*	6
20 Aug 2018	7*	5*	2*	2*	3*	3*	2*	6
21 Aug 2018	5	4	2	2	3	3	2	5
22 Aug 2018	5	4	2	2	3	3	2	5
23 Aug 2018	6*	5*	2*	2*	2*	2*	2*	6
24 Aug 2018	6*	5*	2*	2*	2*	2*	2*	6
25 Aug 2018	6*	5*	2*	2*	2*	2*	2*	6
26 Aug 2018	6*	5*	2*	2*	2*	2*	2*	6
27 Aug 2018	6*	5*	2*	2*	2*	2*	2*	6
28 Aug 2018	5	5	2	2	2	2	2	5
29 Aug 2018	5	5	2	2	2	2	2	5
30 Aug 2018	4*	7*	2*	2*	2*	2*	2*	2
31 Aug 2018	4*	7*	2*	2*	2*	2*	2*	2

* 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 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
14 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
21 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
28 Aug 2018	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 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
14 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
21 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
28 Aug 2018	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
02 Aug 2018	ns	ns	ns	ns	ns	ns	ns	IC
07 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
14 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
21 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
28 Aug 2018	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 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
14 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
21 Aug 2018	IC	IC	IC	IC	IC	IC	IC	IC
28 Aug 2018	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* (Enter) 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	Enter	F:T
S0	07 Aug 2018	1105	4000	76	320e	0.02
S0	14 Aug 2018	1005	<20	<2	<2	0.10
S0	21 Aug 2018	1020	1400e	80e	160e	0.06
S0	28 Aug 2018	1025	5600	280e	2800e	0.05
S2	07 Aug 2018	1150	20e	2e	12e	0.10
S2	14 Aug 2018	1055	<20	<2	<2	0.10
S2	21 Aug 2018	1135	<20	<2	4e	0.10
S2	28 Aug 2018	1150	<2	<2	<2	1.00
S3	07 Aug 2018	1215	40e	2e	28e	0.05
S3	14 Aug 2018	1040	20e	<2	<2	0.10
S3	21 Aug 2018	1210	20e	<2	2e	0.10
S3	28 Aug 2018	1120	<2	<2	<2	1.00
S4	07 Aug 2018	847	<20	<2	6e	0.10
S4	14 Aug 2018	852	20e	<2	8e	0.10
S4	21 Aug 2018	858	<20	2e	<2	0.10
S4	28 Aug 2018	1155	<2	2e	<2	1.00
S5	07 Aug 2018	950	<20	<2	<2	0.10
S5	14 Aug 2018	955	<20	2e	52	0.10
S5	21 Aug 2018	1002	20e	2e	<2	0.10
S5	28 Aug 2018	1005	<20	<2	12e	0.10
S6	07 Aug 2018	1000	<20	2e	<2	0.10
S6	14 Aug 2018	1005	<20	<2	2e	0.10
S6	21 Aug 2018	1011	<20	<2	<2	0.10
S6	28 Aug 2018	956	2e	<2	<2	1.00
S8	07 Aug 2018	1125	<20	<2	<2	0.10
S8	14 Aug 2018	1129	<20	<2	<2	0.10
S8	21 Aug 2018	1142	<20	<2	<2	0.10
S8	28 Aug 2018	856	10e	<2	4e	0.20
S9	07 Aug 2018	1206	<20	<2	4e	0.10
S9	14 Aug 2018	1202	20e	<2	2e	0.10
S9	21 Aug 2018	1228	<200	<2	2e	0.01
S9	28 Aug 2018	820	<20	<2	<2	0.10
S10	07 Aug 2018	852	20e	2e	4e	0.10
S10	14 Aug 2018	848	<20	2e	<2	0.10
S10	21 Aug 2018	853	40e	2e	<2	0.05
S10	28 Aug 2018	1200	<2	<2	2e	1.00
S11	07 Aug 2018	956	<20	<2	<2	0.10
S11	14 Aug 2018	959	20e	<2	2e	0.10
S11	21 Aug 2018	1007	<20	<2	<2	0.10
S11	28 Aug 2018	1000	<2	<2	<2	1.00

Station	Date	Time	Total	Fecal	Enterο	F:T
S12	02 Aug 2018	818	ns	ns	<2	ns
S12	07 Aug 2018	1016	20e	4e	<2	0.20
S12	14 Aug 2018	1015	20e	<2	2e	0.10
S12	21 Aug 2018	1026	<20	<2	<2	0.10
S12	28 Aug 2018	945	<20	<2	<2	0.10

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
S12	02 Aug 2018			Resample for 7/31/18

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 Aug 2018	Arrive Time	1105
S0	07 Aug 2018	Weather	Sunny
S0	07 Aug 2018	Wind Speed (kts)	1.7
S0	07 Aug 2018	Wind Dir	SW
S0	07 Aug 2018	Animal Life	20 Shorebirds; 2 Dogs
S0	07 Aug 2018	Floatables	None
S0	07 Aug 2018	Water Color	Green
S0	07 Aug 2018	Current Direction	N
S0	07 Aug 2018	Water Temp (C)	22
S0	07 Aug 2018	Wave Height Low (ft)	2
S0	07 Aug 2018	High Tide (ft)	3.5
S0	07 Aug 2018	High Tide Time	717
S0	07 Aug 2018	Low Tide (ft)	0.2
S0	07 Aug 2018	Low Tide Time	101
S0	07 Aug 2018	Comments	Kelp; Seagrass; Algae; 6 Persons; Water clear; 1 L/s water flowing from storm drain
S0	14 Aug 2018	Arrive Time	1005
S0	14 Aug 2018	Weather	Sunny
S0	14 Aug 2018	Wind Speed (kts)	1
S0	14 Aug 2018	Wind Dir	SW
S0	14 Aug 2018	Animal Life	5 Birds
S0	14 Aug 2018	Floatables	None
S0	14 Aug 2018	Water Color	Green
S0	14 Aug 2018	Current Direction	N
S0	14 Aug 2018	Water Temp (C)	19
S0	14 Aug 2018	Wave Height Low (ft)	2
S0	14 Aug 2018	High Tide (ft)	5
S0	14 Aug 2018	High Tide Time	19
S0	14 Aug 2018	Low Tide (ft)	-0.3
S0	14 Aug 2018	Low Tide Time	603
S0	14 Aug 2018	Comments	Water clear; 0.5 L/s water flowing from storm drain
S0	21 Aug 2018	Arrive Time	1020
S0	21 Aug 2018	Weather	Sunny
S0	21 Aug 2018	Wind Speed (kts)	2.3
S0	21 Aug 2018	Wind Dir	SE
S0	21 Aug 2018	Animal Life	5 Shorebirds
S0	21 Aug 2018	Floatables	None
S0	21 Aug 2018	Water Color	Green
S0	21 Aug 2018	Current Direction	N
S0	21 Aug 2018	Water Temp (C)	20
S0	21 Aug 2018	Wave Height Low (ft)	2
S0	21 Aug 2018	High Tide (ft)	3.7
S0	21 Aug 2018	High Tide Time	804
S0	21 Aug 2018	Low Tide (ft)	0.4
S0	21 Aug 2018	Low Tide Time	134
S0	21 Aug 2018	Comments	Kelp; Algae; 3 Persons; Water clear; 0.5 L/s water flowing from storm drain
S0	28 Aug 2018	Arrive Time	1025

Station	Date	Parameter	Value
S0	28 Aug 2018	Weather	Sunny
S0	28 Aug 2018	Wind Speed (kts)	4.2
S0	28 Aug 2018	Wind Dir	W
S0	28 Aug 2018	Animal Life	5 Birds; 1 Dog
S0	28 Aug 2018	Floatables	None
S0	28 Aug 2018	Water Color	Green
S0	28 Aug 2018	Current Direction	N
S0	28 Aug 2018	Water Temp (C)	20
S0	28 Aug 2018	Wave Height Low (ft)	3
S0	28 Aug 2018	High Tide (ft)	4.7
S0	28 Aug 2018	High Tide Time	1103
S0	28 Aug 2018	Low Tide (ft)	0.2
S0	28 Aug 2018	Low Tide Time	456
S0	28 Aug 2018	Comments	Water clear; 0.5 L/s water flowing from storm drain .
S2	07 Aug 2018	Arrive Time	1150
S2	07 Aug 2018	Weather	Sunny
S2	07 Aug 2018	Wind Speed (kts)	3.4
S2	07 Aug 2018	Wind Dir	SW
S2	07 Aug 2018	Animal Life	20 Shorebirds; 3 Dogs
S2	07 Aug 2018	Floatables	None
S2	07 Aug 2018	Water Color	Green
S2	07 Aug 2018	Current Direction	N
S2	07 Aug 2018	Water Temp (C)	22
S2	07 Aug 2018	Wave Height Low (ft)	2
S2	07 Aug 2018	High Tide (ft)	3.5
S2	07 Aug 2018	High Tide Time	717
S2	07 Aug 2018	Low Tide (ft)	0.2
S2	07 Aug 2018	Low Tide Time	101
S2	07 Aug 2018	Comments	Kelp; Seagrass; Algae; 20 Persons; Water clear; No flow from storm drain
S2	14 Aug 2018	Arrive Time	1055
S2	14 Aug 2018	Weather	Sunny
S2	14 Aug 2018	Wind Speed (kts)	0.9
S2	14 Aug 2018	Wind Dir	SW
S2	14 Aug 2018	Animal Life	5 Birds
S2	14 Aug 2018	Floatables	None
S2	14 Aug 2018	Water Color	Green
S2	14 Aug 2018	Current Direction	N
S2	14 Aug 2018	Water Temp (C)	20
S2	14 Aug 2018	Wave Height Low (ft)	2
S2	14 Aug 2018	High Tide (ft)	5
S2	14 Aug 2018	High Tide Time	19
S2	14 Aug 2018	Low Tide (ft)	-0.3
S2	14 Aug 2018	Low Tide Time	603
S2	14 Aug 2018	Comments	Water clear; 1 Dead seal on the beach; No flow from storm drain
S2	21 Aug 2018	Arrive Time	1135
S2	21 Aug 2018	Weather	Sunny
S2	21 Aug 2018	Wind Speed (kts)	2.9
S2	21 Aug 2018	Wind Dir	SE
S2	21 Aug 2018	Animal Life	20 Shorebirds
S2	21 Aug 2018	Floatables	None
S2	21 Aug 2018	Water Color	Green

Station	Date	Parameter	Value
S2	21 Aug 2018	Current Direction	N
S2	21 Aug 2018	Water Temp (C)	21
S2	21 Aug 2018	Wave Height Low (ft)	2
S2	21 Aug 2018	High Tide (ft)	3.7
S2	21 Aug 2018	High Tide Time	804
S2	21 Aug 2018	Low Tide (ft)	0.4
S2	21 Aug 2018	Low Tide Time	134
S2	21 Aug 2018	Comments	Kelp; Algae; Water clear; No flow from storm drain
S2	28 Aug 2018	Arrive Time	1150
S2	28 Aug 2018	Weather	Sunny
S2	28 Aug 2018	Wind Speed (kts)	4.6
S2	28 Aug 2018	Wind Dir	W
S2	28 Aug 2018	Animal Life	2 Shorebirds
S2	28 Aug 2018	Floatables	None
S2	28 Aug 2018	Water Color	Green
S2	28 Aug 2018	Current Direction	N
S2	28 Aug 2018	Water Temp (C)	20
S2	28 Aug 2018	Wave Height Low (ft)	3
S2	28 Aug 2018	High Tide (ft)	4.7
S2	28 Aug 2018	High Tide Time	1103
S2	28 Aug 2018	Low Tide (ft)	1.4
S2	28 Aug 2018	Low Tide Time	1653
S2	28 Aug 2018	Comments	Water clear; No flow from storm drain
S3	07 Aug 2018	Arrive Time	1215
S3	07 Aug 2018	Weather	Sunny
S3	07 Aug 2018	Wind Speed (kts)	2.4
S3	07 Aug 2018	Wind Dir	SW
S3	07 Aug 2018	Animal Life	20 Shorebirds; 3 Dogs
S3	07 Aug 2018	Floatables	None
S3	07 Aug 2018	Water Color	Green
S3	07 Aug 2018	Current Direction	N
S3	07 Aug 2018	Water Temp (C)	22
S3	07 Aug 2018	Wave Height Low (ft)	2
S3	07 Aug 2018	High Tide (ft)	3.5
S3	07 Aug 2018	High Tide Time	717
S3	07 Aug 2018	Low Tide (ft)	0.2
S3	07 Aug 2018	Low Tide Time	101
S3	07 Aug 2018	Comments	Kelp; Seagrass; Algae; 20 Persons; Water clear; 0.5 L/s water flowing from storm drain
S3	14 Aug 2018	Arrive Time	1040
S3	14 Aug 2018	Weather	Sunny
S3	14 Aug 2018	Wind Speed (kts)	0.8
S3	14 Aug 2018	Wind Dir	SW
S3	14 Aug 2018	Animal Life	5 Birds
S3	14 Aug 2018	Floatables	None
S3	14 Aug 2018	Water Color	Green
S3	14 Aug 2018	Current Direction	N
S3	14 Aug 2018	Water Temp (C)	20
S3	14 Aug 2018	Wave Height Low (ft)	2
S3	14 Aug 2018	High Tide (ft)	5
S3	14 Aug 2018	High Tide Time	19
S3	14 Aug 2018	Low Tide (ft)	-0.3

Station	Date	Parameter	Value
S3	14 Aug 2018	Low Tide Time	603
S3	14 Aug 2018	Comments	Water clear; No flow from storm drain
S3	21 Aug 2018	Arrive Time	1210
S3	21 Aug 2018	Weather	Sunny
S3	21 Aug 2018	Wind Speed (kts)	2.2
S3	21 Aug 2018	Wind Dir	SE
S3	21 Aug 2018	Animal Life	5 Shorebirds
S3	21 Aug 2018	Floatables	None
S3	21 Aug 2018	Water Color	Green
S3	21 Aug 2018	Current Direction	N
S3	21 Aug 2018	Water Temp (C)	21
S3	21 Aug 2018	Wave Height Low (ft)	3
S3	21 Aug 2018	High Tide (ft)	3.7
S3	21 Aug 2018	High Tide Time	804
S3	21 Aug 2018	Low Tide (ft)	0.4
S3	21 Aug 2018	Low Tide Time	134
S3	21 Aug 2018	Comments	Kelp; Algae; 13 Persons; Water clear; No flow from storm drain
S3	28 Aug 2018	Arrive Time	1120
S3	28 Aug 2018	Weather	Sunny
S3	28 Aug 2018	Wind Speed (kts)	4.2
S3	28 Aug 2018	Wind Dir	W
S3	28 Aug 2018	Animal Life	6 Shorebirds; 6 Doves
S3	28 Aug 2018	Floatables	None
S3	28 Aug 2018	Water Color	Green
S3	28 Aug 2018	Current Direction	N
S3	28 Aug 2018	Water Temp (C)	20
S3	28 Aug 2018	Wave Height Low (ft)	3
S3	28 Aug 2018	High Tide (ft)	4.7
S3	28 Aug 2018	High Tide Time	1103
S3	28 Aug 2018	Low Tide (ft)	1.4
S3	28 Aug 2018	Low Tide Time	1653
S3	28 Aug 2018	Comments	Water clear; No flow from storm drain
S4	07 Aug 2018	Arrive Time	847
S4	07 Aug 2018	Weather	Partly Cloudy
S4	07 Aug 2018	Wind Speed (kts)	8.5
S4	07 Aug 2018	Wind Dir	S
S4	07 Aug 2018	Animal Life	None
S4	07 Aug 2018	Floatables	None
S4	07 Aug 2018	Water Color	Green
S4	07 Aug 2018	Current Direction	N
S4	07 Aug 2018	Water Temp (C)	21
S4	07 Aug 2018	Wave Height Low (ft)	2
S4	07 Aug 2018	High Tide (ft)	3.5
S4	07 Aug 2018	High Tide Time	717
S4	07 Aug 2018	Low Tide (ft)	0.2
S4	07 Aug 2018	Low Tide Time	101
S4	07 Aug 2018	Comments	Kelp; Seagrass; 1 Person; Water clear
S4	14 Aug 2018	Arrive Time	852
S4	14 Aug 2018	Weather	Cloudy
S4	14 Aug 2018	Wind Speed (kts)	3
S4	14 Aug 2018	Wind Dir	W

Station	Date	Parameter	Value
S4	14 Aug 2018	Animal Life	50 Birds
S4	14 Aug 2018	Floatables	None
S4	14 Aug 2018	Water Color	Green
S4	14 Aug 2018	Current Direction	N
S4	14 Aug 2018	Water Temp (C)	21
S4	14 Aug 2018	Wave Height Low (ft)	3
S4	14 Aug 2018	High Tide (ft)	5
S4	14 Aug 2018	High Tide Time	19
S4	14 Aug 2018	Low Tide (ft)	-0.3
S4	14 Aug 2018	Low Tide Time	603
S4	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S4	21 Aug 2018	Arrive Time	858
S4	21 Aug 2018	Weather	Partly Cloudy
S4	21 Aug 2018	Wind Speed (kts)	3.4
S4	21 Aug 2018	Wind Dir	W
S4	21 Aug 2018	Animal Life	None
S4	21 Aug 2018	Floatables	None
S4	21 Aug 2018	Water Color	Green
S4	21 Aug 2018	Current Direction	N
S4	21 Aug 2018	Water Temp (C)	23
S4	21 Aug 2018	Wave Height Low (ft)	2
S4	21 Aug 2018	High Tide (ft)	3.7
S4	21 Aug 2018	High Tide Time	804
S4	21 Aug 2018	Low Tide (ft)	0.4
S4	21 Aug 2018	Low Tide Time	134
S4	21 Aug 2018	Comments	Kelp; Seagrass; Water clear
S4	28 Aug 2018	Arrive Time	1155
S4	28 Aug 2018	Weather	Sunny
S4	28 Aug 2018	Wind Speed (kts)	5.4
S4	28 Aug 2018	Wind Dir	W
S4	28 Aug 2018	Animal Life	60 Shorebirds
S4	28 Aug 2018	Floatables	None
S4	28 Aug 2018	Water Color	Green
S4	28 Aug 2018	Current Direction	N
S4	28 Aug 2018	Water Temp (C)	21
S4	28 Aug 2018	Wave Height Low (ft)	3
S4	28 Aug 2018	High Tide (ft)	4.7
S4	28 Aug 2018	High Tide Time	1103
S4	28 Aug 2018	Low Tide (ft)	1.4
S4	28 Aug 2018	Low Tide Time	1653
S4	28 Aug 2018	Comments	Kelp; Seagrass; Water clear
S5	07 Aug 2018	Arrive Time	950
S5	07 Aug 2018	Weather	Sunny
S5	07 Aug 2018	Wind Speed (kts)	9.7
S5	07 Aug 2018	Wind Dir	W
S5	07 Aug 2018	Animal Life	None
S5	07 Aug 2018	Floatables	None
S5	07 Aug 2018	Water Color	Green
S5	07 Aug 2018	Current Direction	N
S5	07 Aug 2018	Water Temp (C)	22
S5	07 Aug 2018	Wave Height Low (ft)	2
S5	07 Aug 2018	High Tide (ft)	3.5

Station	Date	Parameter	Value
S5	07 Aug 2018	High Tide Time	717
S5	07 Aug 2018	Low Tide (ft)	0.2
S5	07 Aug 2018	Low Tide Time	101
S5	07 Aug 2018	Comments	Kelp; Seagrass; Water clear
S5	14 Aug 2018	Arrive Time	955
S5	14 Aug 2018	Weather	Sunny
S5	14 Aug 2018	Wind Speed (kts)	3
S5	14 Aug 2018	Wind Dir	W
S5	14 Aug 2018	Animal Life	None
S5	14 Aug 2018	Floatables	None
S5	14 Aug 2018	Water Color	Green
S5	14 Aug 2018	Current Direction	N
S5	14 Aug 2018	Water Temp (C)	21
S5	14 Aug 2018	Wave Height Low (ft)	2
S5	14 Aug 2018	High Tide (ft)	5
S5	14 Aug 2018	High Tide Time	19
S5	14 Aug 2018	Low Tide (ft)	-0.3
S5	14 Aug 2018	Low Tide Time	603
S5	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S5	21 Aug 2018	Arrive Time	1002
S5	21 Aug 2018	Weather	Sunny
S5	21 Aug 2018	Wind Speed (kts)	5
S5	21 Aug 2018	Wind Dir	W
S5	21 Aug 2018	Animal Life	None
S5	21 Aug 2018	Floatables	None
S5	21 Aug 2018	Water Color	Green
S5	21 Aug 2018	Current Direction	N
S5	21 Aug 2018	Water Temp (C)	24
S5	21 Aug 2018	Wave Height Low (ft)	3
S5	21 Aug 2018	High Tide (ft)	3.7
S5	21 Aug 2018	High Tide Time	804
S5	21 Aug 2018	Low Tide (ft)	0.4
S5	21 Aug 2018	Low Tide Time	134
S5	21 Aug 2018	Comments	Seagrass; 1 Person; Water clear
S5	28 Aug 2018	Arrive Time	1005
S5	28 Aug 2018	Weather	Sunny
S5	28 Aug 2018	Wind Speed (kts)	4.8
S5	28 Aug 2018	Wind Dir	W
S5	28 Aug 2018	Animal Life	None
S5	28 Aug 2018	Floatables	None
S5	28 Aug 2018	Water Color	Green
S5	28 Aug 2018	Current Direction	N
S5	28 Aug 2018	Water Temp (C)	21
S5	28 Aug 2018	Wave Height Low (ft)	3
S5	28 Aug 2018	High Tide (ft)	4.7
S5	28 Aug 2018	High Tide Time	1103
S5	28 Aug 2018	Low Tide (ft)	0.2
S5	28 Aug 2018	Low Tide Time	456
S5	28 Aug 2018	Comments	Kelp; Seagrass; Water clear
S6	07 Aug 2018	Arrive Time	1000
S6	07 Aug 2018	Weather	Sunny

Station	Date	Parameter	Value
S6	07 Aug 2018	Wind Speed (kts)	5.6
S6	07 Aug 2018	Wind Dir	S
S6	07 Aug 2018	Animal Life	None
S6	07 Aug 2018	Floatables	None
S6	07 Aug 2018	Water Color	Green
S6	07 Aug 2018	Current Direction	N
S6	07 Aug 2018	Water Temp (C)	22
S6	07 Aug 2018	Wave Height Low (ft)	2
S6	07 Aug 2018	High Tide (ft)	3.5
S6	07 Aug 2018	High Tide Time	717
S6	07 Aug 2018	Low Tide (ft)	0.2
S6	07 Aug 2018	Low Tide Time	101
S6	07 Aug 2018	Comments	Kelp; Seagrass; Water clear
S6	14 Aug 2018	Arrive Time	1005
S6	14 Aug 2018	Weather	Sunny
S6	14 Aug 2018	Wind Speed (kts)	3.6
S6	14 Aug 2018	Wind Dir	W
S6	14 Aug 2018	Animal Life	None
S6	14 Aug 2018	Floatables	None
S6	14 Aug 2018	Water Color	Green
S6	14 Aug 2018	Current Direction	N
S6	14 Aug 2018	Water Temp (C)	22
S6	14 Aug 2018	Wave Height Low (ft)	3
S6	14 Aug 2018	High Tide (ft)	5
S6	14 Aug 2018	High Tide Time	19
S6	14 Aug 2018	Low Tide (ft)	-0.3
S6	14 Aug 2018	Low Tide Time	603
S6	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S6	21 Aug 2018	Arrive Time	1011
S6	21 Aug 2018	Weather	Sunny
S6	21 Aug 2018	Wind Speed (kts)	5.6
S6	21 Aug 2018	Wind Dir	W
S6	21 Aug 2018	Animal Life	None
S6	21 Aug 2018	Floatables	None
S6	21 Aug 2018	Water Color	Green
S6	21 Aug 2018	Current Direction	N
S6	21 Aug 2018	Water Temp (C)	23
S6	21 Aug 2018	Wave Height Low (ft)	3
S6	21 Aug 2018	High Tide (ft)	3.7
S6	21 Aug 2018	High Tide Time	804
S6	21 Aug 2018	Low Tide (ft)	0.4
S6	21 Aug 2018	Low Tide Time	134
S6	21 Aug 2018	Comments	Kelp; Seagrass; Water clear
S6	28 Aug 2018	Arrive Time	956
S6	28 Aug 2018	Weather	Sunny
S6	28 Aug 2018	Wind Speed (kts)	4.4
S6	28 Aug 2018	Wind Dir	W
S6	28 Aug 2018	Animal Life	None
S6	28 Aug 2018	Floatables	None
S6	28 Aug 2018	Water Color	Green
S6	28 Aug 2018	Current Direction	N
S6	28 Aug 2018	Water Temp (C)	22

Station	Date	Parameter	Value
S6	28 Aug 2018	Wave Height Low (ft)	3
S6	28 Aug 2018	High Tide (ft)	4.7
S6	28 Aug 2018	High Tide Time	1103
S6	28 Aug 2018	Low Tide (ft)	0.2
S6	28 Aug 2018	Low Tide Time	456
S6	28 Aug 2018	Comments	Kelp; Seagrass; Water clear
S8	07 Aug 2018	Arrive Time	1125
S8	07 Aug 2018	Weather	Sunny
S8	07 Aug 2018	Wind Speed (kts)	1.3
S8	07 Aug 2018	Wind Dir	S
S8	07 Aug 2018	Animal Life	None
S8	07 Aug 2018	Floatables	None
S8	07 Aug 2018	Water Color	Green
S8	07 Aug 2018	Current Direction	N
S8	07 Aug 2018	Water Temp (C)	25
S8	07 Aug 2018	Wave Height Low (ft)	2
S8	07 Aug 2018	High Tide (ft)	3.5
S8	07 Aug 2018	High Tide Time	717
S8	07 Aug 2018	Low Tide (ft)	0.2
S8	07 Aug 2018	Low Tide Time	101
S8	07 Aug 2018	Comments	Seagrass; 60 Persons; 30 Surfers; 32 Swimmers; Water clear
S8	14 Aug 2018	Arrive Time	1129
S8	14 Aug 2018	Weather	Sunny
S8	14 Aug 2018	Wind Speed (kts)	5.8
S8	14 Aug 2018	Wind Dir	W
S8	14 Aug 2018	Animal Life	None
S8	14 Aug 2018	Floatables	None
S8	14 Aug 2018	Water Color	Green
S8	14 Aug 2018	Current Direction	N
S8	14 Aug 2018	Water Temp (C)	22
S8	14 Aug 2018	Wave Height Low (ft)	3
S8	14 Aug 2018	High Tide (ft)	5
S8	14 Aug 2018	High Tide Time	19
S8	14 Aug 2018	Low Tide (ft)	-0.3
S8	14 Aug 2018	Low Tide Time	603
S8	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S8	21 Aug 2018	Arrive Time	1142
S8	21 Aug 2018	Weather	Sunny
S8	21 Aug 2018	Wind Speed (kts)	5.4
S8	21 Aug 2018	Wind Dir	W
S8	21 Aug 2018	Animal Life	None
S8	21 Aug 2018	Floatables	None
S8	21 Aug 2018	Water Color	Green
S8	21 Aug 2018	Current Direction	N
S8	21 Aug 2018	Water Temp (C)	23
S8	21 Aug 2018	Wave Height Low (ft)	2
S8	21 Aug 2018	High Tide (ft)	3.7
S8	21 Aug 2018	High Tide Time	804
S8	21 Aug 2018	Low Tide (ft)	0.4
S8	21 Aug 2018	Low Tide Time	134
S8	21 Aug 2018	Comments	Kelp; Seagrass; 25 Persons; 2 Surfers; 5 Swimmers; Water clear

Station	Date	Parameter	Value
S8	28 Aug 2018	Arrive Time	856
S8	28 Aug 2018	Weather	Partly Cloudy
S8	28 Aug 2018	Wind Speed (kts)	3.3
S8	28 Aug 2018	Wind Dir	W
S8	28 Aug 2018	Animal Life	None
S8	28 Aug 2018	Floatables	None
S8	28 Aug 2018	Water Color	Green
S8	28 Aug 2018	Current Direction	N
S8	28 Aug 2018	Water Temp (C)	20
S8	28 Aug 2018	Wave Height Low (ft)	3
S8	28 Aug 2018	High Tide (ft)	4.7
S8	28 Aug 2018	High Tide Time	1103
S8	28 Aug 2018	Low Tide (ft)	0.2
S8	28 Aug 2018	Low Tide Time	456
S8	28 Aug 2018	Comments	Kelp; Seagrass; 2 Persons; Water clear
S9	07 Aug 2018	Arrive Time	1206
S9	07 Aug 2018	Weather	Sunny
S9	07 Aug 2018	Wind Speed (kts)	4.4
S9	07 Aug 2018	Wind Dir	N
S9	07 Aug 2018	Animal Life	None
S9	07 Aug 2018	Floatables	None
S9	07 Aug 2018	Water Color	Green
S9	07 Aug 2018	Current Direction	N
S9	07 Aug 2018	Water Temp (C)	25
S9	07 Aug 2018	Wave Height Low (ft)	2
S9	07 Aug 2018	High Tide (ft)	3.5
S9	07 Aug 2018	High Tide Time	717
S9	07 Aug 2018	Low Tide (ft)	0.2
S9	07 Aug 2018	Low Tide Time	101
S9	07 Aug 2018	Comments	Seagrass; 65 Persons; 25 Surfers; 22 Swimmers; Water clear
S9	14 Aug 2018	Arrive Time	1202
S9	14 Aug 2018	Weather	Sunny
S9	14 Aug 2018	Wind Speed (kts)	4.6
S9	14 Aug 2018	Wind Dir	W
S9	14 Aug 2018	Animal Life	None
S9	14 Aug 2018	Floatables	None
S9	14 Aug 2018	Water Color	Green
S9	14 Aug 2018	Current Direction	N
S9	14 Aug 2018	Water Temp (C)	22
S9	14 Aug 2018	Wave Height Low (ft)	2
S9	14 Aug 2018	High Tide (ft)	5
S9	14 Aug 2018	High Tide Time	19
S9	14 Aug 2018	Low Tide (ft)	-0.3
S9	14 Aug 2018	Low Tide Time	603
S9	14 Aug 2018	Comments	Kelp; Seagrass; 22 Persons; 3 Surfers; 16 Swimmers; Water clear
S9	21 Aug 2018	Arrive Time	1228
S9	21 Aug 2018	Weather	Sunny
S9	21 Aug 2018	Wind Speed (kts)	6.5
S9	21 Aug 2018	Wind Dir	N
S9	21 Aug 2018	Animal Life	None
S9	21 Aug 2018	Floatables	None
S9	21 Aug 2018	Water Color	Green

Station	Date	Parameter	Value
S9	21 Aug 2018	Current Direction	N
S9	21 Aug 2018	Water Temp (C)	24
S9	21 Aug 2018	Wave Height Low (ft)	2
S9	21 Aug 2018	High Tide (ft)	3.7
S9	21 Aug 2018	High Tide Time	804
S9	21 Aug 2018	Low Tide (ft)	0.4
S9	21 Aug 2018	Low Tide Time	134
S9	21 Aug 2018	Comments	Seagrass; 30 Persons; 10 Surfers; 2 Swimmers; Water clear
S9	28 Aug 2018	Arrive Time	820
S9	28 Aug 2018	Weather	Overcast
S9	28 Aug 2018	Wind Speed (kts)	2.2
S9	28 Aug 2018	Wind Dir	W
S9	28 Aug 2018	Animal Life	None
S9	28 Aug 2018	Floatables	None
S9	28 Aug 2018	Water Color	Green
S9	28 Aug 2018	Current Direction	N
S9	28 Aug 2018	Water Temp (C)	20
S9	28 Aug 2018	Wave Height Low (ft)	2
S9	28 Aug 2018	High Tide (ft)	4.7
S9	28 Aug 2018	High Tide Time	1103
S9	28 Aug 2018	Low Tide (ft)	0.2
S9	28 Aug 2018	Low Tide Time	456
S9	28 Aug 2018	Comments	Kelp; Seagrass; 1 Person; 1 Surfer; Water clear
S10	07 Aug 2018	Arrive Time	852
S10	07 Aug 2018	Weather	Partly Cloudy
S10	07 Aug 2018	Wind Speed (kts)	12
S10	07 Aug 2018	Wind Dir	S
S10	07 Aug 2018	Animal Life	None
S10	07 Aug 2018	Floatables	None
S10	07 Aug 2018	Water Color	Green
S10	07 Aug 2018	Current Direction	N
S10	07 Aug 2018	Water Temp (C)	21
S10	07 Aug 2018	Wave Height Low (ft)	2
S10	07 Aug 2018	High Tide (ft)	3.5
S10	07 Aug 2018	High Tide Time	717
S10	07 Aug 2018	Low Tide (ft)	0.2
S10	07 Aug 2018	Low Tide Time	101
S10	07 Aug 2018	Comments	Kelp; Seagrass; Water clear
S10	14 Aug 2018	Arrive Time	848
S10	14 Aug 2018	Weather	Cloudy
S10	14 Aug 2018	Wind Speed (kts)	2.2
S10	14 Aug 2018	Wind Dir	W
S10	14 Aug 2018	Animal Life	None
S10	14 Aug 2018	Floatables	None
S10	14 Aug 2018	Water Color	Green
S10	14 Aug 2018	Current Direction	N
S10	14 Aug 2018	Water Temp (C)	21
S10	14 Aug 2018	Wave Height Low (ft)	3
S10	14 Aug 2018	High Tide (ft)	5
S10	14 Aug 2018	High Tide Time	19
S10	14 Aug 2018	Low Tide (ft)	-0.3
S10	14 Aug 2018	Low Tide Time	603

Station	Date	Parameter	Value
S10	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S10	21 Aug 2018	Arrive Time	853
S10	21 Aug 2018	Weather	Partly Cloudy
S10	21 Aug 2018	Wind Speed (kts)	3.1
S10	21 Aug 2018	Wind Dir	W
S10	21 Aug 2018	Animal Life	None
S10	21 Aug 2018	Floatables	None
S10	21 Aug 2018	Water Color	Green
S10	21 Aug 2018	Current Direction	N
S10	21 Aug 2018	Water Temp (C)	23
S10	21 Aug 2018	Wave Height Low (ft)	2
S10	21 Aug 2018	High Tide (ft)	3.7
S10	21 Aug 2018	High Tide Time	804
S10	21 Aug 2018	Low Tide (ft)	0.4
S10	21 Aug 2018	Low Tide Time	134
S10	21 Aug 2018	Comments	Kelp; Seagrass; Water clear
S10	28 Aug 2018	Arrive Time	1200
S10	28 Aug 2018	Weather	Sunny
S10	28 Aug 2018	Wind Speed (kts)	5.2
S10	28 Aug 2018	Wind Dir	W
S10	28 Aug 2018	Animal Life	None
S10	28 Aug 2018	Floatables	None
S10	28 Aug 2018	Water Color	Green
S10	28 Aug 2018	Current Direction	N
S10	28 Aug 2018	Water Temp (C)	22
S10	28 Aug 2018	Wave Height Low (ft)	3
S10	28 Aug 2018	High Tide (ft)	4.7
S10	28 Aug 2018	High Tide Time	1103
S10	28 Aug 2018	Low Tide (ft)	1.4
S10	28 Aug 2018	Low Tide Time	1653
S10	28 Aug 2018	Comments	Kelp; Seagrass; Water clear
S11	07 Aug 2018	Arrive Time	956
S11	07 Aug 2018	Weather	Sunny
S11	07 Aug 2018	Wind Speed (kts)	7.6
S11	07 Aug 2018	Wind Dir	W
S11	07 Aug 2018	Animal Life	None
S11	07 Aug 2018	Floatables	None
S11	07 Aug 2018	Water Color	Green
S11	07 Aug 2018	Current Direction	N
S11	07 Aug 2018	Water Temp (C)	21
S11	07 Aug 2018	Wave Height Low (ft)	2
S11	07 Aug 2018	High Tide (ft)	3.5
S11	07 Aug 2018	High Tide Time	717
S11	07 Aug 2018	Low Tide (ft)	0.2
S11	07 Aug 2018	Low Tide Time	101
S11	07 Aug 2018	Comments	Kelp; Seagrass; 3 Persons; Water clear
S11	14 Aug 2018	Arrive Time	959
S11	14 Aug 2018	Weather	Sunny
S11	14 Aug 2018	Wind Speed (kts)	2.5
S11	14 Aug 2018	Wind Dir	W
S11	14 Aug 2018	Animal Life	None

Station	Date	Parameter	Value
S11	14 Aug 2018	Floatables	None
S11	14 Aug 2018	Water Color	Green
S11	14 Aug 2018	Current Direction	N
S11	14 Aug 2018	Water Temp (C)	21
S11	14 Aug 2018	Wave Height Low (ft)	3
S11	14 Aug 2018	High Tide (ft)	5
S11	14 Aug 2018	High Tide Time	19
S11	14 Aug 2018	Low Tide (ft)	-0.3
S11	14 Aug 2018	Low Tide Time	603
S11	14 Aug 2018	Comments	Kelp; Seagrass; Water clear
S11	21 Aug 2018	Arrive Time	1007
S11	21 Aug 2018	Weather	Sunny
S11	21 Aug 2018	Wind Speed (kts)	5.6
S11	21 Aug 2018	Wind Dir	W
S11	21 Aug 2018	Animal Life	None
S11	21 Aug 2018	Floatables	None
S11	21 Aug 2018	Water Color	Green
S11	21 Aug 2018	Current Direction	N
S11	21 Aug 2018	Water Temp (C)	25
S11	21 Aug 2018	Wave Height Low (ft)	3
S11	21 Aug 2018	High Tide (ft)	3.7
S11	21 Aug 2018	High Tide Time	804
S11	21 Aug 2018	Low Tide (ft)	0.4
S11	21 Aug 2018	Low Tide Time	134
S11	21 Aug 2018	Comments	Kelp; Seagrass; Water clear
S11	28 Aug 2018	Arrive Time	1000
S11	28 Aug 2018	Weather	Sunny
S11	28 Aug 2018	Wind Speed (kts)	4.5
S11	28 Aug 2018	Wind Dir	W
S11	28 Aug 2018	Animal Life	None
S11	28 Aug 2018	Floatables	None
S11	28 Aug 2018	Water Color	Green
S11	28 Aug 2018	Current Direction	N
S11	28 Aug 2018	Water Temp (C)	21
S11	28 Aug 2018	Wave Height Low (ft)	3
S11	28 Aug 2018	High Tide (ft)	4.7
S11	28 Aug 2018	High Tide Time	1103
S11	28 Aug 2018	Low Tide (ft)	0.2
S11	28 Aug 2018	Low Tide Time	456
S11	28 Aug 2018	Comments	Kelp; Seagrass; Water clear
S12	02 Aug 2018	Arrive Time	818
S12	02 Aug 2018	Weather	Sunny
S12	02 Aug 2018	Wind Speed (kts)	2.7
S12	02 Aug 2018	Wind Dir	SW
S12	02 Aug 2018	Animal Life	None
S12	02 Aug 2018	Floatables	None
S12	02 Aug 2018	Water Color	Green
S12	02 Aug 2018	Current Direction	N
S12	02 Aug 2018	Water Temp (C)	24
S12	02 Aug 2018	Wave Height Low (ft)	2
S12	02 Aug 2018	High Tide (ft)	4.4
S12	02 Aug 2018	High Tide Time	1219

Station	Date	Parameter	Value
S12	02 Aug 2018	Low Tide (ft)	0.9
S12	02 Aug 2018	Low Tide Time	710
S12	02 Aug 2018	Comments	Resample; Kelp; 1 Jogger; 2 Persons; Water clear
S12	07 Aug 2018	Arrive Time	1016
S12	07 Aug 2018	Weather	Sunny
S12	07 Aug 2018	Wind Speed (kts)	7.6
S12	07 Aug 2018	Wind Dir	S
S12	07 Aug 2018	Animal Life	None
S12	07 Aug 2018	Floatables	None
S12	07 Aug 2018	Water Color	Green
S12	07 Aug 2018	Current Direction	N
S12	07 Aug 2018	Water Temp (C)	24
S12	07 Aug 2018	Wave Height Low (ft)	2
S12	07 Aug 2018	High Tide (ft)	3.5
S12	07 Aug 2018	High Tide Time	717
S12	07 Aug 2018	Low Tide (ft)	0.2
S12	07 Aug 2018	Low Tide Time	101
S12	07 Aug 2018	Comments	Kelp; Seagrass; 4 Persons; 3 Swimmers; Water clear
S12	14 Aug 2018	Arrive Time	1015
S12	14 Aug 2018	Weather	Sunny
S12	14 Aug 2018	Wind Speed (kts)	5.2
S12	14 Aug 2018	Wind Dir	W
S12	14 Aug 2018	Animal Life	None
S12	14 Aug 2018	Floatables	None
S12	14 Aug 2018	Water Color	Green
S12	14 Aug 2018	Current Direction	N
S12	14 Aug 2018	Water Temp (C)	22
S12	14 Aug 2018	Wave Height Low (ft)	4
S12	14 Aug 2018	High Tide (ft)	5
S12	14 Aug 2018	High Tide Time	19
S12	14 Aug 2018	Low Tide (ft)	-0.3
S12	14 Aug 2018	Low Tide Time	603
S12	14 Aug 2018	Comments	Kelp; Seagrass; 6 Persons; Water clear
S12	21 Aug 2018	Arrive Time	1026
S12	21 Aug 2018	Weather	Sunny
S12	21 Aug 2018	Wind Speed (kts)	4.4
S12	21 Aug 2018	Wind Dir	N
S12	21 Aug 2018	Animal Life	None
S12	21 Aug 2018	Floatables	None
S12	21 Aug 2018	Water Color	Green
S12	21 Aug 2018	Current Direction	N
S12	21 Aug 2018	Water Temp (C)	23
S12	21 Aug 2018	Wave Height Low (ft)	2
S12	21 Aug 2018	High Tide (ft)	3.7
S12	21 Aug 2018	High Tide Time	804
S12	21 Aug 2018	Low Tide (ft)	0.4
S12	21 Aug 2018	Low Tide Time	134
S12	21 Aug 2018	Comments	Seagrass; 1 Person; Water clear
S12	28 Aug 2018	Arrive Time	945
S12	28 Aug 2018	Weather	Sunny
S12	28 Aug 2018	Wind Speed (kts)	3.4

Station	Date	Parameter	Value
S12	28 Aug 2018	Wind Dir	W
S12	28 Aug 2018	Animal Life	None
S12	28 Aug 2018	Floatables	None
S12	28 Aug 2018	Water Color	Green
S12	28 Aug 2018	Current Direction	N
S12	28 Aug 2018	Water Temp (C)	20
S12	28 Aug 2018	Wave Height Low (ft)	3
S12	28 Aug 2018	High Tide (ft)	4.7
S12	28 Aug 2018	High Tide Time	1103
S12	28 Aug 2018	Low Tide (ft)	0.2
S12	28 Aug 2018	Low Tide Time	456
S12	28 Aug 2018	Comments	Kelp; Seagrass; 24 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 Aug 2018	28*	17*	16*	18*	9*	3*	26*
02 Aug 2018	28*	17*	16*	18*	9*	3*	26*
03 Aug 2018	28*	17*	16*	18*	9*	3*	26*
04 Aug 2018	28*	17*	16*	18*	9*	3*	26*
05 Aug 2018	28*	17*	16*	18*	9*	3*	26*
06 Aug 2018	16	12	11	12	6	3	16
07 Aug 2018	16	12	11	12	6	3	16
08 Aug 2018	5*	4*	3*	3*	5*	2*	5*
09 Aug 2018	5*	4*	3*	3*	5*	2*	5*
10 Aug 2018	5*	4*	3*	3*	5*	2*	5*
11 Aug 2018	5*	4*	3*	3*	5*	2*	5*
12 Aug 2018	5*	4*	3*	3*	5*	2*	5*
13 Aug 2018	6	4	3	3	6	2	5
14 Aug 2018	6	4	3	3	6	2	5
15 Aug 2018	5*	5*	3*	3*	5*	2*	5*
16 Aug 2018	5*	5*	3*	3*	5*	2*	5*
17 Aug 2018	5*	5*	3*	3*	5*	2*	5*
18 Aug 2018	5*	5*	3*	3*	5*	2*	5*
19 Aug 2018	5*	5*	3*	3*	5*	2*	5*
20 Aug 2018	5	4	3	4	6	2	5
21 Aug 2018	5	4	3	4	6	2	5
22 Aug 2018	5*	3*	2*	3*	5*	2*	5*
23 Aug 2018	5*	3*	2*	3*	5*	2*	5*
24 Aug 2018	5*	3*	2*	3*	5*	2*	5*
25 Aug 2018	5*	3*	2*	3*	5*	2*	5*
26 Aug 2018	5*	3*	2*	3*	5*	2*	5*
27 Aug 2018	5	3	2	3	5	2	4
28 Aug 2018	5	3	2	3	5	2	4
29 Aug 2018	6*	4*	2*	3*	7*	2*	4*
30 Aug 2018	6*	4*	2*	3*	7*	2*	4*
31 Aug 2018	6*	4*	2*	3*	7*	2*	4*

* 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 Aug 2018	4*	3*	3*	2*	2*	2*	3*
02 Aug 2018	4*	3*	3*	2*	2*	2*	3*
03 Aug 2018	4*	3*	3*	2*	2*	2*	3*
04 Aug 2018	4*	3*	3*	2*	2*	2*	3*
05 Aug 2018	4*	3*	3*	2*	2*	2*	3*
06 Aug 2018	4	3	3	2	2	2	2
07 Aug 2018	4	3	3	2	2	2	2
08 Aug 2018	2*	2*	2*	2*	2*	2*	2*
09 Aug 2018	2*	2*	2*	2*	2*	2*	2*
10 Aug 2018	2*	2*	2*	2*	2*	2*	2*
11 Aug 2018	2*	2*	2*	2*	2*	2*	2*
12 Aug 2018	2*	2*	2*	2*	2*	2*	2*
13 Aug 2018	2	2	2	2	2	2	2
14 Aug 2018	2	2	2	2	2	2	2
15 Aug 2018	2*	2*	2*	2*	2*	2*	2*
16 Aug 2018	2*	2*	2*	2*	2*	2*	2*
17 Aug 2018	2*	2*	2*	2*	2*	2*	2*
18 Aug 2018	2*	2*	2*	2*	2*	2*	2*
19 Aug 2018	2*	2*	2*	2*	2*	2*	2*
20 Aug 2018	2	2	2	2	2	2	2
21 Aug 2018	2	2	2	2	2	2	2
22 Aug 2018	2*	2*	2*	2*	2*	2*	2*
23 Aug 2018	2*	2*	2*	2*	2*	2*	2*
24 Aug 2018	2*	2*	2*	2*	2*	2*	2*
25 Aug 2018	2*	2*	2*	2*	2*	2*	2*
26 Aug 2018	2*	2*	2*	2*	2*	2*	2*
27 Aug 2018	2	2	2	2	2	2	2
28 Aug 2018	2	2	2	2	2	2	2
29 Aug 2018	2*	2*	2*	2*	2*	2*	2*
30 Aug 2018	2*	2*	2*	2*	2*	2*	2*
31 Aug 2018	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 Aug 2018	6*	5*	6*	6*	2*	2*	6*
02 Aug 2018	6*	5*	6*	6*	2*	2*	6*
03 Aug 2018	6*	5*	6*	6*	2*	2*	6*
04 Aug 2018	6*	5*	6*	6*	2*	2*	6*
05 Aug 2018	6*	5*	6*	6*	2*	2*	6*
06 Aug 2018	5	4	5	5	2	2	5
07 Aug 2018	5	4	5	5	2	2	5
08 Aug 2018	2*	2*	2*	2*	2*	2*	2*
09 Aug 2018	2*	2*	2*	2*	2*	2*	2*
10 Aug 2018	2*	2*	2*	2*	2*	2*	2*
11 Aug 2018	2*	2*	2*	2*	2*	2*	2*
12 Aug 2018	2*	2*	2*	2*	2*	2*	2*
13 Aug 2018	2	2	2	2	2	2	2
14 Aug 2018	2	2	2	2	2	2	2
15 Aug 2018	2*	2*	2*	2*	2*	2*	2*
16 Aug 2018	2*	2*	2*	2*	2*	2*	2*
17 Aug 2018	2*	2*	2*	2*	2*	2*	2*
18 Aug 2018	2*	2*	2*	2*	2*	2*	2*
19 Aug 2018	2*	2*	2*	2*	2*	2*	2*
20 Aug 2018	2	2	2	2	2	2	2
21 Aug 2018	2	2	2	2	2	2	2
22 Aug 2018	2*	2*	2*	2*	2*	2*	2*
23 Aug 2018	2*	2*	2*	2*	2*	2*	2*
24 Aug 2018	2*	2*	2*	2*	2*	2*	2*
25 Aug 2018	2*	2*	2*	2*	2*	2*	2*
26 Aug 2018	2*	2*	2*	2*	2*	2*	2*
27 Aug 2018	2	2	2	2	2	2	2
28 Aug 2018	2	2	2	2	2	2	2
29 Aug 2018	2*	2*	2*	2*	2*	2*	2*
30 Aug 2018	2*	2*	2*	2*	2*	2*	2*
31 Aug 2018	2*	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
06 Aug 2018	IC						
13 Aug 2018	IC						
20 Aug 2018	IC						
27 Aug 2018	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
06 Aug 2018	IC						
13 Aug 2018	IC						
20 Aug 2018	IC						
27 Aug 2018	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
06 Aug 2018	IC						
13 Aug 2018	IC						
20 Aug 2018	IC						
27 Aug 2018	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
06 Aug 2018	IC						
13 Aug 2018	IC						
20 Aug 2018	IC						
27 Aug 2018	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. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I19	06 Aug 2018	1019	2	2e	<2	<2	1.0	23.5	81.15	8.3	33.78	8.3
I19	06 Aug 2018	1019	6	<2	<2	<2	1.0	21.9	74.11	8.1	33.77	8.3
I19	06 Aug 2018	1019	11	<2	<2	<2	1.0	19.4	57.18	9.1	33.66	8.2
I19	13 Aug 2018	1057	2	2e	<2	<2	1.0	20.2	71.68	8.8	33.67	8.2
I19	13 Aug 2018	1057	6	20e	2e	<2	0.1	18.5	59.08	9.1	33.61	8.3
I19	13 Aug 2018	1057	11	8e	<2	<2	0.2	17.7	63.12	8.8	33.60	8.3
I19	20 Aug 2018	1049	2	<2	<2	<2	1.0	22.8	76.24	8.2	33.71	8.3
I19	20 Aug 2018	1049	6	<2	<2	<2	1.0	19.9	73.41	8.5	33.67	8.2
I19	20 Aug 2018	1049	11	<20	<2	<2	0.1	17.9	65.63	8.1	33.60	8.2
I19	27 Aug 2018	1122	2	<2	<2	<2	1.0	20.9	76.90	7.9	33.67	8.2
I19	27 Aug 2018	1122	6	<2	<2	<2	1.0	17.3	81.63	8.1	33.57	8.2
I19	27 Aug 2018	1122	11	<20	<2	<2	0.1	15.4	73.27	7.4	33.52	8.1
I24	06 Aug 2018	1042	2	<2	<2	<2	1.0	22.7	80.69	8.3	33.83	8.3
I24	06 Aug 2018	1042	6	<2	<2	<2	1.0	18.5	75.54	9.2	33.83	8.2
I24	06 Aug 2018	1042	11	4e	<2	<2	0.5	16.6	69.13	9.0	33.61	8.2
I24	13 Aug 2018	1121	2	<2	2e	<2	1.0	22.9	73.01	8.7	33.67	8.3
I24	13 Aug 2018	1121	6	6e	<2	<2	0.3	18.8	77.80	10.2	33.62	8.3
I24	13 Aug 2018	1121	11	8e	<2	2e	0.2	17.4	69.15	8.9	33.59	8.3
I24	20 Aug 2018	1109	2	<2	<2	<2	1.0	22.9	78.59	8.4	33.71	8.3
I24	20 Aug 2018	1109	6	2e	<2	<2	1.0	18.7	73.54	9.7	33.60	8.3
I24	20 Aug 2018	1109	11	<2	<2	<2	1.0	17.9	72.28	8.6	33.59	8.2
I24	27 Aug 2018	1148	2	<2	<2	<2	1.0	21.2	79.43	8.1	33.69	8.2
I24	27 Aug 2018	1148	6	<20	<2	<2	0.1	17.8	75.97	8.1	33.60	8.2
I24	27 Aug 2018	1148	11	4e	<2	<2	0.5	15.2	83.78	7.8	33.51	8.1
I25	06 Aug 2018	1048	2	<2	<2	<2	1.0	23.4	79.82	7.8	33.94	8.2
I25	06 Aug 2018	1048	6	<2	<2	<2	1.0	21.1	79.62	8.8	33.80	8.3
I25	06 Aug 2018	1048	9	<2	<2	<2	1.0	18.4	75.20	9.0	33.68	8.2
I25	13 Aug 2018	1130	2	<2	<2	<2	1.0	23.3	71.54	8.5	33.69	8.3
I25	13 Aug 2018	1130	6	4e	<2	<2	0.5	19.2	77.89	10.2	33.64	8.3
I25	13 Aug 2018	1130	9	2e	<2	<2	1.0	17.7	71.51	9.5	33.59	8.3
I25	20 Aug 2018	1124	2	<2	<2	<2	1.0	22.6	79.68	8.4	33.72	8.3
I25	20 Aug 2018	1124	6	<2	<2	<2	1.0	18.4	72.56	9.8	33.60	8.3
I25	20 Aug 2018	1124	9	<2	<2	<2	1.0	17.8	74.91	7.7	33.58	8.2
I25	27 Aug 2018	1155	2	<2	<2	<2	1.0	21.5	79.45	8.1	33.69	8.2
I25	27 Aug 2018	1155	6	<2	<2	<2	1.0	16.3	80.96	8.2	33.55	8.2
I25	27 Aug 2018	1155	9	2e	<2	<2	1.0	15.4	83.15	8.1	33.50	8.1

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH
I26	06 Aug 2018	1058	2	<2	<2	<2	1.0	23.7	79.38	NA	NA	8.2
I26	06 Aug 2018	1058	6	<2	<2	<2	1.0	21.2	79.15	NA	NA	8.3
I26	06 Aug 2018	1058	9	<2	<2	<2	1.0	16.7	76.64	NA	NA	8.2
I26	13 Aug 2018	1141	2	<2	<2	<2	1.0	22.7	71.44	8.9	33.68	8.3
I26	13 Aug 2018	1141	6	<2	<2	<2	1.0	20.5	73.08	10.0	33.63	8.3
I26	13 Aug 2018	1141	9	2e	<2	<2	1.0	19.0	70.56	9.5	33.62	8.3
I26	20 Aug 2018	1145	2	<20	2e	<2	0.1	21.1	73.08	9.0	33.69	8.3
I26	20 Aug 2018	1145	6	<20	<2	<2	0.1	18.8	73.23	8.3	33.62	8.2
I26	20 Aug 2018	1145	9	<2	<2	<2	1.0	17.9	71.38	8.3	33.60	8.2
I26	27 Aug 2018	1208	2	<2	<2	<2	1.0	21.5	79.05	8.1	33.69	8.2
I26	27 Aug 2018	1208	6	<2	<2	<2	1.0	18.5	79.21	8.4	33.64	8.2
I26	27 Aug 2018	1208	9	<2	<2	<2	1.0	15.9	80.29	8.2	33.63	8.2
I32	06 Aug 2018	1116	2	<2	<2	<2	1.0	23.9	80.41	8.3	33.81	8.3
I32	06 Aug 2018	1116	6	<2	<2	<2	1.0	23.3	78.73	8.1	33.79	8.3
I32	06 Aug 2018	1116	9	<2	<2	<2	1.0	23.1	77.44	8.0	33.79	8.3
I32	13 Aug 2018	1154	2	<2	<2	<2	1.0	23.2	68.09	8.3	33.69	8.3
I32	13 Aug 2018	1154	6	<20	2e	<2	0.1	20.9	59.21	8.4	33.69	8.3
I32	13 Aug 2018	1154	9	<20	<2	<2	0.1	19.0	60.22	9.0	33.60	8.3
I32	20 Aug 2018	1200	2	<2	<2	<2	1.0	22.9	74.90	8.3	33.71	8.3
I32	20 Aug 2018	1200	6	<2	<2	<2	1.0	21.6	70.75	8.0	33.69	8.3
I32	20 Aug 2018	1200	9	<20	<2	<2	0.1	17.8	70.83	8.6	33.57	8.2
I32	27 Aug 2018	1223	2	<2	<2	<2	1.0	21.5	77.27	8.2	33.68	8.2
I32	27 Aug 2018	1223	6	<2	<2	<2	1.0	19.4	76.54	8.2	33.63	8.2
I32	27 Aug 2018	1223	9	<20	<2	<2	0.1	17.0	74.63	7.9	33.57	8.2
I39	06 Aug 2018	1009	2	<2	<2	<2	1.0	23.3	80.05	8.0	33.84	8.3
I39	06 Aug 2018	1009	12	<2	<2	<2	1.0	14.9	80.57	8.5	33.59	8.1
I39	06 Aug 2018	1009	18	<2	<2	<2	1.0	14.3	81.59	8.2	33.57	8.1
I39	13 Aug 2018	1033	2	<2	<2	<2	1.0	23.3	73.62	8.7	33.69	8.3
I39	13 Aug 2018	1033	12	<2	<2	<2	1.0	18.8	76.59	9.8	33.62	8.3
I39	13 Aug 2018	1033	18	<2	<2	<2	1.0	17.2	77.01	8.6	33.59	8.3
I39	20 Aug 2018	1026	2	<2	<2	<2	1.0	22.6	80.65	8.1	33.73	8.2
I39	20 Aug 2018	1026	12	<2	<2	<2	1.0	20.5	81.02	8.9	33.66	8.3
I39	20 Aug 2018	1026	18	<2	<2	<2	1.0	17.1	79.90	8.6	33.56	8.2
I39	27 Aug 2018	1054	2	<2	<2	<2	1.0	21.2	80.83	8.0	33.76	8.2
I39	27 Aug 2018	1054	12	<2	<2	<2	1.0	15.1	85.09	8.3	33.54	8.2
I39	27 Aug 2018	1054	18	<2	<2	<2	1.0	14.4	85.22	7.9	33.52	8.1
I40	06 Aug 2018	1033	2	<2	<2	<2	1.0	23.4	81.79	8.3	33.86	8.3
I40	06 Aug 2018	1033	6	<2	<2	<2	1.0	22.1	76.23	8.1	33.82	8.3
I40	06 Aug 2018	1033	9	2e	<2	<2	1.0	17.9	65.01	9.5	33.65	8.2
I40	13 Aug 2018	1111	2	<2	<2	<2	1.0	20.9	72.68	9.5	33.66	8.3
I40	13 Aug 2018	1111	6	12e	<2	<2	0.2	19.1	66.40	10.2	33.62	8.3

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH
I40	13 Aug 2018	1111	9	<2	<2	<2	1.0	18.0	67.60	9.5	33.60	8.3
I40	20 Aug 2018	1100	2	<2	<2	<2	1.0	22.7	77.06	7.6	33.73	8.3
I40	20 Aug 2018	1100	6	<20	<2	<2	0.1	19.5	62.61	7.8	33.85	8.2
I40	20 Aug 2018	1100	9	<2	<2	<2	1.0	18.1	63.71	7.9	33.77	8.2
I40	27 Aug 2018	1139	2	<2	<2	<2	1.0	21.4	77.51	8.1	33.68	8.2
I40	27 Aug 2018	1139	6	<2	<2	<2	1.0	17.0	80.08	8.3	33.59	8.2
I40	27 Aug 2018	1139	9	<2	<2	<2	1.0	16.0	81.38	8.1	33.54	8.2

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
I26	06 Aug 2018			Salinity and DO for all depths were removed due to erroneous values

Table 3.9

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

Station	Date	Parameter	Value
I19	06 Aug 2018	Depth (m)	9
I19	06 Aug 2018	Arrive Time	1101
I19	06 Aug 2018	Depart Time	1105
I19	06 Aug 2018	Air Temp (C)	23
I19	06 Aug 2018	Weather	Clear
I19	06 Aug 2018	Visibility (mi)	8
I19	06 Aug 2018	Wind Speed (kts)	5
I19	06 Aug 2018	Wind Dir	S
I19	06 Aug 2018	Water Color	Green
I19	06 Aug 2018	Wave Ht Low (ft)	3
I19	06 Aug 2018	Wave Period (sec)	13
I19	06 Aug 2018	Sea State	Calm
I19	06 Aug 2018	High Tide (ft)	3.19
I19	06 Aug 2018	High Tide Time	608
I19	06 Aug 2018	Low Tide (ft)	2.15
I19	06 Aug 2018	Low Tide Time	1101
I19	06 Aug 2018	Comments	none
I19	13 Aug 2018	Depth (m)	12
I19	13 Aug 2018	Arrive Time	1057
I19	13 Aug 2018	Depart Time	1102
I19	13 Aug 2018	Air Temp (C)	22
I19	13 Aug 2018	Weather	Partly Cloudy
I19	13 Aug 2018	Visibility (mi)	15
I19	13 Aug 2018	Wind Speed (kts)	3
I19	13 Aug 2018	Wind Dir	S
I19	13 Aug 2018	Water Color	Green
I19	13 Aug 2018	Wave Ht Low (ft)	3
I19	13 Aug 2018	Wave Period (sec)	11
I19	13 Aug 2018	Sea State	Calm
I19	13 Aug 2018	High Tide (ft)	5
I19	13 Aug 2018	High Tide Time	1136
I19	13 Aug 2018	Low Tide (ft)	-0.83
I19	13 Aug 2018	Low Tide Time	522
I19	13 Aug 2018	Comments	none
I19	20 Aug 2018	Depth (m)	11
I19	20 Aug 2018	Arrive Time	1049
I19	20 Aug 2018	Depart Time	1052
I19	20 Aug 2018	Air Temp (C)	22
I19	20 Aug 2018	Weather	Partly Cloudy
I19	20 Aug 2018	Visibility (mi)	9
I19	20 Aug 2018	Wind Speed (kts)	8
I19	20 Aug 2018	Wind Dir	S
I19	20 Aug 2018	Water Color	Green
I19	20 Aug 2018	Wave Ht Low (ft)	2
I19	20 Aug 2018	Wave Period (sec)	4
I19	20 Aug 2018	Sea State	Calm
I19	20 Aug 2018	High Tide (ft)	3.47
I19	20 Aug 2018	High Tide Time	720
I19	20 Aug 2018	Low Tide (ft)	2.52

Station	Date	Parameter	Value
I19	20 Aug 2018	Low Tide Time	1155
I19	20 Aug 2018	Comments	none
I19	27 Aug 2018	Depth (m)	12
I19	27 Aug 2018	Arrive Time	1122
I19	27 Aug 2018	Depart Time	1125
I19	27 Aug 2018	Air Temp (C)	22
I19	27 Aug 2018	Weather	Haze
I19	27 Aug 2018	Visibility (mi)	8
I19	27 Aug 2018	Wind Speed (kts)	9
I19	27 Aug 2018	Wind Dir	NW
I19	27 Aug 2018	Water Color	Green
I19	27 Aug 2018	Wave Ht Low (ft)	2
I19	27 Aug 2018	Wave Period (sec)	11
I19	27 Aug 2018	Sea State	Confused swell
I19	27 Aug 2018	High Tide (ft)	4.6
I19	27 Aug 2018	High Tide Time	1036
I19	27 Aug 2018	Low Tide (ft)	-0.01
I19	27 Aug 2018	Low Tide Time	430
I19	27 Aug 2018	Comments	none
I24	06 Aug 2018	Depth (m)	10
I24	06 Aug 2018	Arrive Time	1120
I24	06 Aug 2018	Depart Time	1125
I24	06 Aug 2018	Air Temp (C)	23
I24	06 Aug 2018	Weather	Clear
I24	06 Aug 2018	Visibility (mi)	8
I24	06 Aug 2018	Wind Speed (kts)	10
I24	06 Aug 2018	Wind Dir	S
I24	06 Aug 2018	Water Color	Green
I24	06 Aug 2018	Wave Ht Low (ft)	3
I24	06 Aug 2018	Wave Period (sec)	13
I24	06 Aug 2018	Sea State	Calm
I24	06 Aug 2018	High Tide (ft)	3.19
I24	06 Aug 2018	High Tide Time	608
I24	06 Aug 2018	Low Tide (ft)	2.15
I24	06 Aug 2018	Low Tide Time	1101
I24	06 Aug 2018	Comments	none
I24	13 Aug 2018	Depth (m)	12
I24	13 Aug 2018	Arrive Time	1121
I24	13 Aug 2018	Depart Time	1125
I24	13 Aug 2018	Air Temp (C)	22
I24	13 Aug 2018	Weather	Haze
I24	13 Aug 2018	Visibility (mi)	15
I24	13 Aug 2018	Wind Speed (kts)	2
I24	13 Aug 2018	Wind Dir	S
I24	13 Aug 2018	Water Color	Green
I24	13 Aug 2018	Wave Ht Low (ft)	3
I24	13 Aug 2018	Wave Period (sec)	11
I24	13 Aug 2018	Sea State	Calm
I24	13 Aug 2018	High Tide (ft)	5
I24	13 Aug 2018	High Tide Time	1136
I24	13 Aug 2018	Low Tide (ft)	-0.83
I24	13 Aug 2018	Low Tide Time	522

Station	Date	Parameter	Value
I24	13 Aug 2018	Comments	none
I24	20 Aug 2018	Depth (m)	11
I24	20 Aug 2018	Arrive Time	1109
I24	20 Aug 2018	Depart Time	1119
I24	20 Aug 2018	Air Temp (C)	22
I24	20 Aug 2018	Weather	Partly Cloudy
I24	20 Aug 2018	Visibility (mi)	9
I24	20 Aug 2018	Wind Speed (kts)	7
I24	20 Aug 2018	Wind Dir	SE
I24	20 Aug 2018	Water Color	Green
I24	20 Aug 2018	Wave Ht Low (ft)	2
I24	20 Aug 2018	Wave Period (sec)	4
I24	20 Aug 2018	Sea State	Calm
I24	20 Aug 2018	High Tide (ft)	3.47
I24	20 Aug 2018	High Tide Time	720
I24	20 Aug 2018	Low Tide (ft)	2.52
I24	20 Aug 2018	Low Tide Time	1155
I24	20 Aug 2018	Comments	none
I24	27 Aug 2018	Depth (m)	11
I24	27 Aug 2018	Arrive Time	1148
I24	27 Aug 2018	Depart Time	1151
I24	27 Aug 2018	Air Temp (C)	21
I24	27 Aug 2018	Weather	Haze
I24	27 Aug 2018	Visibility (mi)	8
I24	27 Aug 2018	Wind Speed (kts)	12
I24	27 Aug 2018	Wind Dir	W
I24	27 Aug 2018	Water Color	Greenish-Blue
I24	27 Aug 2018	Wave Ht Low (ft)	2
I24	27 Aug 2018	Wave Period (sec)	11
I24	27 Aug 2018	Sea State	Light chop
I24	27 Aug 2018	High Tide (ft)	4.6
I24	27 Aug 2018	High Tide Time	1036
I24	27 Aug 2018	Low Tide (ft)	-0.01
I24	27 Aug 2018	Low Tide Time	430
I24	27 Aug 2018	Comments	none
I25	06 Aug 2018	Depth (m)	9
I25	06 Aug 2018	Arrive Time	1129
I25	06 Aug 2018	Depart Time	1133
I25	06 Aug 2018	Air Temp (C)	23
I25	06 Aug 2018	Weather	Clear
I25	06 Aug 2018	Visibility (mi)	8
I25	06 Aug 2018	Wind Speed (kts)	6
I25	06 Aug 2018	Wind Dir	S
I25	06 Aug 2018	Water Color	Green
I25	06 Aug 2018	Wave Ht Low (ft)	3
I25	06 Aug 2018	Wave Period (sec)	13
I25	06 Aug 2018	Sea State	Calm
I25	06 Aug 2018	High Tide (ft)	3.19
I25	06 Aug 2018	High Tide Time	608
I25	06 Aug 2018	Low Tide (ft)	2.15
I25	06 Aug 2018	Low Tide Time	1101
I25	06 Aug 2018	Comments	none

Station	Date	Parameter	Value
I25	13 Aug 2018	Depth (m)	11
I25	13 Aug 2018	Arrive Time	1130
I25	13 Aug 2018	Depart Time	1134
I25	13 Aug 2018	Air Temp (C)	22
I25	13 Aug 2018	Weather	Haze
I25	13 Aug 2018	Visibility (mi)	15
I25	13 Aug 2018	Wind Speed (kts)	7
I25	13 Aug 2018	Wind Dir	W
I25	13 Aug 2018	Water Color	Green
I25	13 Aug 2018	Wave Ht Low (ft)	3
I25	13 Aug 2018	Wave Period (sec)	11
I25	13 Aug 2018	Sea State	Calm
I25	13 Aug 2018	High Tide (ft)	5
I25	13 Aug 2018	High Tide Time	1136
I25	13 Aug 2018	Low Tide (ft)	-0.83
I25	13 Aug 2018	Low Tide Time	522
I25	13 Aug 2018	Comments	none
I25	20 Aug 2018	Depth (m)	10
I25	20 Aug 2018	Arrive Time	1124
I25	20 Aug 2018	Depart Time	1127
I25	20 Aug 2018	Air Temp (C)	23
I25	20 Aug 2018	Weather	Partly Cloudy
I25	20 Aug 2018	Visibility (mi)	9
I25	20 Aug 2018	Wind Speed (kts)	2
I25	20 Aug 2018	Wind Dir	SE
I25	20 Aug 2018	Water Color	Green
I25	20 Aug 2018	Wave Ht Low (ft)	2
I25	20 Aug 2018	Wave Period (sec)	4
I25	20 Aug 2018	Sea State	Calm
I25	20 Aug 2018	High Tide (ft)	3.47
I25	20 Aug 2018	High Tide Time	720
I25	20 Aug 2018	Low Tide (ft)	2.52
I25	20 Aug 2018	Low Tide Time	1155
I25	20 Aug 2018	Comments	none
I25	27 Aug 2018	Depth (m)	9
I25	27 Aug 2018	Arrive Time	1155
I25	27 Aug 2018	Depart Time	1159
I25	27 Aug 2018	Air Temp (C)	21
I25	27 Aug 2018	Weather	Haze
I25	27 Aug 2018	Visibility (mi)	8
I25	27 Aug 2018	Wind Speed (kts)	11
I25	27 Aug 2018	Wind Dir	W
I25	27 Aug 2018	Water Color	Greenish-Blue
I25	27 Aug 2018	Wave Ht Low (ft)	2
I25	27 Aug 2018	Wave Period (sec)	11
I25	27 Aug 2018	Sea State	Light chop
I25	27 Aug 2018	High Tide (ft)	4.6
I25	27 Aug 2018	High Tide Time	1036
I25	27 Aug 2018	Low Tide (ft)	-0.01
I25	27 Aug 2018	Low Tide Time	430
I25	27 Aug 2018	Comments	none

Station	Date	Parameter	Value
I26	06 Aug 2018	Depth (m)	9
I26	06 Aug 2018	Arrive Time	1138
I26	06 Aug 2018	Depart Time	1144
I26	06 Aug 2018	Air Temp (C)	23
I26	06 Aug 2018	Weather	Clear
I26	06 Aug 2018	Visibility (mi)	8
I26	06 Aug 2018	Wind Speed (kts)	6
I26	06 Aug 2018	Wind Dir	SW
I26	06 Aug 2018	Water Color	Green
I26	06 Aug 2018	Wave Ht Low (ft)	3
I26	06 Aug 2018	Wave Period (sec)	13
I26	06 Aug 2018	Sea State	Calm
I26	06 Aug 2018	High Tide (ft)	3.19
I26	06 Aug 2018	High Tide Time	608
I26	06 Aug 2018	Low Tide (ft)	2.15
I26	06 Aug 2018	Low Tide Time	1101
I26	06 Aug 2018	Comments	Salinity and DO for all depths were removed due to erroneous values
I26	13 Aug 2018	Depth (m)	11
I26	13 Aug 2018	Arrive Time	1141
I26	13 Aug 2018	Depart Time	1145
I26	13 Aug 2018	Air Temp (C)	22
I26	13 Aug 2018	Weather	Haze
I26	13 Aug 2018	Visibility (mi)	15
I26	13 Aug 2018	Wind Speed (kts)	11
I26	13 Aug 2018	Wind Dir	E
I26	13 Aug 2018	Water Color	Green
I26	13 Aug 2018	Wave Ht Low (ft)	3
I26	13 Aug 2018	Wave Period (sec)	11
I26	13 Aug 2018	Sea State	Calm
I26	13 Aug 2018	High Tide (ft)	5
I26	13 Aug 2018	High Tide Time	1136
I26	13 Aug 2018	Low Tide (ft)	-0.83
I26	13 Aug 2018	Low Tide Time	522
I26	13 Aug 2018	Comments	none
I26	20 Aug 2018	Depth (m)	10
I26	20 Aug 2018	Arrive Time	1145
I26	20 Aug 2018	Depart Time	1147
I26	20 Aug 2018	Air Temp (C)	22
I26	20 Aug 2018	Weather	Overcast
I26	20 Aug 2018	Visibility (mi)	9
I26	20 Aug 2018	Wind Speed (kts)	6
I26	20 Aug 2018	Wind Dir	S
I26	20 Aug 2018	Water Color	Green
I26	20 Aug 2018	Wave Ht Low (ft)	2
I26	20 Aug 2018	Wave Period (sec)	4
I26	20 Aug 2018	Sea State	Calm
I26	20 Aug 2018	High Tide (ft)	3.47
I26	20 Aug 2018	High Tide Time	720
I26	20 Aug 2018	Low Tide (ft)	2.52
I26	20 Aug 2018	Low Tide Time	1155
I26	20 Aug 2018	Comments	Kelp debris

Station	Date	Parameter	Value
I26	27 Aug 2018	Depth (m)	10
I26	27 Aug 2018	Arrive Time	1208
I26	27 Aug 2018	Depart Time	1212
I26	27 Aug 2018	Air Temp (C)	21
I26	27 Aug 2018	Weather	Haze
I26	27 Aug 2018	Visibility (mi)	8
I26	27 Aug 2018	Wind Speed (kts)	14
I26	27 Aug 2018	Wind Dir	W
I26	27 Aug 2018	Water Color	Bluish-Green
I26	27 Aug 2018	Wave Ht Low (ft)	2
I26	27 Aug 2018	Wave Period (sec)	11
I26	27 Aug 2018	Sea State	Light chop
I26	27 Aug 2018	High Tide (ft)	4.6
I26	27 Aug 2018	High Tide Time	1036
I26	27 Aug 2018	Low Tide (ft)	-0.01
I26	27 Aug 2018	Low Tide Time	430
I26	27 Aug 2018	Comments	none
I32	06 Aug 2018	Depth (m)	11
I32	06 Aug 2018	Arrive Time	1152
I32	06 Aug 2018	Depart Time	1155
I32	06 Aug 2018	Air Temp (C)	23
I32	06 Aug 2018	Weather	Clear
I32	06 Aug 2018	Visibility (mi)	8
I32	06 Aug 2018	Wind Speed (kts)	2
I32	06 Aug 2018	Wind Dir	S
I32	06 Aug 2018	Water Color	Green
I32	06 Aug 2018	Wave Ht Low (ft)	3
I32	06 Aug 2018	Wave Period (sec)	13
I32	06 Aug 2018	Sea State	Calm
I32	06 Aug 2018	High Tide (ft)	3.19
I32	06 Aug 2018	High Tide Time	608
I32	06 Aug 2018	Low Tide (ft)	2.15
I32	06 Aug 2018	Low Tide Time	1101
I32	06 Aug 2018	Comments	
I32	13 Aug 2018	Depth (m)	12
I32	13 Aug 2018	Arrive Time	1154
I32	13 Aug 2018	Depart Time	1159
I32	13 Aug 2018	Air Temp (C)	23
I32	13 Aug 2018	Weather	Haze
I32	13 Aug 2018	Visibility (mi)	15
I32	13 Aug 2018	Wind Speed (kts)	7
I32	13 Aug 2018	Wind Dir	NE
I32	13 Aug 2018	Water Color	Green
I32	13 Aug 2018	Wave Ht Low (ft)	3
I32	13 Aug 2018	Wave Period (sec)	11
I32	13 Aug 2018	Sea State	Calm
I32	13 Aug 2018	High Tide (ft)	5
I32	13 Aug 2018	High Tide Time	1136
I32	13 Aug 2018	Low Tide (ft)	-0.83
I32	13 Aug 2018	Low Tide Time	522
I32	13 Aug 2018	Comments	none
I32	20 Aug 2018	Depth (m)	11

Station	Date	Parameter	Value
I32	20 Aug 2018	Arrive Time	1200
I32	20 Aug 2018	Depart Time	1202
I32	20 Aug 2018	Air Temp (C)	22
I32	20 Aug 2018	Weather	Overcast
I32	20 Aug 2018	Visibility (mi)	9
I32	20 Aug 2018	Wind Speed (kts)	14
I32	20 Aug 2018	Wind Dir	S
I32	20 Aug 2018	Water Color	Green
I32	20 Aug 2018	Wave Ht Low (ft)	2
I32	20 Aug 2018	Wave Period (sec)	4
I32	20 Aug 2018	Sea State	Calm
I32	20 Aug 2018	High Tide (ft)	3.47
I32	20 Aug 2018	High Tide Time	720
I32	20 Aug 2018	Low Tide (ft)	2.52
I32	20 Aug 2018	Low Tide Time	1155
I32	20 Aug 2018	Comments	none
I32	27 Aug 2018	Depth (m)	9
I32	27 Aug 2018	Arrive Time	1223
I32	27 Aug 2018	Depart Time	1227
I32	27 Aug 2018	Air Temp (C)	21
I32	27 Aug 2018	Weather	Haze
I32	27 Aug 2018	Visibility (mi)	8
I32	27 Aug 2018	Wind Speed (kts)	11
I32	27 Aug 2018	Wind Dir	W
I32	27 Aug 2018	Water Color	Greenish-Blue
I32	27 Aug 2018	Wave Ht Low (ft)	2
I32	27 Aug 2018	Wave Period (sec)	11
I32	27 Aug 2018	Sea State	Light chop
I32	27 Aug 2018	High Tide (ft)	4.6
I32	27 Aug 2018	High Tide Time	1036
I32	27 Aug 2018	Low Tide (ft)	-0.01
I32	27 Aug 2018	Low Tide Time	430
I32	27 Aug 2018	Comments	none
I39	06 Aug 2018	Depth (m)	20
I39	06 Aug 2018	Arrive Time	1040
I39	06 Aug 2018	Depart Time	1045
I39	06 Aug 2018	Air Temp (C)	23
I39	06 Aug 2018	Weather	Clear
I39	06 Aug 2018	Visibility (mi)	8
I39	06 Aug 2018	Wind Speed (kts)	6
I39	06 Aug 2018	Wind Dir	SE
I39	06 Aug 2018	Water Color	Green
I39	06 Aug 2018	Wave Ht Low (ft)	3
I39	06 Aug 2018	Wave Period (sec)	13
I39	06 Aug 2018	Sea State	Calm
I39	06 Aug 2018	High Tide (ft)	3.19
I39	06 Aug 2018	High Tide Time	608
I39	06 Aug 2018	Low Tide (ft)	2.15
I39	06 Aug 2018	Low Tide Time	1101
I39	06 Aug 2018	Comments	none
I39	13 Aug 2018	Depth (m)	20
I39	13 Aug 2018	Arrive Time	1033

Station	Date	Parameter	Value
I39	13 Aug 2018	Depart Time	1039
I39	13 Aug 2018	Air Temp (C)	23
I39	13 Aug 2018	Weather	Partly Cloudy
I39	13 Aug 2018	Visibility (mi)	15
I39	13 Aug 2018	Wind Speed (kts)	0
I39	13 Aug 2018	Wind Dir	
I39	13 Aug 2018	Water Color	Green
I39	13 Aug 2018	Wave Ht Low (ft)	3
I39	13 Aug 2018	Wave Period (sec)	11
I39	13 Aug 2018	Sea State	Calm
I39	13 Aug 2018	High Tide (ft)	5
I39	13 Aug 2018	High Tide Time	1136
I39	13 Aug 2018	Low Tide (ft)	-0.83
I39	13 Aug 2018	Low Tide Time	522
I39	13 Aug 2018	Comments	Kelp debris
I39	20 Aug 2018	Depth (m)	19
I39	20 Aug 2018	Arrive Time	1026
I39	20 Aug 2018	Depart Time	1030
I39	20 Aug 2018	Air Temp (C)	22
I39	20 Aug 2018	Weather	Overcast
I39	20 Aug 2018	Visibility (mi)	7
I39	20 Aug 2018	Wind Speed (kts)	4
I39	20 Aug 2018	Wind Dir	S
I39	20 Aug 2018	Water Color	Green
I39	20 Aug 2018	Wave Ht Low (ft)	2
I39	20 Aug 2018	Wave Period (sec)	4
I39	20 Aug 2018	Sea State	Calm
I39	20 Aug 2018	High Tide (ft)	3.47
I39	20 Aug 2018	High Tide Time	720
I39	20 Aug 2018	Low Tide (ft)	2.52
I39	20 Aug 2018	Low Tide Time	1155
I39	20 Aug 2018	Comments	Boats
I39	27 Aug 2018	Depth (m)	21
I39	27 Aug 2018	Arrive Time	1054
I39	27 Aug 2018	Depart Time	1057
I39	27 Aug 2018	Air Temp (C)	22
I39	27 Aug 2018	Weather	Haze
I39	27 Aug 2018	Visibility (mi)	8
I39	27 Aug 2018	Wind Speed (kts)	4
I39	27 Aug 2018	Wind Dir	NW
I39	27 Aug 2018	Water Color	Green
I39	27 Aug 2018	Wave Ht Low (ft)	2
I39	27 Aug 2018	Wave Period (sec)	11
I39	27 Aug 2018	Sea State	Confused swell
I39	27 Aug 2018	High Tide (ft)	4.6
I39	27 Aug 2018	High Tide Time	1036
I39	27 Aug 2018	Low Tide (ft)	-0.01
I39	27 Aug 2018	Low Tide Time	430
I39	27 Aug 2018	Comments	none
I40	06 Aug 2018	Depth (m)	10
I40	06 Aug 2018	Arrive Time	1112
I40	06 Aug 2018	Depart Time	1118

Station	Date	Parameter	Value
I40	06 Aug 2018	Air Temp (C)	23
I40	06 Aug 2018	Weather	Clear
I40	06 Aug 2018	Visibility (mi)	8
I40	06 Aug 2018	Wind Speed (kts)	2
I40	06 Aug 2018	Wind Dir	S
I40	06 Aug 2018	Water Color	Green
I40	06 Aug 2018	Wave Ht Low (ft)	3
I40	06 Aug 2018	Wave Period (sec)	13
I40	06 Aug 2018	Sea State	Calm
I40	06 Aug 2018	High Tide (ft)	3.19
I40	06 Aug 2018	High Tide Time	608
I40	06 Aug 2018	Low Tide (ft)	2.15
I40	06 Aug 2018	Low Tide Time	1101
I40	06 Aug 2018	Comments	none
I40	13 Aug 2018	Depth (m)	11
I40	13 Aug 2018	Arrive Time	1111
I40	13 Aug 2018	Depart Time	1115
I40	13 Aug 2018	Air Temp (C)	22
I40	13 Aug 2018	Weather	Partly Cloudy
I40	13 Aug 2018	Visibility (mi)	15
I40	13 Aug 2018	Wind Speed (kts)	8
I40	13 Aug 2018	Wind Dir	E
I40	13 Aug 2018	Water Color	Green
I40	13 Aug 2018	Wave Ht Low (ft)	3
I40	13 Aug 2018	Wave Period (sec)	11
I40	13 Aug 2018	Sea State	Calm
I40	13 Aug 2018	High Tide (ft)	5
I40	13 Aug 2018	High Tide Time	1136
I40	13 Aug 2018	Low Tide (ft)	-0.83
I40	13 Aug 2018	Low Tide Time	522
I40	13 Aug 2018	Comments	none
I40	20 Aug 2018	Depth (m)	10
I40	20 Aug 2018	Arrive Time	1100
I40	20 Aug 2018	Depart Time	1103
I40	20 Aug 2018	Air Temp (C)	22
I40	20 Aug 2018	Weather	Partly Cloudy
I40	20 Aug 2018	Visibility (mi)	9
I40	20 Aug 2018	Wind Speed (kts)	6
I40	20 Aug 2018	Wind Dir	S
I40	20 Aug 2018	Water Color	Green
I40	20 Aug 2018	Wave Ht Low (ft)	2
I40	20 Aug 2018	Wave Period (sec)	4
I40	20 Aug 2018	Sea State	Calm
I40	20 Aug 2018	High Tide (ft)	3.47
I40	20 Aug 2018	High Tide Time	720
I40	20 Aug 2018	Low Tide (ft)	2.52
I40	20 Aug 2018	Low Tide Time	1155
I40	20 Aug 2018	Comments	none
I40	27 Aug 2018	Depth (m)	11
I40	27 Aug 2018	Arrive Time	1139
I40	27 Aug 2018	Depart Time	1141
I40	27 Aug 2018	Air Temp (C)	21

Station	Date	Parameter	Value
I40	27 Aug 2018	Weather	Haze
I40	27 Aug 2018	Visibility (mi)	8
I40	27 Aug 2018	Wind Speed (kts)	10
I40	27 Aug 2018	Wind Dir	W
I40	27 Aug 2018	Water Color	Green
I40	27 Aug 2018	Wave Ht Low (ft)	2
I40	27 Aug 2018	Wave Period (sec)	11
I40	27 Aug 2018	Sea State	Light chop
I40	27 Aug 2018	High Tide (ft)	4.6
I40	27 Aug 2018	High Tide Time	1036
I40	27 Aug 2018	Low Tide (ft)	-0.01
I40	27 Aug 2018	Low Tide Time	430
I40	27 Aug 2018	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 ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I19	06 Aug 2018	1	23.53	80.81	8.2	33.80	8.3	22.9	0.50
I19	06 Aug 2018	2	23.53	81.15	8.3	33.78	8.3	22.9	0.48
I19	06 Aug 2018	3	23.25	80.08	8.3	33.79	8.3	22.9	0.47
I19	06 Aug 2018	4	23.21	80.45	8.3	33.82	8.3	23.0	0.53
I19	06 Aug 2018	5	22.68	77.04	8.2	33.83	8.3	23.1	0.58
I19	06 Aug 2018	6	21.92	74.11	8.1	33.77	8.3	23.3	0.83
I19	06 Aug 2018	7	21.73	73.92	8.2	33.74	8.3	23.3	1.28
I19	06 Aug 2018	8	21.46	73.36	8.3	33.73	8.3	23.4	1.52
I19	06 Aug 2018	9	21.07	71.07	8.3	33.72	8.3	23.5	1.74
I19	06 Aug 2018	10	19.39	57.18	9.1	33.66	8.2	23.9	2.52
I19	13 Aug 2018	1	20.62	71.41	8.9	33.64	8.2	23.6	0.90
I19	13 Aug 2018	2	20.22	71.68	8.8	33.67	8.2	23.7	0.92
I19	13 Aug 2018	3	19.41	71.80	9.0	33.65	8.3	23.9	0.95
I19	13 Aug 2018	4	19.01	70.67	9.0	33.63	8.3	24.0	1.31
I19	13 Aug 2018	5	18.68	66.60	9.0	33.62	8.3	24.0	2.50
I19	13 Aug 2018	6	18.49	59.08	9.1	33.61	8.3	24.1	4.73
I19	13 Aug 2018	7	18.13	58.41	9.3	33.61	8.3	24.2	6.37
I19	13 Aug 2018	8	18.00	62.78	9.2	33.60	8.3	24.2	6.37
I19	13 Aug 2018	9	17.89	63.47	9.0	33.60	8.3	24.2	5.83
I19	13 Aug 2018	10	17.72	63.12	8.8	33.60	8.3	24.3	5.16
I19	20 Aug 2018	1	22.86	76.17	8.2	33.71	8.3	23.0	1.19
I19	20 Aug 2018	2	22.81	76.24	8.2	33.71	8.3	23.0	1.23
I19	20 Aug 2018	3	22.61	76.53	8.1	33.71	8.3	23.1	1.34
I19	20 Aug 2018	4	22.24	76.60	8.0	33.70	8.3	23.2	1.44
I19	20 Aug 2018	5	21.82	75.61	8.0	33.71	8.3	23.3	1.74
I19	20 Aug 2018	6	19.91	73.41	8.5	33.67	8.2	23.8	2.56
I19	20 Aug 2018	7	19.04	67.25	9.1	33.61	8.2	23.9	5.54
I19	20 Aug 2018	8	18.72	68.48	9.1	33.59	8.2	24.0	6.72
I19	20 Aug 2018	9	18.63	69.26	8.8	33.59	8.2	24.0	6.33
I19	20 Aug 2018	10	17.94	65.63	8.1	33.60	8.2	24.2	6.17
I19	27 Aug 2018	1	21.00	76.99	8.0	33.68	8.2	23.5	0.82
I19	27 Aug 2018	2	20.88	76.90	7.9	33.67	8.2	23.5	0.85
I19	27 Aug 2018	3	19.47	77.22	8.1	33.66	8.2	23.9	0.85
I19	27 Aug 2018	4	18.46	79.50	8.4	33.62	8.2	24.1	0.83
I19	27 Aug 2018	5	17.98	81.16	8.4	33.59	8.2	24.2	0.89
I19	27 Aug 2018	6	17.28	81.63	8.1	33.57	8.2	24.4	1.06
I19	27 Aug 2018	7	15.73	79.40	7.7	33.56	8.1	24.7	1.82
I19	27 Aug 2018	8	15.44	76.27	7.5	33.51	8.1	24.7	3.33
I19	27 Aug 2018	9	15.44	73.81	7.4	33.51	8.1	24.7	4.51
I19	27 Aug 2018	10	15.42	73.27	7.4	33.52	8.1	24.7	5.05
I24	06 Aug 2018	1	23.10	80.32	8.1	33.78	8.3	23.0	0.47
I24	06 Aug 2018	2	22.67	80.69	8.3	33.83	8.3	23.1	0.47
I24	06 Aug 2018	3	21.63	79.97	8.7	33.85	8.3	23.4	0.51
I24	06 Aug 2018	4	20.59	78.46	9.0	33.86	8.3	23.7	0.54
I24	06 Aug 2018	5	19.54	77.19	9.2	33.77	8.3	23.9	0.67
I24	06 Aug 2018	6	18.46	75.54	9.2	33.83	8.2	24.3	0.90
I24	06 Aug 2018	7	17.13	68.32	9.3	33.66	8.2	24.5	1.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I24	06 Aug 2018	8	16.80	66.70	9.2	33.66	8.2	24.5	1.75
I24	06 Aug 2018	9	16.52	67.45	9.1	33.62	8.2	24.6	2.02
I24	06 Aug 2018	10	16.59	69.13	9.0	33.61	8.2	24.5	2.46
I24	13 Aug 2018	1	22.85	73.26	8.8	33.67	8.3	23.0	0.89
I24	13 Aug 2018	2	22.88	73.01	8.7	33.67	8.3	23.0	0.95
I24	13 Aug 2018	3	21.67	73.39	9.2	33.69	8.3	23.3	1.02
I24	13 Aug 2018	4	20.42	74.69	9.8	33.66	8.3	23.6	1.15
I24	13 Aug 2018	5	19.23	79.13	10.1	33.65	8.3	23.9	1.30
I24	13 Aug 2018	6	18.78	77.80	10.2	33.62	8.3	24.0	1.77
I24	13 Aug 2018	7	18.72	72.49	10.1	33.60	8.3	24.0	2.63
I24	13 Aug 2018	8	18.28	67.57	9.9	33.61	8.3	24.1	4.47
I24	13 Aug 2018	9	18.02	70.62	9.8	33.60	8.3	24.2	5.55
I24	13 Aug 2018	10	17.65	69.22	9.2	33.60	8.3	24.3	5.40
I24	13 Aug 2018	11	17.43	69.15	8.9	33.59	8.3	24.3	4.03
I24	20 Aug 2018	1	22.94	79.09	8.4	33.71	8.3	23.0	0.82
I24	20 Aug 2018	2	22.86	78.59	8.4	33.71	8.3	23.0	0.85
I24	20 Aug 2018	3	22.24	76.64	8.2	33.71	8.3	23.2	1.00
I24	20 Aug 2018	4	20.42	71.37	9.0	33.65	8.3	23.6	1.65
I24	20 Aug 2018	5	19.61	73.38	9.4	33.65	8.3	23.8	2.17
I24	20 Aug 2018	6	18.69	73.54	9.7	33.60	8.3	24.0	2.71
I24	20 Aug 2018	7	18.45	71.25	9.7	33.59	8.3	24.1	3.88
I24	20 Aug 2018	8	18.32	70.01	9.6	33.59	8.3	24.1	5.35
I24	20 Aug 2018	9	18.00	69.70	9.1	33.59	8.2	24.2	6.63
I24	20 Aug 2018	10	17.88	72.28	8.6	33.59	8.2	24.2	6.29
I24	27 Aug 2018	1	21.36	79.39	8.2	33.68	8.2	23.4	0.44
I24	27 Aug 2018	2	21.23	79.43	8.1	33.69	8.2	23.4	0.44
I24	27 Aug 2018	3	19.92	79.45	8.1	33.70	8.2	23.8	0.52
I24	27 Aug 2018	4	18.91	78.28	8.1	33.66	8.2	24.0	0.75
I24	27 Aug 2018	5	18.25	76.37	8.2	33.61	8.2	24.1	1.04
I24	27 Aug 2018	6	17.79	75.97	8.1	33.60	8.2	24.3	1.13
I24	27 Aug 2018	7	17.18	78.13	7.9	33.58	8.2	24.4	0.92
I24	27 Aug 2018	8	15.69	81.69	8.1	33.56	8.2	24.7	1.12
I24	27 Aug 2018	9	15.56	81.11	8.0	33.52	8.1	24.7	1.51
I24	27 Aug 2018	10	15.29	82.04	7.9	33.52	8.1	24.8	1.57
I24	27 Aug 2018	11	15.24	83.78	7.8	33.51	8.1	24.8	1.31
I25	06 Aug 2018	1	24.16	79.38	7.7	33.77	8.2	22.7	0.53
I25	06 Aug 2018	2	23.40	79.82	7.8	33.94	8.2	23.0	0.53
I25	06 Aug 2018	3	22.47	80.00	8.2	33.86	8.3	23.2	0.54
I25	06 Aug 2018	4	22.06	80.15	8.4	33.78	8.3	23.3	0.56
I25	06 Aug 2018	5	21.85	80.01	8.6	33.77	8.3	23.3	0.62
I25	06 Aug 2018	6	21.15	79.62	8.8	33.80	8.3	23.5	0.69
I25	06 Aug 2018	7	19.64	76.14	8.8	33.81	8.3	23.9	0.81
I25	06 Aug 2018	8	17.81	74.55	9.1	33.60	8.2	24.2	1.07
I25	06 Aug 2018	9	18.38	75.20	9.0	33.68	8.2	24.2	1.05
I25	13 Aug 2018	1	23.29	70.60	8.6	33.69	8.3	22.9	1.03
I25	13 Aug 2018	2	23.31	71.54	8.5	33.69	8.3	22.9	1.08
I25	13 Aug 2018	3	22.65	72.27	8.7	33.69	8.3	23.0	1.07
I25	13 Aug 2018	4	22.05	73.27	9.0	33.67	8.3	23.2	1.16
I25	13 Aug 2018	5	20.49	73.82	9.8	33.66	8.3	23.6	1.41
I25	13 Aug 2018	6	19.18	77.89	10.2	33.64	8.3	23.9	1.58

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I25	13 Aug 2018	7	18.86	75.95	10.1	33.61	8.3	24.0	2.04
I25	13 Aug 2018	8	18.22	68.87	9.8	33.61	8.3	24.2	3.55
I25	13 Aug 2018	9	17.73	71.51	9.5	33.59	8.3	24.3	4.30
I25	20 Aug 2018	1	22.95	79.80	8.4	33.71	8.3	23.0	0.60
I25	20 Aug 2018	2	22.61	79.68	8.4	33.72	8.3	23.1	0.64
I25	20 Aug 2018	3	21.05	76.94	8.9	33.70	8.3	23.5	0.93
I25	20 Aug 2018	4	19.82	72.83	9.6	33.64	8.3	23.8	1.46
I25	20 Aug 2018	5	18.97	72.33	9.8	33.62	8.3	24.0	2.04
I25	20 Aug 2018	6	18.38	72.56	9.8	33.60	8.3	24.1	2.90
I25	20 Aug 2018	7	18.17	69.98	9.0	33.59	8.2	24.1	4.82
I25	20 Aug 2018	8	17.90	67.39	8.2	33.59	8.2	24.2	5.72
I25	20 Aug 2018	9	17.80	74.91	7.7	33.58	8.2	24.2	3.50
I25	27 Aug 2018	1	21.62	79.47	8.2	33.69	8.2	23.3	0.44
I25	27 Aug 2018	2	21.46	79.45	8.1	33.69	8.2	23.4	0.46
I25	27 Aug 2018	3	20.18	79.57	8.1	33.68	8.2	23.7	0.48
I25	27 Aug 2018	4	18.93	79.98	8.3	33.64	8.2	24.0	0.53
I25	27 Aug 2018	5	17.70	80.64	8.3	33.59	8.2	24.3	0.66
I25	27 Aug 2018	6	16.26	80.96	8.2	33.55	8.2	24.6	0.86
I25	27 Aug 2018	7	15.48	82.77	8.2	33.51	8.1	24.7	0.85
I25	27 Aug 2018	8	15.40	82.98	8.1	33.50	8.1	24.7	0.88
I25	27 Aug 2018	9	15.41	83.15	8.1	33.50	8.1	24.7	0.90
I26	06 Aug 2018	1	23.86	79.31	NA	NA	8.2	22.1	0.41
I26	06 Aug 2018	2	23.72	79.38	NA	NA	8.2	22.6	0.41
I26	06 Aug 2018	3	23.34	79.96	NA	NA	8.2	22.9	0.41
I26	06 Aug 2018	4	22.86	80.29	NA	NA	8.3	23.3	0.42
I26	06 Aug 2018	5	22.21	80.18	NA	NA	8.3	23.7	0.46
I26	06 Aug 2018	6	21.20	79.15	NA	NA	8.3	23.9	0.45
I26	06 Aug 2018	7	20.66	76.33	NA	NA	8.2	23.8	0.47
I26	06 Aug 2018	8	18.60	75.70	NA	NA	8.2	24.6	0.48
I26	06 Aug 2018	9	16.74	76.64	NA	NA	8.2	24.9	0.42
I26	13 Aug 2018	1	23.13	71.48	8.7	33.68	8.3	22.9	0.89
I26	13 Aug 2018	2	22.71	71.44	8.9	33.68	8.3	23.0	0.93
I26	13 Aug 2018	3	21.86	72.56	9.4	33.67	8.3	23.2	0.95
I26	13 Aug 2018	4	21.47	72.74	9.6	33.66	8.3	23.3	1.19
I26	13 Aug 2018	5	20.57	73.68	10.0	33.65	8.3	23.6	1.65
I26	13 Aug 2018	6	20.51	73.08	10.0	33.63	8.3	23.6	2.02
I26	13 Aug 2018	7	20.36	71.92	10.0	33.63	8.3	23.6	2.18
I26	13 Aug 2018	8	19.82	71.69	9.9	33.64	8.3	23.8	2.48
I26	13 Aug 2018	9	19.01	70.56	9.5	33.62	8.3	24.0	3.20
I26	20 Aug 2018	1	21.95	73.15	8.5	33.67	8.3	23.2	1.07
I26	20 Aug 2018	2	21.13	73.08	9.0	33.69	8.3	23.5	1.09
I26	20 Aug 2018	3	20.29	71.60	9.2	33.64	8.3	23.6	1.31
I26	20 Aug 2018	4	19.54	72.33	8.3	33.63	8.2	23.8	1.49
I26	20 Aug 2018	5	19.18	71.64	8.3	33.64	8.2	23.9	2.02
I26	20 Aug 2018	6	18.84	73.23	8.3	33.62	8.2	24.0	2.36
I26	20 Aug 2018	7	18.47	71.52	8.7	33.61	8.2	24.1	3.40
I26	20 Aug 2018	8	18.35	70.31	8.8	33.60	8.2	24.1	4.82
I26	20 Aug 2018	9	17.95	71.38	8.3	33.60	8.2	24.2	5.12
I26	27 Aug 2018	1	21.53	79.24	8.2	33.68	8.2	23.3	0.42

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I26	27 Aug 2018	2	21.48	79.05	8.1	33.69	8.2	23.4	0.43
I26	27 Aug 2018	3	21.07	79.29	8.2	33.71	8.2	23.5	0.46
I26	27 Aug 2018	4	20.30	78.77	8.2	33.72	8.2	23.7	0.54
I26	27 Aug 2018	5	19.13	79.17	8.3	33.67	8.2	24.0	0.64
I26	27 Aug 2018	6	18.49	79.21	8.4	33.64	8.2	24.1	0.82
I26	27 Aug 2018	7	18.18	80.29	8.4	33.62	8.2	24.2	1.00
I26	27 Aug 2018	8	17.54	80.69	8.2	33.61	8.2	24.3	1.02
I26	27 Aug 2018	9	15.92	80.29	8.2	33.63	8.2	24.7	1.17
I32	06 Aug 2018	1	24.07	80.34	8.2	33.80	8.3	22.7	0.41
I32	06 Aug 2018	2	23.93	80.41	8.3	33.81	8.3	22.8	0.44
I32	06 Aug 2018	3	23.60	80.50	8.3	33.83	8.3	22.9	0.45
I32	06 Aug 2018	4	23.38	80.14	8.3	33.80	8.3	22.9	0.49
I32	06 Aug 2018	5	23.36	79.44	8.3	33.79	8.3	22.9	0.55
I32	06 Aug 2018	6	23.34	78.73	8.1	33.79	8.3	22.9	0.65
I32	06 Aug 2018	7	23.32	78.27	8.1	33.79	8.3	22.9	0.78
I32	06 Aug 2018	8	23.23	78.12	8.1	33.79	8.3	23.0	0.86
I32	06 Aug 2018	9	23.12	77.44	8.0	33.79	8.3	23.0	0.91
I32	06 Aug 2018	10	23.00	73.65	8.0	33.78	8.3	23.0	0.98
I32	13 Aug 2018	1	23.24	68.65	8.3	33.69	8.3	22.9	1.40
I32	13 Aug 2018	2	23.17	68.09	8.3	33.69	8.3	22.9	1.71
I32	13 Aug 2018	3	23.17	67.95	8.3	33.69	8.3	22.9	1.86
I32	13 Aug 2018	4	22.82	66.56	8.2	33.69	8.3	23.0	2.10
I32	13 Aug 2018	5	22.37	64.76	8.0	33.67	8.3	23.1	2.44
I32	13 Aug 2018	6	20.93	59.21	8.4	33.69	8.3	23.5	4.52
I32	13 Aug 2018	7	20.46	53.65	8.7	33.65	8.3	23.6	7.91
I32	13 Aug 2018	8	19.29	54.67	9.1	33.62	8.3	23.9	11.67
I32	13 Aug 2018	9	18.97	60.22	9.0	33.60	8.3	24.0	9.98
I32	13 Aug 2018	10	18.17	66.62	8.7	33.59	8.3	24.2	6.43
I32	20 Aug 2018	1	22.96	75.02	8.3	33.71	8.3	23.0	1.01
I32	20 Aug 2018	2	22.91	74.90	8.3	33.71	8.3	23.0	1.10
I32	20 Aug 2018	3	22.81	74.21	8.3	33.71	8.3	23.0	1.36
I32	20 Aug 2018	4	22.62	73.64	8.2	33.70	8.3	23.1	1.59
I32	20 Aug 2018	5	22.44	73.31	8.0	33.70	8.3	23.1	1.82
I32	20 Aug 2018	6	21.60	70.75	8.0	33.69	8.3	23.3	2.45
I32	20 Aug 2018	7	18.95	69.63	9.3	33.63	8.3	24.0	3.15
I32	20 Aug 2018	8	18.26	70.77	9.4	33.58	8.3	24.1	4.17
I32	20 Aug 2018	9	17.77	70.83	8.6	33.57	8.2	24.2	4.54
I32	20 Aug 2018	10	17.40	70.97	8.4	33.55	8.2	24.3	3.91
I32	27 Aug 2018	1	21.48	77.15	8.2	33.68	8.2	23.4	0.53
I32	27 Aug 2018	2	21.50	77.27	8.2	33.68	8.2	23.4	0.53
I32	27 Aug 2018	3	20.98	77.93	8.1	33.69	8.2	23.5	0.61
I32	27 Aug 2018	4	19.98	76.81	8.2	33.66	8.2	23.7	0.83
I32	27 Aug 2018	5	19.71	76.49	8.3	33.63	8.2	23.8	1.10
I32	27 Aug 2018	6	19.41	76.54	8.2	33.63	8.2	23.9	1.47
I32	27 Aug 2018	7	19.24	76.28	8.1	33.62	8.2	23.9	1.84
I32	27 Aug 2018	8	18.22	75.94	7.8	33.61	8.2	24.2	2.34
I32	27 Aug 2018	9	17.00	74.63	7.9	33.57	8.2	24.4	3.03
I32	27 Aug 2018	10	16.23	75.79	8.1	33.55	8.2	24.6	3.23
I39	06 Aug 2018	1	23.54	79.52	7.9	33.78	8.3	22.9	0.45
I39	06 Aug 2018	2	23.29	80.05	8.0	33.84	8.3	23.0	0.46

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I39	06 Aug 2018	3	22.12	80.06	8.4	33.82	8.3	23.3	0.51
I39	06 Aug 2018	4	21.72	79.89	8.5	33.87	8.3	23.4	0.62
I39	06 Aug 2018	5	20.44	79.53	8.8	33.78	8.2	23.7	0.73
I39	06 Aug 2018	6	19.78	79.42	8.8	33.81	8.2	23.9	0.87
I39	06 Aug 2018	7	18.68	80.24	9.0	33.70	8.2	24.1	0.94
I39	06 Aug 2018	8	18.37	80.30	9.0	33.72	8.2	24.2	0.98
I39	06 Aug 2018	9	17.65	80.08	9.1	33.66	8.2	24.3	1.08
I39	06 Aug 2018	10	16.59	80.25	8.9	33.72	8.2	24.6	1.15
I39	06 Aug 2018	11	15.16	80.27	8.7	33.66	8.2	24.9	1.29
I39	06 Aug 2018	12	14.86	80.57	8.5	33.59	8.1	24.9	1.67
I39	06 Aug 2018	13	14.70	81.00	8.4	33.57	8.1	24.9	1.88
I39	06 Aug 2018	14	14.67	81.09	8.4	33.56	8.1	24.9	1.99
I39	06 Aug 2018	15	14.56	81.34	8.3	33.56	8.1	25.0	2.12
I39	06 Aug 2018	16	14.51	81.77	8.3	33.56	8.1	25.0	1.98
I39	06 Aug 2018	17	14.39	81.87	8.3	33.56	8.1	25.0	2.08
I39	06 Aug 2018	18	14.35	81.59	8.2	33.57	8.1	25.0	1.97
I39	13 Aug 2018	1	23.29	73.53	8.7	33.68	8.3	22.9	0.89
I39	13 Aug 2018	2	23.26	73.62	8.7	33.69	8.3	22.9	0.91
I39	13 Aug 2018	3	22.33	74.79	9.1	33.70	8.3	23.1	1.00
I39	13 Aug 2018	4	21.02	77.51	9.5	33.69	8.3	23.5	1.11
I39	13 Aug 2018	5	19.61	80.24	9.9	33.66	8.3	23.8	1.33
I39	13 Aug 2018	6	19.33	79.33	10.1	33.63	8.3	23.9	1.76
I39	13 Aug 2018	7	19.11	78.29	10.1	33.62	8.3	23.9	2.39
I39	13 Aug 2018	8	19.02	77.87	10.1	33.61	8.3	24.0	2.84
I39	13 Aug 2018	9	18.91	77.74	10.0	33.61	8.3	24.0	3.21
I39	13 Aug 2018	10	18.87	77.61	10.0	33.62	8.3	24.0	3.43
I39	13 Aug 2018	11	18.82	76.95	9.9	33.62	8.3	24.0	3.59
I39	13 Aug 2018	12	18.77	76.59	9.8	33.62	8.3	24.0	3.60
I39	13 Aug 2018	13	18.50	76.00	9.6	33.62	8.3	24.1	3.91
I39	13 Aug 2018	14	18.37	74.41	9.3	33.61	8.3	24.1	4.09
I39	13 Aug 2018	15	17.46	75.49	8.8	33.61	8.3	24.3	3.52
I39	13 Aug 2018	16	17.32	76.41	8.6	33.59	8.3	24.4	2.92
I39	13 Aug 2018	17	17.26	76.89	8.6	33.59	8.3	24.4	2.56
I39	13 Aug 2018	18	17.25	77.01	8.6	33.59	8.3	24.4	2.35
I39	20 Aug 2018	1	22.62	81.44	8.1	33.73	8.2	23.1	0.85
I39	20 Aug 2018	2	22.62	80.65	8.1	33.73	8.2	23.1	0.88
I39	20 Aug 2018	3	22.59	81.54	8.1	33.73	8.2	23.1	0.94
I39	20 Aug 2018	4	22.52	81.38	8.1	33.73	8.2	23.1	1.13
I39	20 Aug 2018	5	22.47	81.27	8.1	33.73	8.2	23.1	1.21
I39	20 Aug 2018	6	22.40	81.24	8.1	33.72	8.2	23.1	1.31
I39	20 Aug 2018	7	22.23	80.91	8.2	33.72	8.2	23.2	1.45
I39	20 Aug 2018	8	22.01	80.73	8.2	33.71	8.2	23.2	1.67
I39	20 Aug 2018	9	21.51	80.99	8.3	33.70	8.2	23.4	1.70
I39	20 Aug 2018	10	21.10	81.31	8.5	33.68	8.2	23.5	1.71
I39	20 Aug 2018	11	20.94	81.24	8.6	33.67	8.2	23.5	1.84
I39	20 Aug 2018	12	20.53	81.02	8.9	33.66	8.3	23.6	1.96
I39	20 Aug 2018	13	20.36	80.66	8.9	33.65	8.3	23.6	2.10
I39	20 Aug 2018	14	20.18	80.30	8.9	33.64	8.3	23.7	2.18
I39	20 Aug 2018	15	19.68	80.15	8.9	33.64	8.3	23.8	2.34
I39	20 Aug 2018	16	18.54	79.85	8.8	33.63	8.3	24.1	2.48
I39	20 Aug 2018	17	17.18	79.84	8.8	33.59	8.2	24.4	2.71
I39	20 Aug 2018	18	17.12	79.90	8.6	33.56	8.2	24.4	2.81

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I39	27 Aug 2018	1	21.67	80.78	8.1	33.70	8.2	23.3	0.42
I39	27 Aug 2018	2	21.23	80.83	8.0	33.76	8.2	23.5	0.44
I39	27 Aug 2018	3	19.47	81.55	8.2	33.75	8.2	23.9	0.43
I39	27 Aug 2018	4	17.52	81.33	8.5	33.68	8.2	24.4	0.56
I39	27 Aug 2018	5	17.23	83.47	8.6	33.58	8.2	24.4	0.52
I39	27 Aug 2018	6	16.81	83.79	8.6	33.58	8.2	24.5	0.56
I39	27 Aug 2018	7	16.27	84.56	8.6	33.57	8.2	24.6	0.55
I39	27 Aug 2018	8	16.26	85.43	8.6	33.55	8.2	24.6	0.57
I39	27 Aug 2018	9	15.88	85.72	8.6	33.54	8.2	24.7	0.61
I39	27 Aug 2018	10	15.78	85.91	8.5	33.54	8.2	24.7	0.66
I39	27 Aug 2018	11	15.58	85.65	8.4	33.54	8.2	24.7	0.78
I39	27 Aug 2018	12	15.07	85.09	8.3	33.54	8.2	24.8	0.98
I39	27 Aug 2018	13	14.79	85.19	8.2	33.52	8.1	24.9	1.10
I39	27 Aug 2018	14	14.61	85.35	8.1	33.52	8.1	24.9	1.28
I39	27 Aug 2018	15	14.49	85.20	8.0	33.52	8.1	24.9	1.49
I39	27 Aug 2018	16	14.41	85.08	7.9	33.52	8.1	25.0	1.62
I39	27 Aug 2018	17	14.41	85.16	7.9	33.52	8.1	25.0	1.68
I39	27 Aug 2018	18	14.41	85.22	7.9	33.52	8.1	25.0	1.74
I40	06 Aug 2018	1	23.70	81.81	8.2	33.80	8.3	22.8	0.41
I40	06 Aug 2018	2	23.42	81.79	8.3	33.86	8.3	22.9	0.42
I40	06 Aug 2018	3	22.99	81.31	8.3	33.81	8.3	23.0	0.43
I40	06 Aug 2018	4	22.86	79.92	8.3	33.81	8.3	23.1	0.48
I40	06 Aug 2018	5	22.68	78.84	8.3	33.80	8.3	23.1	0.57
I40	06 Aug 2018	6	22.08	76.23	8.1	33.82	8.3	23.3	0.73
I40	06 Aug 2018	7	20.48	73.11	8.3	33.93	8.2	23.8	0.93
I40	06 Aug 2018	8	18.22	67.35	9.4	33.71	8.2	24.2	1.43
I40	06 Aug 2018	9	17.90	65.01	9.5	33.65	8.2	24.3	2.10
I40	06 Aug 2018	10	17.88	61.46	9.5	33.61	8.2	24.2	2.49
I40	13 Aug 2018	1	21.57	72.73	9.3	33.66	8.3	23.3	0.88
I40	13 Aug 2018	2	20.93	72.68	9.5	33.66	8.3	23.5	0.97
I40	13 Aug 2018	3	19.93	72.16	10.0	33.64	8.3	23.7	1.27
I40	13 Aug 2018	4	19.70	71.86	10.1	33.62	8.3	23.8	1.60
I40	13 Aug 2018	5	19.41	70.82	10.3	33.62	8.3	23.9	2.39
I40	13 Aug 2018	6	19.11	66.40	10.2	33.62	8.3	23.9	4.44
I40	13 Aug 2018	7	18.94	60.01	9.8	33.61	8.3	24.0	7.04
I40	13 Aug 2018	8	18.32	60.45	9.6	33.61	8.3	24.1	8.10
I40	13 Aug 2018	9	18.04	67.60	9.5	33.60	8.3	24.2	6.78
I40	13 Aug 2018	10	17.93	55.04	8.9	33.59	8.3	24.2	5.79
I40	20 Aug 2018	1	22.79	77.13	6.8	33.70	8.3	23.0	0.93
I40	20 Aug 2018	2	22.74	77.06	7.6	33.73	8.3	23.0	0.94
I40	20 Aug 2018	3	22.36	75.73	7.7	33.87	8.3	23.3	0.95
I40	20 Aug 2018	4	22.01	72.98	7.9	33.85	8.3	23.3	0.97
I40	20 Aug 2018	5	20.50	67.82	7.8	33.99	8.2	24.0	0.88
I40	20 Aug 2018	6	19.51	62.61	7.8	33.85	8.2	24.0	0.91
I40	20 Aug 2018	7	18.98	60.56	8.2	33.76	8.2	24.1	1.74
I40	20 Aug 2018	8	18.45	62.99	8.2	33.70	8.2	24.2	2.73
I40	20 Aug 2018	9	18.06	63.71	7.9	33.77	8.2	24.3	3.99
I40	20 Aug 2018	10	18.00	64.57	7.9	33.74	8.2	24.3	5.37
I40	27 Aug 2018	1	21.32	77.47	8.1	33.68	8.2	23.4	0.64
I40	27 Aug 2018	2	21.42	77.51	8.1	33.68	8.2	23.4	0.65
I40	27 Aug 2018	3	21.04	77.31	7.8	33.71	8.2	23.5	0.63

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I40	27 Aug 2018	4	19.24	77.27	7.9	33.75	8.2	24.0	0.74
I40	27 Aug 2018	5	17.41	79.33	8.2	33.68	8.2	24.4	0.89
I40	27 Aug 2018	6	16.96	80.08	8.3	33.59	8.2	24.4	1.00
I40	27 Aug 2018	7	16.53	81.08	8.3	33.57	8.2	24.5	1.06
I40	27 Aug 2018	8	16.25	81.39	8.2	33.55	8.2	24.6	1.13
I40	27 Aug 2018	9	16.02	81.38	8.1	33.54	8.2	24.6	1.25
I40	27 Aug 2018	10	15.79	80.42	8.0	33.54	8.1	24.7	1.56

NA = not available

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
22 Aug 2018	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
23 Aug 2018	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
22 Aug 2018	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
23 Aug 2018	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
22 Aug 2018	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
23 Aug 2018	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
22 Aug 2018	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
23 Aug 2018	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. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I10	21 Aug 2018	1039	2	<2	<2	<2	1.00	23.4	83.74	7.9	33.77	8.3
I10	21 Aug 2018	1039	12	6e	<2	<2	0.33	17.3	77.54	8.7	33.56	8.2
I10	21 Aug 2018	1039	18	<2	<2	<2	1.00	16.3	81.90	7.5	33.56	8.1
I11	21 Aug 2018	1027	2	<2	<2	<2	1.00	23.4	83.02	8.0	33.76	8.3
I11	21 Aug 2018	1027	6	<2	<2	<2	1.00	20.2	78.25	9.0	33.67	8.3
I11	21 Aug 2018	1027	11	2e	<2	<2	1.00	17.8	75.88	8.1	33.56	8.2
I12	22 Aug 2018	1021	2	<2	<2	<2	1.00	23.2	81.75	8.1	33.78	8.3
I12	22 Aug 2018	1021	18	36e	4e	4e	0.11	15.2	81.77	7.8	33.33	8.2
I12	22 Aug 2018	1021	27	6e	<2	20e	0.33	14.5	84.15	6.8	33.55	8.1
I13	22 Aug 2018	1054	2	<2	<2	4e	1.00	24.1	87.48	7.3	33.88	8.3
I13	22 Aug 2018	1054	18	<2	<2	<2	1.00	17.1	87.69	8.9	33.58	8.3
I13	22 Aug 2018	1054	37	<2	<2	<2	1.00	14.1	85.73	7.0	33.55	8.1
I14	22 Aug 2018	1109	2	2e	<2	<2	1.00	24.0	85.67	7.7	33.82	8.3
I14	22 Aug 2018	1109	18	<2	<2	4e	1.00	16.2	80.53	8.6	33.55	8.3
I14	22 Aug 2018	1109	27	<2	<2	8e	1.00	14.6	84.11	7.1	33.54	8.2
I16	22 Aug 2018	1011	2	<2	<2	40e	1.00	23.5	84.27	7.9	33.80	8.3
I16	22 Aug 2018	1011	18	<2	<2	<2	1.00	15.6	82.33	8.4	33.55	8.2
I16	22 Aug 2018	1011	27	<2	<2	2e	1.00	14.5	85.25	6.9	33.55	8.1
I18	22 Aug 2018	947	2	<2	<2	12e	1.00	23.7	85.46	7.8	33.81	8.3
I18	22 Aug 2018	947	12	4e	<2	2e	0.50	17.3	78.67	9.2	33.54	8.3
I18	22 Aug 2018	947	18	12e	2e	12e	0.17	15.7	83.14	7.5	33.53	8.2
I20	22 Aug 2018	830	2	<2	<2	6e	1.00	23.8	87.11	7.6	33.81	8.3
I20	22 Aug 2018	830	18	<2	<2	<2	1.00	17.4	89.37	8.5	33.55	8.2
I20	22 Aug 2018	830	55	<2	<2	<2	1.00	13.0	88.71	6.2	33.55	8.0
I21	22 Aug 2018	847	2	<2	<2	44	1.00	23.9	86.92	7.6	33.83	8.3
I21	22 Aug 2018	847	18	<2	<2	2e	1.00	16.6	89.22	8.6	33.52	8.2
I21	22 Aug 2018	847	37	<2	<2	4e	1.00	14.0	87.05	6.8	33.54	8.1
I22	22 Aug 2018	922	2	14e	<2	78	0.14	23.5	82.46	7.9	33.80	8.3
I22	22 Aug 2018	922	18	<2	<2	2e	1.00	15.3	83.54	8.5	33.53	8.2
I22	22 Aug 2018	922	27	<2	<2	2e	1.00	14.6	85.65	7.2	33.54	8.1
I23	22 Aug 2018	934	2	<2	<2	2e	1.00	23.5	84.11	7.9	33.80	8.3
I23	22 Aug 2018	934	12	<2	<2	<2	1.00	17.8	78.49	9.6	33.56	8.3
I23	22 Aug 2018	934	18	20e	2e	32e	0.10	15.8	82.97	8.1	33.43	8.2
I3	21 Aug 2018	929	2	<2	<2	<2	1.00	23.4	86.52	7.9	33.79	8.3
I3	21 Aug 2018	929	18	<2	<2	<2	1.00	15.8	87.13	8.7	33.51	8.2
I3	21 Aug 2018	929	27	2e	<2	<2	1.00	14.6	87.12	6.9	33.54	8.1

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH
I30	23 Aug 2018	1006	2	<2	<2	<2	1.00	23.4	82.28	8.1	33.77	8.3
I30	23 Aug 2018	1006	18	<2	<2	<2	1.00	15.3	85.08	8.0	33.53	8.2
I30	23 Aug 2018	1006	27	<2	<2	<2	1.00	14.6	85.12	7.1	33.55	8.1
I33	23 Aug 2018	905	2	<2	<2	<2	1.00	23.8	87.44	7.7	33.81	8.2
I33	23 Aug 2018	905	18	<2	<2	<2	1.00	17.2	86.04	8.5	33.56	8.2
I33	23 Aug 2018	905	27	<2	<2	<2	1.00	14.6	85.93	7.6	33.53	8.1
I36	23 Aug 2018	1047	2	<20	<2	<2	0.10	23.4	76.39	8.3	33.73	8.3
I36	23 Aug 2018	1047	6	<20	<2	<2	0.10	18.6	71.96	9.5	33.61	8.3
I36	23 Aug 2018	1047	11	<20	<2	<2	0.10	17.2	73.86	7.0	33.55	8.1
I37	23 Aug 2018	832	2	2e	2e	<2	1.00	21.9	77.34	8.2	33.74	8.2
I37	23 Aug 2018	832	6	2e	<2	<2	1.00	17.5	74.07	8.3	33.57	8.2
I37	23 Aug 2018	832	11	<20	<2	<2	0.10	16.7	76.83	7.7	33.55	8.1
I38	23 Aug 2018	1122	2	<2	<2	<2	1.00	23.7	77.76	8.2	33.73	8.3
I38	23 Aug 2018	1122	6	<2	<2	<2	1.00	19.0	75.03	9.3	33.59	8.3
I38	23 Aug 2018	1122	11	<2	<2	<2	1.00	17.5	75.21	7.1	33.57	8.1
I5	21 Aug 2018	953	2	<2	<2	<2	1.00	22.8	80.91	8.1	33.73	8.3
I5	21 Aug 2018	953	6	68	<2	4e	0.03	19.7	73.22	8.0	33.63	8.2
I5	21 Aug 2018	953	11	28e	4e	<2	0.14	17.3	77.68	7.9	33.57	8.2
I7	21 Aug 2018	819	2	<2	<2	<2	1.00	23.7	88.57	7.4	33.82	8.2
I7	21 Aug 2018	819	18	<2	<2	<2	1.00	17.3	89.51	8.5	33.54	8.2
I7	21 Aug 2018	819	52	<2	<2	<2	1.00	13.2	88.33	6.5	33.55	8.0
I8	21 Aug 2018	1112	2	<20	<2	<2	0.10	24.0	86.77	7.5	33.83	8.3
I8	21 Aug 2018	1112	18	<2	<2	<2	1.00	16.8	84.04	9.0	33.56	8.3
I8	21 Aug 2018	1112	37	<2	<2	<2	1.00	14.2	84.59	7.1	33.55	8.1
I9	21 Aug 2018	1054	2	<2	<2	<2	1.00	23.4	84.70	7.4	33.76	8.3
I9	21 Aug 2018	1054	18	<2	<2	<2	1.00	16.2	84.87	8.6	33.57	8.2
I9	21 Aug 2018	1054	27	4e	<2	<2	0.50	14.7	85.61	6.8	33.55	8.1

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	21 Aug 2018	Depth (m)	60
I1	21 Aug 2018	Arrive Time	845
I1	21 Aug 2018	Depart Time	853
I1	21 Aug 2018	Air Temp (C)	22
I1	21 Aug 2018	Weather	Partly Cloudy
I1	21 Aug 2018	Visibility (mi)	8
I1	21 Aug 2018	Wind Speed (kts)	14
I1	21 Aug 2018	Wind Dir	SE
I1	21 Aug 2018	Water Color	Bluish-Green
I1	21 Aug 2018	Wave Ht Low (ft)	3
I1	21 Aug 2018	Wave Period (sec)	11
I1	21 Aug 2018	Sea State	Calm
I1	21 Aug 2018	High Tide (ft)	3.71
I1	21 Aug 2018	High Tide Time	804
I1	21 Aug 2018	Low Tide (ft)	0.43
I1	21 Aug 2018	Low Tide Time	134
I1	21 Aug 2018	Comments	none
I10	21 Aug 2018	Depth (m)	21
I10	21 Aug 2018	Arrive Time	1039
I10	21 Aug 2018	Depart Time	1047
I10	21 Aug 2018	Air Temp (C)	22
I10	21 Aug 2018	Weather	Haze
I10	21 Aug 2018	Visibility (mi)	10
I10	21 Aug 2018	Wind Speed (kts)	12
I10	21 Aug 2018	Wind Dir	S
I10	21 Aug 2018	Water Color	Bluish-Green
I10	21 Aug 2018	Wave Ht Low (ft)	3
I10	21 Aug 2018	Wave Period (sec)	11
I10	21 Aug 2018	Sea State	Calm
I10	21 Aug 2018	High Tide (ft)	3.71
I10	21 Aug 2018	High Tide Time	804
I10	21 Aug 2018	Low Tide (ft)	0.43
I10	21 Aug 2018	Low Tide Time	134
I10	21 Aug 2018	Comments	none
I11	21 Aug 2018	Depth (m)	14
I11	21 Aug 2018	Arrive Time	1027
I11	21 Aug 2018	Depart Time	1033
I11	21 Aug 2018	Air Temp (C)	22
I11	21 Aug 2018	Weather	Haze
I11	21 Aug 2018	Visibility (mi)	10
I11	21 Aug 2018	Wind Speed (kts)	6
I11	21 Aug 2018	Wind Dir	S
I11	21 Aug 2018	Water Color	Bluish-Green
I11	21 Aug 2018	Wave Ht Low (ft)	3
I11	21 Aug 2018	Wave Period (sec)	11
I11	21 Aug 2018	Sea State	Calm
I11	21 Aug 2018	High Tide (ft)	3.71
I11	21 Aug 2018	High Tide Time	804
I11	21 Aug 2018	Low Tide (ft)	0.43

Station	Date	Parameter	Value
I11	21 Aug 2018	Low Tide Time	134
I11	21 Aug 2018	Comments	none
I12	22 Aug 2018	Depth (m)	29
I12	22 Aug 2018	Arrive Time	1021
I12	22 Aug 2018	Depart Time	1030
I12	22 Aug 2018	Air Temp (C)	22
I12	22 Aug 2018	Weather	Clear
I12	22 Aug 2018	Visibility (mi)	10
I12	22 Aug 2018	Wind Speed (kts)	4
I12	22 Aug 2018	Wind Dir	S
I12	22 Aug 2018	Water Color	Green
I12	22 Aug 2018	Wave Ht Low (ft)	3
I12	22 Aug 2018	Wave Period (sec)	9
I12	22 Aug 2018	Sea State	Calm
I12	22 Aug 2018	High Tide (ft)	3.9
I12	22 Aug 2018	High Tide Time	834
I12	22 Aug 2018	Low Tide (ft)	2.22
I12	22 Aug 2018	Low Tide Time	1334
I12	22 Aug 2018	Comments	Boats
I13	22 Aug 2018	Depth (m)	39
I13	22 Aug 2018	Arrive Time	1054
I13	22 Aug 2018	Depart Time	1058
I13	22 Aug 2018	Air Temp (C)	23
I13	22 Aug 2018	Weather	Clear
I13	22 Aug 2018	Visibility (mi)	10
I13	22 Aug 2018	Wind Speed (kts)	6
I13	22 Aug 2018	Wind Dir	S
I13	22 Aug 2018	Water Color	Green
I13	22 Aug 2018	Wave Ht Low (ft)	3
I13	22 Aug 2018	Wave Period (sec)	9
I13	22 Aug 2018	Sea State	Calm
I13	22 Aug 2018	High Tide (ft)	3.9
I13	22 Aug 2018	High Tide Time	834
I13	22 Aug 2018	Low Tide (ft)	2.22
I13	22 Aug 2018	Low Tide Time	1334
I13	22 Aug 2018	Comments	none
I14	22 Aug 2018	Depth (m)	29
I14	22 Aug 2018	Arrive Time	1109
I14	22 Aug 2018	Depart Time	1115
I14	22 Aug 2018	Air Temp (C)	23
I14	22 Aug 2018	Weather	Clear
I14	22 Aug 2018	Visibility (mi)	12
I14	22 Aug 2018	Wind Speed (kts)	5
I14	22 Aug 2018	Wind Dir	S
I14	22 Aug 2018	Water Color	Green
I14	22 Aug 2018	Wave Ht Low (ft)	3
I14	22 Aug 2018	Wave Period (sec)	9
I14	22 Aug 2018	Sea State	Calm
I14	22 Aug 2018	High Tide (ft)	3.9
I14	22 Aug 2018	High Tide Time	834
I14	22 Aug 2018	Low Tide (ft)	2.22
I14	22 Aug 2018	Low Tide Time	1334

Station	Date	Parameter	Value
I14	22 Aug 2018	Comments	Boats
I15	22 Aug 2018	Depth (m)	32
I15	22 Aug 2018	Arrive Time	1033
I15	22 Aug 2018	Depart Time	1037
I15	22 Aug 2018	Air Temp (C)	22
I15	22 Aug 2018	Weather	Clear
I15	22 Aug 2018	Visibility (mi)	10
I15	22 Aug 2018	Wind Speed (kts)	6
I15	22 Aug 2018	Wind Dir	S
I15	22 Aug 2018	Water Color	Green
I15	22 Aug 2018	Wave Ht Low (ft)	3
I15	22 Aug 2018	Wave Period (sec)	9
I15	22 Aug 2018	Sea State	Calm
I15	22 Aug 2018	High Tide (ft)	3.9
I15	22 Aug 2018	High Tide Time	834
I15	22 Aug 2018	Low Tide (ft)	2.22
I15	22 Aug 2018	Low Tide Time	1334
I15	22 Aug 2018	Comments	Boats
I16	22 Aug 2018	Depth (m)	29
I16	22 Aug 2018	Arrive Time	1011
I16	22 Aug 2018	Depart Time	1015
I16	22 Aug 2018	Air Temp (C)	23
I16	22 Aug 2018	Weather	Clear
I16	22 Aug 2018	Visibility (mi)	10
I16	22 Aug 2018	Wind Speed (kts)	6
I16	22 Aug 2018	Wind Dir	S
I16	22 Aug 2018	Water Color	Green
I16	22 Aug 2018	Wave Ht Low (ft)	3
I16	22 Aug 2018	Wave Period (sec)	9
I16	22 Aug 2018	Sea State	Calm
I16	22 Aug 2018	High Tide (ft)	3.9
I16	22 Aug 2018	High Tide Time	834
I16	22 Aug 2018	Low Tide (ft)	2.22
I16	22 Aug 2018	Low Tide Time	1334
I16	22 Aug 2018	Comments	none
I17	22 Aug 2018	Depth (m)	27
I17	22 Aug 2018	Arrive Time	1003
I17	22 Aug 2018	Depart Time	1007
I17	22 Aug 2018	Air Temp (C)	23
I17	22 Aug 2018	Weather	Clear
I17	22 Aug 2018	Visibility (mi)	10
I17	22 Aug 2018	Wind Speed (kts)	2
I17	22 Aug 2018	Wind Dir	S
I17	22 Aug 2018	Water Color	Green
I17	22 Aug 2018	Wave Ht Low (ft)	3
I17	22 Aug 2018	Wave Period (sec)	9
I17	22 Aug 2018	Sea State	Calm
I17	22 Aug 2018	High Tide (ft)	3.9
I17	22 Aug 2018	High Tide Time	834
I17	22 Aug 2018	Low Tide (ft)	2.22
I17	22 Aug 2018	Low Tide Time	1334
I17	22 Aug 2018	Comments	Boats

Station	Date	Parameter	Value
I18	22 Aug 2018	Depth (m)	21
I18	22 Aug 2018	Arrive Time	947
I18	22 Aug 2018	Depart Time	951
I18	22 Aug 2018	Air Temp (C)	22
I18	22 Aug 2018	Weather	Clear
I18	22 Aug 2018	Visibility (mi)	10
I18	22 Aug 2018	Wind Speed (kts)	5
I18	22 Aug 2018	Wind Dir	S
I18	22 Aug 2018	Water Color	Green
I18	22 Aug 2018	Wave Ht Low (ft)	3
I18	22 Aug 2018	Wave Period (sec)	9
I18	22 Aug 2018	Sea State	Calm
I18	22 Aug 2018	High Tide (ft)	3.9
I18	22 Aug 2018	High Tide Time	834
I18	22 Aug 2018	Low Tide (ft)	2.22
I18	22 Aug 2018	Low Tide Time	1334
I18	22 Aug 2018	Comments	Boats
I2	21 Aug 2018	Depth (m)	34
I2	21 Aug 2018	Arrive Time	915
I2	21 Aug 2018	Depart Time	920
I2	21 Aug 2018	Air Temp (C)	22
I2	21 Aug 2018	Weather	Partly Cloudy
I2	21 Aug 2018	Visibility (mi)	8
I2	21 Aug 2018	Wind Speed (kts)	8
I2	21 Aug 2018	Wind Dir	S
I2	21 Aug 2018	Water Color	Bluish-Green
I2	21 Aug 2018	Wave Ht Low (ft)	3
I2	21 Aug 2018	Wave Period (sec)	11
I2	21 Aug 2018	Sea State	Calm
I2	21 Aug 2018	High Tide (ft)	3.71
I2	21 Aug 2018	High Tide Time	804
I2	21 Aug 2018	Low Tide (ft)	0.43
I2	21 Aug 2018	Low Tide Time	134
I2	21 Aug 2018	Comments	none
I20	22 Aug 2018	Depth (m)	55
I20	22 Aug 2018	Arrive Time	830
I20	22 Aug 2018	Depart Time	835
I20	22 Aug 2018	Air Temp (C)	22
I20	22 Aug 2018	Weather	Haze
I20	22 Aug 2018	Visibility (mi)	4
I20	22 Aug 2018	Wind Speed (kts)	0
I20	22 Aug 2018	Wind Dir	
I20	22 Aug 2018	Water Color	Green
I20	22 Aug 2018	Wave Ht Low (ft)	3
I20	22 Aug 2018	Wave Period (sec)	9
I20	22 Aug 2018	Sea State	Calm
I20	22 Aug 2018	High Tide (ft)	3.9
I20	22 Aug 2018	High Tide Time	834
I20	22 Aug 2018	Low Tide (ft)	2.22
I20	22 Aug 2018	Low Tide Time	1334
I20	22 Aug 2018	Comments	none

Station	Date	Parameter	Value
I21	22 Aug 2018	Depth (m)	42
I21	22 Aug 2018	Arrive Time	847
I21	22 Aug 2018	Depart Time	853
I21	22 Aug 2018	Air Temp (C)	22
I21	22 Aug 2018	Weather	Haze
I21	22 Aug 2018	Visibility (mi)	4
I21	22 Aug 2018	Wind Speed (kts)	0
I21	22 Aug 2018	Wind Dir	
I21	22 Aug 2018	Water Color	Green
I21	22 Aug 2018	Wave Ht Low (ft)	3
I21	22 Aug 2018	Wave Period (sec)	9
I21	22 Aug 2018	Sea State	Calm
I21	22 Aug 2018	High Tide (ft)	3.9
I21	22 Aug 2018	High Tide Time	834
I21	22 Aug 2018	Low Tide (ft)	2.22
I21	22 Aug 2018	Low Tide Time	1334
I21	22 Aug 2018	Comments	none
I22	22 Aug 2018	Depth (m)	29
I22	22 Aug 2018	Arrive Time	922
I22	22 Aug 2018	Depart Time	926
I22	22 Aug 2018	Air Temp (C)	22
I22	22 Aug 2018	Weather	Haze
I22	22 Aug 2018	Visibility (mi)	4
I22	22 Aug 2018	Wind Speed (kts)	4
I22	22 Aug 2018	Wind Dir	SW
I22	22 Aug 2018	Water Color	Green
I22	22 Aug 2018	Wave Ht Low (ft)	3
I22	22 Aug 2018	Wave Period (sec)	9
I22	22 Aug 2018	Sea State	Calm
I22	22 Aug 2018	High Tide (ft)	3.9
I22	22 Aug 2018	High Tide Time	834
I22	22 Aug 2018	Low Tide (ft)	2.22
I22	22 Aug 2018	Low Tide Time	1334
I22	22 Aug 2018	Comments	none
I23	22 Aug 2018	Depth (m)	22
I23	22 Aug 2018	Arrive Time	934
I23	22 Aug 2018	Depart Time	937
I23	22 Aug 2018	Air Temp (C)	23
I23	22 Aug 2018	Weather	Haze
I23	22 Aug 2018	Visibility (mi)	4
I23	22 Aug 2018	Wind Speed (kts)	3
I23	22 Aug 2018	Wind Dir	SW
I23	22 Aug 2018	Water Color	Green
I23	22 Aug 2018	Wave Ht Low (ft)	3
I23	22 Aug 2018	Wave Period (sec)	9
I23	22 Aug 2018	Sea State	Calm
I23	22 Aug 2018	High Tide (ft)	3.9
I23	22 Aug 2018	High Tide Time	834
I23	22 Aug 2018	Low Tide (ft)	2.22
I23	22 Aug 2018	Low Tide Time	1334
I23	22 Aug 2018	Comments	Boats
I27	22 Aug 2018	Depth (m)	29

Station	Date	Parameter	Value
I27	22 Aug 2018	Arrive Time	907
I27	22 Aug 2018	Depart Time	911
I27	22 Aug 2018	Air Temp (C)	22
I27	22 Aug 2018	Weather	Haze
I27	22 Aug 2018	Visibility (mi)	4
I27	22 Aug 2018	Wind Speed (kts)	5
I27	22 Aug 2018	Wind Dir	S
I27	22 Aug 2018	Water Color	Green
I27	22 Aug 2018	Wave Ht Low (ft)	3
I27	22 Aug 2018	Wave Period (sec)	9
I27	22 Aug 2018	Sea State	Calm
I27	22 Aug 2018	High Tide (ft)	3.9
I27	22 Aug 2018	High Tide Time	834
I27	22 Aug 2018	Low Tide (ft)	2.22
I27	22 Aug 2018	Low Tide Time	1334
I27	22 Aug 2018	Comments	none
I28	23 Aug 2018	Depth (m)	58
I28	23 Aug 2018	Arrive Time	929
I28	23 Aug 2018	Depart Time	934
I28	23 Aug 2018	Air Temp (C)	22
I28	23 Aug 2018	Weather	Partly Cloudy
I28	23 Aug 2018	Visibility (mi)	8
I28	23 Aug 2018	Wind Speed (kts)	2
I28	23 Aug 2018	Wind Dir	N
I28	23 Aug 2018	Water Color	Blue
I28	23 Aug 2018	Wave Ht Low (ft)	3
I28	23 Aug 2018	Wave Period (sec)	11
I28	23 Aug 2018	Sea State	Wind ripples
I28	23 Aug 2018	High Tide (ft)	4.07
I28	23 Aug 2018	High Tide Time	858
I28	23 Aug 2018	Low Tide (ft)	2
I28	23 Aug 2018	Low Tide Time	1409
I28	23 Aug 2018	Comments	none
I29	23 Aug 2018	Depth (m)	38
I29	23 Aug 2018	Arrive Time	947
I29	23 Aug 2018	Depart Time	954
I29	23 Aug 2018	Air Temp (C)	22
I29	23 Aug 2018	Weather	Clear
I29	23 Aug 2018	Visibility (mi)	10
I29	23 Aug 2018	Wind Speed (kts)	4
I29	23 Aug 2018	Wind Dir	NW
I29	23 Aug 2018	Water Color	Blue
I29	23 Aug 2018	Wave Ht Low (ft)	3
I29	23 Aug 2018	Wave Period (sec)	11
I29	23 Aug 2018	Sea State	Wind ripples
I29	23 Aug 2018	High Tide (ft)	4.07
I29	23 Aug 2018	High Tide Time	858
I29	23 Aug 2018	Low Tide (ft)	2
I29	23 Aug 2018	Low Tide Time	1409
I29	23 Aug 2018	Comments	Lobster floats
I3	21 Aug 2018	Depth (m)	27
I3	21 Aug 2018	Arrive Time	929

Station	Date	Parameter	Value
I3	21 Aug 2018	Depart Time	937
I3	21 Aug 2018	Air Temp (C)	22
I3	21 Aug 2018	Weather	Partly Cloudy
I3	21 Aug 2018	Visibility (mi)	8
I3	21 Aug 2018	Wind Speed (kts)	7
I3	21 Aug 2018	Wind Dir	E
I3	21 Aug 2018	Water Color	Bluish-Green
I3	21 Aug 2018	Wave Ht Low (ft)	3
I3	21 Aug 2018	Wave Period (sec)	11
I3	21 Aug 2018	Sea State	Calm
I3	21 Aug 2018	High Tide (ft)	3.71
I3	21 Aug 2018	High Tide Time	804
I3	21 Aug 2018	Low Tide (ft)	0.43
I3	21 Aug 2018	Low Tide Time	134
I3	21 Aug 2018	Comments	none
I30	23 Aug 2018	Depth (m)	29
I30	23 Aug 2018	Arrive Time	1006
I30	23 Aug 2018	Depart Time	1012
I30	23 Aug 2018	Air Temp (C)	22
I30	23 Aug 2018	Weather	Clear
I30	23 Aug 2018	Visibility (mi)	10
I30	23 Aug 2018	Wind Speed (kts)	5
I30	23 Aug 2018	Wind Dir	NW
I30	23 Aug 2018	Water Color	Greenish-Blue
I30	23 Aug 2018	Wave Ht Low (ft)	3
I30	23 Aug 2018	Wave Period (sec)	11
I30	23 Aug 2018	Sea State	Wind ripples
I30	23 Aug 2018	High Tide (ft)	4.07
I30	23 Aug 2018	High Tide Time	858
I30	23 Aug 2018	Low Tide (ft)	2
I30	23 Aug 2018	Low Tide Time	1409
I30	23 Aug 2018	Comments	Kelp debris
I31	23 Aug 2018	Depth (m)	20
I31	23 Aug 2018	Arrive Time	1020
I31	23 Aug 2018	Depart Time	1026
I31	23 Aug 2018	Air Temp (C)	22
I31	23 Aug 2018	Weather	Clear
I31	23 Aug 2018	Visibility (mi)	10
I31	23 Aug 2018	Wind Speed (kts)	5
I31	23 Aug 2018	Wind Dir	NW
I31	23 Aug 2018	Water Color	Green
I31	23 Aug 2018	Wave Ht Low (ft)	3
I31	23 Aug 2018	Wave Period (sec)	11
I31	23 Aug 2018	Sea State	Wind ripples
I31	23 Aug 2018	High Tide (ft)	4.07
I31	23 Aug 2018	High Tide Time	858
I31	23 Aug 2018	Low Tide (ft)	2
I31	23 Aug 2018	Low Tide Time	1409
I31	23 Aug 2018	Comments	Kelp debris
I33	23 Aug 2018	Depth (m)	31
I33	23 Aug 2018	Arrive Time	905
I33	23 Aug 2018	Depart Time	913

Station	Date	Parameter	Value
I33	23 Aug 2018	Air Temp (C)	22
I33	23 Aug 2018	Weather	Partly Cloudy
I33	23 Aug 2018	Visibility (mi)	8
I33	23 Aug 2018	Wind Speed (kts)	2
I33	23 Aug 2018	Wind Dir	NE
I33	23 Aug 2018	Water Color	Bluish-Green
I33	23 Aug 2018	Wave Ht Low (ft)	3
I33	23 Aug 2018	Wave Period (sec)	11
I33	23 Aug 2018	Sea State	Wind ripples
I33	23 Aug 2018	High Tide (ft)	4.07
I33	23 Aug 2018	High Tide Time	858
I33	23 Aug 2018	Low Tide (ft)	2
I33	23 Aug 2018	Low Tide Time	1409
I33	23 Aug 2018	Comments	none
I34	23 Aug 2018	Depth (m)	21
I34	23 Aug 2018	Arrive Time	850
I34	23 Aug 2018	Depart Time	854
I34	23 Aug 2018	Air Temp (C)	22
I34	23 Aug 2018	Weather	Partly Cloudy
I34	23 Aug 2018	Visibility (mi)	8
I34	23 Aug 2018	Wind Speed (kts)	2
I34	23 Aug 2018	Wind Dir	NW
I34	23 Aug 2018	Water Color	Bluish-Green
I34	23 Aug 2018	Wave Ht Low (ft)	3
I34	23 Aug 2018	Wave Period (sec)	11
I34	23 Aug 2018	Sea State	Wind ripples
I34	23 Aug 2018	High Tide (ft)	4.07
I34	23 Aug 2018	High Tide Time	858
I34	23 Aug 2018	Low Tide (ft)	2
I34	23 Aug 2018	Low Tide Time	1409
I34	23 Aug 2018	Comments	none
I35	23 Aug 2018	Depth (m)	20
I35	23 Aug 2018	Arrive Time	1101
I35	23 Aug 2018	Depart Time	1107
I35	23 Aug 2018	Air Temp (C)	22
I35	23 Aug 2018	Weather	Clear
I35	23 Aug 2018	Visibility (mi)	10
I35	23 Aug 2018	Wind Speed (kts)	6
I35	23 Aug 2018	Wind Dir	W
I35	23 Aug 2018	Water Color	Green
I35	23 Aug 2018	Wave Ht Low (ft)	3
I35	23 Aug 2018	Wave Period (sec)	11
I35	23 Aug 2018	Sea State	Wind ripples
I35	23 Aug 2018	High Tide (ft)	4.07
I35	23 Aug 2018	High Tide Time	858
I35	23 Aug 2018	Low Tide (ft)	2
I35	23 Aug 2018	Low Tide Time	1409
I35	23 Aug 2018	Comments	Kelp debris
I36	23 Aug 2018	Depth (m)	12
I36	23 Aug 2018	Arrive Time	1047
I36	23 Aug 2018	Depart Time	1053
I36	23 Aug 2018	Air Temp (C)	22

Station	Date	Parameter	Value
I36	23 Aug 2018	Weather	Clear
I36	23 Aug 2018	Visibility (mi)	10
I36	23 Aug 2018	Wind Speed (kts)	9
I36	23 Aug 2018	Wind Dir	W
I36	23 Aug 2018	Water Color	Green
I36	23 Aug 2018	Wave Ht Low (ft)	3
I36	23 Aug 2018	Wave Period (sec)	11
I36	23 Aug 2018	Sea State	Wind ripples
I36	23 Aug 2018	High Tide (ft)	4.07
I36	23 Aug 2018	High Tide Time	858
I36	23 Aug 2018	Low Tide (ft)	2
I36	23 Aug 2018	Low Tide Time	1409
I36	23 Aug 2018	Comments	none
I37	23 Aug 2018	Depth (m)	14
I37	23 Aug 2018	Arrive Time	832
I37	23 Aug 2018	Depart Time	842
I37	23 Aug 2018	Air Temp (C)	22
I37	23 Aug 2018	Weather	Partly Cloudy
I37	23 Aug 2018	Visibility (mi)	8
I37	23 Aug 2018	Wind Speed (kts)	2
I37	23 Aug 2018	Wind Dir	NW
I37	23 Aug 2018	Water Color	Bluish-Green
I37	23 Aug 2018	Wave Ht Low (ft)	3
I37	23 Aug 2018	Wave Period (sec)	11
I37	23 Aug 2018	Sea State	Wind ripples
I37	23 Aug 2018	High Tide (ft)	4.07
I37	23 Aug 2018	High Tide Time	858
I37	23 Aug 2018	Low Tide (ft)	2
I37	23 Aug 2018	Low Tide Time	1409
I37	23 Aug 2018	Comments	Kelp debris
I38	23 Aug 2018	Depth (m)	13
I38	23 Aug 2018	Arrive Time	1122
I38	23 Aug 2018	Depart Time	1128
I38	23 Aug 2018	Air Temp (C)	22
I38	23 Aug 2018	Weather	Clear
I38	23 Aug 2018	Visibility (mi)	10
I38	23 Aug 2018	Wind Speed (kts)	2
I38	23 Aug 2018	Wind Dir	NW
I38	23 Aug 2018	Water Color	Green
I38	23 Aug 2018	Wave Ht Low (ft)	3
I38	23 Aug 2018	Wave Period (sec)	11
I38	23 Aug 2018	Sea State	Wind ripples
I38	23 Aug 2018	High Tide (ft)	4.07
I38	23 Aug 2018	High Tide Time	858
I38	23 Aug 2018	Low Tide (ft)	2
I38	23 Aug 2018	Low Tide Time	1409
I38	23 Aug 2018	Comments	none
I4	21 Aug 2018	Depth (m)	20
I4	21 Aug 2018	Arrive Time	944
I4	21 Aug 2018	Depart Time	949
I4	21 Aug 2018	Air Temp (C)	22
I4	21 Aug 2018	Weather	Haze

Station	Date	Parameter	Value
I4	21 Aug 2018	Visibility (mi)	10
I4	21 Aug 2018	Wind Speed (kts)	7
I4	21 Aug 2018	Wind Dir	SE
I4	21 Aug 2018	Water Color	Bluish-Green
I4	21 Aug 2018	Wave Ht Low (ft)	3
I4	21 Aug 2018	Wave Period (sec)	11
I4	21 Aug 2018	Sea State	Calm
I4	21 Aug 2018	High Tide (ft)	3.71
I4	21 Aug 2018	High Tide Time	804
I4	21 Aug 2018	Low Tide (ft)	0.43
I4	21 Aug 2018	Low Tide Time	134
I4	21 Aug 2018	Comments	none
I5	21 Aug 2018	Depth (m)	14
I5	21 Aug 2018	Arrive Time	953
I5	21 Aug 2018	Depart Time	958
I5	21 Aug 2018	Air Temp (C)	22
I5	21 Aug 2018	Weather	Haze
I5	21 Aug 2018	Visibility (mi)	10
I5	21 Aug 2018	Wind Speed (kts)	7
I5	21 Aug 2018	Wind Dir	S
I5	21 Aug 2018	Water Color	Greenish-Blue
I5	21 Aug 2018	Wave Ht Low (ft)	3
I5	21 Aug 2018	Wave Period (sec)	11
I5	21 Aug 2018	Sea State	Calm
I5	21 Aug 2018	High Tide (ft)	3.71
I5	21 Aug 2018	High Tide Time	804
I5	21 Aug 2018	Low Tide (ft)	0.43
I5	21 Aug 2018	Low Tide Time	134
I5	21 Aug 2018	Comments	none
I6	21 Aug 2018	Depth (m)	26
I6	21 Aug 2018	Arrive Time	1012
I6	21 Aug 2018	Depart Time	1017
I6	21 Aug 2018	Air Temp (C)	22
I6	21 Aug 2018	Weather	Haze
I6	21 Aug 2018	Visibility (mi)	10
I6	21 Aug 2018	Wind Speed (kts)	11
I6	21 Aug 2018	Wind Dir	SW
I6	21 Aug 2018	Water Color	Bluish-Green
I6	21 Aug 2018	Wave Ht Low (ft)	3
I6	21 Aug 2018	Wave Period (sec)	11
I6	21 Aug 2018	Sea State	Calm
I6	21 Aug 2018	High Tide (ft)	3.71
I6	21 Aug 2018	High Tide Time	804
I6	21 Aug 2018	Low Tide (ft)	0.43
I6	21 Aug 2018	Low Tide Time	134
I6	21 Aug 2018	Comments	none
I7	21 Aug 2018	Depth (m)	52
I7	21 Aug 2018	Arrive Time	819
I7	21 Aug 2018	Depart Time	835
I7	21 Aug 2018	Air Temp (C)	22
I7	21 Aug 2018	Weather	Partly Cloudy
I7	21 Aug 2018	Visibility (mi)	8

Station	Date	Parameter	Value
I7	21 Aug 2018	Wind Speed (kts)	7
I7	21 Aug 2018	Wind Dir	SE
I7	21 Aug 2018	Water Color	Bluish-Green
I7	21 Aug 2018	Wave Ht Low (ft)	3
I7	21 Aug 2018	Wave Period (sec)	11
I7	21 Aug 2018	Sea State	Calm
I7	21 Aug 2018	High Tide (ft)	3.71
I7	21 Aug 2018	High Tide Time	804
I7	21 Aug 2018	Low Tide (ft)	0.43
I7	21 Aug 2018	Low Tide Time	134
I7	21 Aug 2018	Comments	none
I8	21 Aug 2018	Depth (m)	36
I8	21 Aug 2018	Arrive Time	1112
I8	21 Aug 2018	Depart Time	1118
I8	21 Aug 2018	Air Temp (C)	22
I8	21 Aug 2018	Weather	Haze
I8	21 Aug 2018	Visibility (mi)	10
I8	21 Aug 2018	Wind Speed (kts)	13
I8	21 Aug 2018	Wind Dir	SW
I8	21 Aug 2018	Water Color	Bluish-Green
I8	21 Aug 2018	Wave Ht Low (ft)	3
I8	21 Aug 2018	Wave Period (sec)	11
I8	21 Aug 2018	Sea State	Calm
I8	21 Aug 2018	High Tide (ft)	3.71
I8	21 Aug 2018	High Tide Time	804
I8	21 Aug 2018	Low Tide (ft)	0.43
I8	21 Aug 2018	Low Tide Time	134
I8	21 Aug 2018	Comments	none
I9	21 Aug 2018	Depth (m)	30
I9	21 Aug 2018	Arrive Time	1054
I9	21 Aug 2018	Depart Time	1102
I9	21 Aug 2018	Air Temp (C)	22
I9	21 Aug 2018	Weather	Haze
I9	21 Aug 2018	Visibility (mi)	10
I9	21 Aug 2018	Wind Speed (kts)	13
I9	21 Aug 2018	Wind Dir	S
I9	21 Aug 2018	Water Color	Bluish-Green
I9	21 Aug 2018	Wave Ht Low (ft)	3
I9	21 Aug 2018	Wave Period (sec)	11
I9	21 Aug 2018	Sea State	Calm
I9	21 Aug 2018	High Tide (ft)	3.71
I9	21 Aug 2018	High Tide Time	804
I9	21 Aug 2018	Low Tide (ft)	0.43
I9	21 Aug 2018	Low Tide Time	134
I9	21 Aug 2018	Comments	Salinity at 5-9m was removed due to erroneous value

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 ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I1	21 Aug 2018	1	23.76	88.76	7.4	33.81	8.2	22.8	0.15
I1	21 Aug 2018	2	23.76	88.85	7.4	33.81	8.2	22.8	0.14
I1	21 Aug 2018	3	23.76	88.84	7.4	33.81	8.2	22.8	0.18
I1	21 Aug 2018	4	23.76	88.94	7.3	33.81	8.2	22.8	0.19
I1	21 Aug 2018	5	23.76	88.95	7.3	33.81	8.2	22.8	0.22
I1	21 Aug 2018	6	23.76	88.94	7.3	33.81	8.2	22.8	0.18
I1	21 Aug 2018	7	23.76	88.90	7.4	33.81	8.2	22.8	0.19
I1	21 Aug 2018	8	23.72	88.84	7.4	33.81	8.2	22.8	0.19
I1	21 Aug 2018	9	23.55	89.10	7.4	33.79	8.2	22.9	0.22
I1	21 Aug 2018	10	22.85	89.03	7.5	33.76	8.2	23.0	0.21
I1	21 Aug 2018	11	20.70	88.91	8.2	33.68	8.2	23.6	0.16
I1	21 Aug 2018	12	20.10	89.17	8.3	33.65	8.2	23.7	0.16
I1	21 Aug 2018	13	18.99	89.31	8.4	33.60	8.2	24.0	0.11
I1	21 Aug 2018	14	18.37	89.54	8.4	33.57	8.2	24.1	0.07
I1	21 Aug 2018	15	18.21	89.66	8.5	33.56	8.2	24.1	0.06
I1	21 Aug 2018	16	18.10	89.63	8.5	33.56	8.2	24.1	0.09
I1	21 Aug 2018	17	18.05	89.64	8.4	33.57	8.2	24.2	0.08
I1	21 Aug 2018	18	17.82	89.59	8.4	33.56	8.2	24.2	0.10
I1	21 Aug 2018	19	17.40	89.57	8.4	33.55	8.2	24.3	0.12
I1	21 Aug 2018	20	16.93	89.51	8.5	33.54	8.2	24.4	0.15
I1	21 Aug 2018	21	16.85	89.49	8.5	33.53	8.2	24.4	0.18
I1	21 Aug 2018	22	16.72	89.49	8.5	33.53	8.2	24.5	0.19
I1	21 Aug 2018	23	16.66	89.39	8.5	33.54	8.2	24.5	0.21
I1	21 Aug 2018	24	16.67	89.36	8.5	33.54	8.2	24.5	0.23
I1	21 Aug 2018	25	16.59	89.37	8.5	33.54	8.2	24.5	0.25
I1	21 Aug 2018	26	16.53	89.29	8.5	33.54	8.2	24.5	0.26
I1	21 Aug 2018	27	16.45	89.26	8.5	33.54	8.2	24.5	0.26
I1	21 Aug 2018	28	16.41	89.25	8.5	33.54	8.2	24.5	0.25
I1	21 Aug 2018	29	16.37	89.25	8.6	33.54	8.2	24.5	0.22
I1	21 Aug 2018	30	16.32	89.25	8.5	33.54	8.2	24.6	0.25
I1	21 Aug 2018	31	16.24	89.16	8.5	33.54	8.2	24.6	0.26
I1	21 Aug 2018	32	16.13	89.06	8.6	33.54	8.2	24.6	0.29
I1	21 Aug 2018	33	16.04	89.03	8.5	33.54	8.2	24.6	0.31
I1	21 Aug 2018	34	15.89	88.85	8.6	33.54	8.2	24.7	0.38
I1	21 Aug 2018	35	15.66	88.66	8.6	33.54	8.2	24.7	0.43
I1	21 Aug 2018	36	15.38	88.48	8.6	33.53	8.2	24.8	0.50
I1	21 Aug 2018	37	15.02	88.37	8.6	33.52	8.2	24.8	0.63
I1	21 Aug 2018	38	14.76	88.16	8.6	33.51	8.2	24.9	0.75
I1	21 Aug 2018	39	14.74	88.12	8.6	33.51	8.2	24.9	0.85
I1	21 Aug 2018	40	14.60	88.11	8.5	33.51	8.2	24.9	0.90
I1	21 Aug 2018	41	14.52	87.92	8.4	33.51	8.2	24.9	1.00
I1	21 Aug 2018	42	14.33	87.66	8.1	33.52	8.2	25.0	1.08
I1	21 Aug 2018	43	14.26	87.98	7.9	33.53	8.1	25.0	1.10
I1	21 Aug 2018	44	14.23	88.00	7.8	33.53	8.1	25.0	1.03
I1	21 Aug 2018	45	14.08	88.13	7.5	33.54	8.1	25.0	1.05
I1	21 Aug 2018	46	14.02	88.33	7.4	33.54	8.1	25.1	0.98
I1	21 Aug 2018	47	13.71	88.42	7.2	33.54	8.1	25.1	0.93
I1	21 Aug 2018	48	13.67	88.63	7.1	33.54	8.1	25.1	0.87
I1	21 Aug 2018	49	13.61	88.62	7.1	33.54	8.1	25.1	0.84
I1	21 Aug 2018	50	13.60	88.52	7.0	33.54	8.1	25.1	0.82
I1	21 Aug 2018	51	13.48	88.64	7.0	33.54	8.1	25.2	0.78

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I1	21 Aug 2018	52	13.47	88.76	6.9	33.54	8.1	25.2	0.78
I1	21 Aug 2018	53	13.41	88.60	6.9	33.54	8.1	25.2	0.75
I1	21 Aug 2018	54	13.36	88.58	6.8	33.54	8.1	25.2	0.71
I1	21 Aug 2018	55	13.36	88.74	6.8	33.54	8.1	25.2	0.71
I1	21 Aug 2018	56	13.32	88.70	6.8	33.54	8.1	25.2	0.77
I1	21 Aug 2018	57	13.30	88.84	6.8	33.54	8.0	25.2	0.69
I1	21 Aug 2018	58	13.29	88.81	6.7	33.54	8.0	25.2	0.66
I1	21 Aug 2018	59	13.27	88.83	6.7	33.54	8.0	25.2	0.71
I1	21 Aug 2018	60	13.26	88.82	6.6	33.54	8.0	25.2	0.73
I10	21 Aug 2018	1	23.36	83.77	7.9	33.77	8.3	22.9	0.42
I10	21 Aug 2018	2	23.37	83.74	7.9	33.77	8.3	22.9	0.42
I10	21 Aug 2018	3	23.24	83.92	7.9	33.78	8.3	22.9	0.46
I10	21 Aug 2018	4	22.36	83.53	8.3	33.77	8.3	23.2	0.59
I10	21 Aug 2018	5	20.98	81.53	9.0	33.68	8.3	23.5	0.87
I10	21 Aug 2018	6	20.33	79.84	9.4	33.65	8.3	23.6	1.19
I10	21 Aug 2018	7	19.45	78.47	9.8	33.62	8.3	23.9	1.48
I10	21 Aug 2018	8	18.77	76.17	10.1	33.59	8.3	24.0	1.99
I10	21 Aug 2018	9	18.16	75.74	9.9	33.59	8.3	24.1	2.60
I10	21 Aug 2018	10	17.58	78.04	9.8	33.58	8.3	24.3	2.67
I10	21 Aug 2018	11	17.45	80.05	9.4	33.56	8.3	24.3	2.77
I10	21 Aug 2018	12	17.28	77.54	8.7	33.56	8.2	24.3	3.57
I10	21 Aug 2018	13	17.13	76.50	8.3	33.56	8.2	24.4	4.02
I10	21 Aug 2018	14	16.90	76.30	8.0	33.57	8.2	24.4	4.33
I10	21 Aug 2018	15	16.72	76.62	7.9	33.57	8.2	24.5	4.52
I10	21 Aug 2018	16	16.57	78.38	7.8	33.56	8.2	24.5	3.83
I10	21 Aug 2018	17	16.48	80.62	7.7	33.56	8.2	24.5	2.79
I10	21 Aug 2018	18	16.34	81.90	7.5	33.56	8.1	24.6	2.20
I10	21 Aug 2018	19	16.26	82.15	7.2	33.56	8.1	24.6	1.73
I11	21 Aug 2018	1	23.41	83.03	8.0	33.76	8.3	22.9	0.52
I11	21 Aug 2018	2	23.41	83.02	8.0	33.76	8.3	22.9	0.51
I11	21 Aug 2018	3	23.26	82.80	8.1	33.76	8.3	22.9	0.63
I11	21 Aug 2018	4	22.99	81.53	8.2	33.73	8.3	23.0	0.86
I11	21 Aug 2018	5	22.75	80.57	8.1	33.71	8.3	23.0	1.09
I11	21 Aug 2018	6	20.21	78.25	9.0	33.67	8.3	23.7	1.48
I11	21 Aug 2018	7	18.54	76.19	9.5	33.58	8.3	24.1	2.18
I11	21 Aug 2018	8	18.40	74.61	9.1	33.56	8.3	24.1	2.86
I11	21 Aug 2018	9	18.03	74.92	8.9	33.55	8.2	24.2	3.06
I11	21 Aug 2018	10	17.94	75.65	8.7	33.56	8.2	24.2	3.19
I11	21 Aug 2018	11	17.75	75.88	8.1	33.56	8.2	24.2	3.08
I11	21 Aug 2018	12	17.22	78.87	7.5	33.56	8.2	24.4	2.10
I11	21 Aug 2018	13	17.15	79.84	7.3	33.56	8.2	24.4	1.42
I12	22 Aug 2018	1	23.33	81.58	8.0	33.79	8.3	22.9	0.34
I12	22 Aug 2018	2	23.21	81.75	8.1	33.78	8.3	22.9	0.40
I12	22 Aug 2018	3	22.93	81.61	8.2	33.77	8.3	23.0	0.42
I12	22 Aug 2018	4	22.42	81.57	8.5	33.75	8.3	23.1	0.53
I12	22 Aug 2018	5	21.48	77.64	9.1	33.70	8.3	23.4	0.75
I12	22 Aug 2018	6	20.19	75.67	9.7	33.65	8.3	23.7	1.20
I12	22 Aug 2018	7	19.75	74.78	9.8	33.63	8.3	23.8	1.71
I12	22 Aug 2018	8	19.46	76.00	9.5	33.63	8.3	23.9	1.91
I12	22 Aug 2018	9	18.26	75.64	9.5	33.60	8.3	24.1	2.19
I12	22 Aug 2018	10	17.87	75.12	9.3	33.58	8.3	24.2	2.62
I12	22 Aug 2018	11	17.29	75.97	9.1	33.57	8.3	24.3	3.12

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I12	22 Aug 2018	12	16.86	76.91	8.9	33.55	8.3	24.4	3.44
I12	22 Aug 2018	13	16.36	78.21	8.6	33.52	8.3	24.5	3.54
I12	22 Aug 2018	14	16.02	79.54	8.4	33.46	8.2	24.6	3.32
I12	22 Aug 2018	15	15.74	80.41	8.2	33.42	8.2	24.6	3.10
I12	22 Aug 2018	16	15.76	80.62	8.1	33.42	8.2	24.6	3.07
I12	22 Aug 2018	17	15.56	80.73	7.8	33.39	8.2	24.6	2.99
I12	22 Aug 2018	18	15.17	81.77	7.8	33.33	8.2	24.6	2.73
I12	22 Aug 2018	19	15.27	82.30	8.1	33.49	8.2	24.7	2.59
I12	22 Aug 2018	20	15.23	82.93	8.2	33.52	8.2	24.8	2.54
I12	22 Aug 2018	21	15.16	82.72	7.9	33.54	8.2	24.8	2.58
I12	22 Aug 2018	22	15.13	82.56	7.6	33.54	8.2	24.8	2.54
I12	22 Aug 2018	23	15.08	82.36	7.2	33.55	8.1	24.8	2.38
I12	22 Aug 2018	24	14.90	82.53	7.0	33.55	8.1	24.9	2.27
I12	22 Aug 2018	25	14.74	82.87	7.0	33.55	8.1	24.9	2.27
I12	22 Aug 2018	26	14.65	82.96	6.9	33.55	8.1	24.9	2.13
I12	22 Aug 2018	27	14.50	84.15	6.8	33.55	8.1	25.0	1.79
I12	22 Aug 2018	28	14.52	84.60	6.8	33.55	8.1	25.0	1.60
I13	22 Aug 2018	1	24.24	87.27	6.6	33.91	8.3	22.7	0.29
I13	22 Aug 2018	2	24.15	87.48	7.3	33.88	8.3	22.8	0.26
I13	22 Aug 2018	3	24.02	87.62	7.5	33.85	8.3	22.8	0.35
I13	22 Aug 2018	4	23.98	87.82	7.5	33.84	8.3	22.8	0.30
I13	22 Aug 2018	5	23.77	87.69	7.6	33.83	8.3	22.8	0.25
I13	22 Aug 2018	6	23.57	87.41	7.7	33.81	8.3	22.9	0.35
I13	22 Aug 2018	7	23.40	87.41	7.8	33.79	8.3	22.9	0.28
I13	22 Aug 2018	8	22.92	87.06	7.8	33.82	8.3	23.1	0.28
I13	22 Aug 2018	9	21.76	87.26	8.0	33.78	8.3	23.4	0.29
I13	22 Aug 2018	10	20.89	87.61	8.1	33.75	8.3	23.6	0.28
I13	22 Aug 2018	11	20.24	87.85	8.2	33.70	8.3	23.7	0.24
I13	22 Aug 2018	12	19.81	88.04	8.3	33.70	8.3	23.8	0.23
I13	22 Aug 2018	13	19.51	87.82	8.4	33.66	8.3	23.9	0.25
I13	22 Aug 2018	14	18.98	87.23	8.5	33.67	8.3	24.0	0.28
I13	22 Aug 2018	15	18.52	86.76	8.6	33.63	8.3	24.1	0.35
I13	22 Aug 2018	16	18.03	86.93	8.7	33.65	8.3	24.2	0.37
I13	22 Aug 2018	17	17.36	87.25	8.9	33.60	8.3	24.4	0.44
I13	22 Aug 2018	18	17.14	87.69	8.9	33.58	8.3	24.4	0.46
I13	22 Aug 2018	19	16.91	87.71	8.8	33.57	8.3	24.4	0.50
I13	22 Aug 2018	20	16.61	85.73	8.7	33.58	8.3	24.5	0.71
I13	22 Aug 2018	21	16.24	82.68	8.4	33.55	8.2	24.6	1.26
I13	22 Aug 2018	22	15.88	80.66	8.3	33.53	8.2	24.6	1.97
I13	22 Aug 2018	23	15.65	81.14	8.3	33.53	8.2	24.7	2.72
I13	22 Aug 2018	24	15.55	82.10	8.3	33.54	8.2	24.7	2.95
I13	22 Aug 2018	25	15.39	82.60	8.3	33.54	8.2	24.8	2.94
I13	22 Aug 2018	26	15.34	82.93	8.3	33.54	8.2	24.8	2.97
I13	22 Aug 2018	27	15.31	82.94	8.2	33.55	8.2	24.8	3.00
I13	22 Aug 2018	28	15.23	83.12	8.2	33.55	8.2	24.8	3.07
I13	22 Aug 2018	29	14.94	83.87	8.3	33.55	8.2	24.9	2.93
I13	22 Aug 2018	30	14.76	84.62	8.3	33.54	8.2	24.9	2.78
I13	22 Aug 2018	31	14.57	85.34	8.3	33.53	8.2	24.9	2.53
I13	22 Aug 2018	32	14.51	86.44	8.2	33.54	8.2	24.9	2.16
I13	22 Aug 2018	33	14.36	86.81	7.9	33.54	8.2	25.0	1.93
I13	22 Aug 2018	34	14.21	85.50	7.5	33.55	8.2	25.0	2.26
I13	22 Aug 2018	35	14.15	84.48	7.2	33.55	8.2	25.0	2.83
I13	22 Aug 2018	36	14.11	85.65	7.1	33.55	8.1	25.0	2.65
I13	22 Aug 2018	37	14.10	85.73	7.0	33.55	8.1	25.0	2.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I13	22 Aug 2018	38	14.09	86.44	7.0	33.55	8.1	25.0	1.95
I14	22 Aug 2018	1	24.01	84.23	7.8	33.82	8.3	22.7	0.33
I14	22 Aug 2018	2	24.01	85.67	7.7	33.82	8.3	22.7	0.33
I14	22 Aug 2018	3	23.78	85.85	7.7	33.82	8.3	22.8	0.31
I14	22 Aug 2018	4	23.54	86.05	7.8	33.80	8.3	22.9	0.33
I14	22 Aug 2018	5	23.44	86.22	7.8	33.80	8.3	22.9	0.33
I14	22 Aug 2018	6	22.64	86.12	8.2	33.77	8.3	23.1	0.36
I14	22 Aug 2018	7	21.57	82.93	9.0	33.71	8.3	23.4	0.60
I14	22 Aug 2018	8	20.83	78.59	9.5	33.67	8.3	23.5	0.98
I14	22 Aug 2018	9	20.41	77.72	9.7	33.65	8.3	23.6	1.28
I14	22 Aug 2018	10	20.11	76.60	9.7	33.63	8.4	23.7	1.63
I14	22 Aug 2018	11	19.51	76.06	9.6	33.63	8.4	23.8	1.89
I14	22 Aug 2018	12	18.95	78.20	9.4	33.62	8.3	24.0	1.92
I14	22 Aug 2018	13	18.14	78.27	9.4	33.60	8.3	24.2	2.13
I14	22 Aug 2018	14	17.71	77.97	9.4	33.58	8.3	24.3	2.53
I14	22 Aug 2018	15	17.43	78.39	9.2	33.57	8.3	24.3	2.73
I14	22 Aug 2018	16	17.01	79.12	9.0	33.56	8.3	24.4	2.94
I14	22 Aug 2018	17	16.57	80.10	8.8	33.55	8.3	24.5	3.18
I14	22 Aug 2018	18	16.24	80.53	8.6	33.55	8.3	24.6	3.20
I14	22 Aug 2018	19	15.93	81.48	8.5	33.55	8.2	24.6	3.22
I14	22 Aug 2018	20	15.81	81.70	8.4	33.55	8.2	24.7	3.23
I14	22 Aug 2018	21	15.47	82.83	8.4	33.54	8.2	24.7	3.01
I14	22 Aug 2018	22	15.15	84.44	8.5	33.53	8.2	24.8	2.59
I14	22 Aug 2018	23	15.06	84.63	8.2	33.53	8.2	24.8	2.40
I14	22 Aug 2018	24	14.93	83.40	7.6	33.53	8.2	24.9	2.39
I14	22 Aug 2018	25	14.83	84.42	7.5	33.54	8.2	24.9	2.25
I14	22 Aug 2018	26	14.74	84.11	7.4	33.54	8.2	24.9	2.33
I14	22 Aug 2018	27	14.62	84.11	7.1	33.54	8.2	24.9	2.21
I14	22 Aug 2018	28	14.57	85.38	6.9	33.54	8.1	24.9	1.69
I15	22 Aug 2018	1	24.01	84.08	7.6	33.83	8.3	22.8	0.33
I15	22 Aug 2018	2	23.96	84.94	7.6	33.83	8.3	22.8	0.35
I15	22 Aug 2018	3	23.93	85.28	7.6	33.83	8.3	22.8	0.35
I15	22 Aug 2018	4	23.46	85.39	7.7	33.82	8.3	22.9	0.30
I15	22 Aug 2018	5	22.04	84.50	8.4	33.74	8.3	23.2	0.39
I15	22 Aug 2018	6	21.50	82.15	8.8	33.70	8.3	23.4	0.57
I15	22 Aug 2018	7	21.08	80.09	9.0	33.68	8.3	23.5	0.83
I15	22 Aug 2018	8	20.52	76.91	9.3	33.67	8.3	23.6	1.35
I15	22 Aug 2018	9	19.63	75.88	9.5	33.64	8.3	23.8	1.82
I15	22 Aug 2018	10	18.85	75.56	9.6	33.61	8.3	24.0	2.40
I15	22 Aug 2018	11	18.24	75.94	9.6	33.58	8.3	24.1	2.83
I15	22 Aug 2018	12	17.77	76.72	9.3	33.58	8.3	24.2	3.10
I15	22 Aug 2018	13	17.33	76.36	9.2	33.57	8.3	24.3	3.48
I15	22 Aug 2018	14	17.31	76.47	9.1	33.56	8.3	24.3	3.71
I15	22 Aug 2018	15	16.92	76.99	8.8	33.57	8.3	24.4	3.86
I15	22 Aug 2018	16	16.31	78.80	8.7	33.55	8.3	24.6	3.81
I15	22 Aug 2018	17	16.13	79.58	8.6	33.54	8.3	24.6	3.83
I15	22 Aug 2018	18	16.01	80.49	8.6	33.54	8.2	24.6	3.72
I15	22 Aug 2018	19	15.93	81.16	8.5	33.55	8.2	24.6	3.49
I15	22 Aug 2018	20	15.74	81.77	8.3	33.55	8.2	24.7	3.20
I15	22 Aug 2018	21	15.38	82.52	8.3	33.55	8.2	24.8	2.87
I15	22 Aug 2018	22	15.15	84.16	8.5	33.54	8.2	24.8	2.42
I15	22 Aug 2018	23	14.99	85.06	8.3	33.54	8.2	24.8	2.19
I15	22 Aug 2018	24	14.87	85.40	8.2	33.53	8.2	24.9	2.06

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I15	22 Aug 2018	25	14.88	85.31	8.2	33.54	8.2	24.9	2.06
I15	22 Aug 2018	26	14.87	85.20	8.1	33.54	8.2	24.9	2.10
I15	22 Aug 2018	27	14.78	83.91	7.6	33.54	8.2	24.9	2.49
I15	22 Aug 2018	28	14.59	82.94	7.1	33.55	8.1	24.9	2.73
I15	22 Aug 2018	29	14.48	83.43	7.0	33.55	8.1	25.0	2.51
I15	22 Aug 2018	30	14.41	84.09	7.0	33.55	8.1	25.0	2.20
I15	22 Aug 2018	31	14.38	84.49	6.9	33.55	8.1	25.0	1.96
I16	22 Aug 2018	1	23.56	84.20	7.9	33.80	8.3	22.9	0.35
I16	22 Aug 2018	2	23.47	84.27	7.9	33.80	8.3	22.9	0.39
I16	22 Aug 2018	3	23.23	84.62	8.0	33.78	8.3	22.9	0.40
I16	22 Aug 2018	4	21.30	84.01	9.1	33.73	8.3	23.4	0.62
I16	22 Aug 2018	5	20.48	78.72	9.6	33.64	8.3	23.6	1.07
I16	22 Aug 2018	6	19.80	76.76	9.8	33.64	8.3	23.8	1.52
I16	22 Aug 2018	7	19.37	75.61	9.8	33.62	8.3	23.9	2.05
I16	22 Aug 2018	8	18.86	75.78	9.6	33.61	8.3	24.0	2.27
I16	22 Aug 2018	9	18.17	76.85	9.5	33.59	8.3	24.2	2.48
I16	22 Aug 2018	10	17.72	77.32	9.3	33.58	8.3	24.3	2.74
I16	22 Aug 2018	11	17.38	78.01	9.2	33.57	8.3	24.3	3.07
I16	22 Aug 2018	12	17.09	78.32	9.1	33.56	8.3	24.4	3.37
I16	22 Aug 2018	13	16.97	78.60	8.9	33.56	8.3	24.4	3.47
I16	22 Aug 2018	14	16.53	79.32	8.7	33.55	8.3	24.5	3.61
I16	22 Aug 2018	15	16.25	80.31	8.6	33.55	8.3	24.6	3.54
I16	22 Aug 2018	16	16.02	81.29	8.5	33.55	8.2	24.6	3.27
I16	22 Aug 2018	17	15.87	81.98	8.4	33.55	8.2	24.7	3.08
I16	22 Aug 2018	18	15.62	82.33	8.4	33.55	8.2	24.7	2.90
I16	22 Aug 2018	19	15.37	83.19	8.5	33.54	8.2	24.8	2.62
I16	22 Aug 2018	20	15.26	84.68	8.5	33.54	8.2	24.8	2.44
I16	22 Aug 2018	21	15.06	85.15	8.5	33.54	8.2	24.8	2.29
I16	22 Aug 2018	22	15.05	84.96	8.4	33.54	8.2	24.8	2.35
I16	22 Aug 2018	23	14.98	84.74	8.2	33.54	8.2	24.8	2.32
I16	22 Aug 2018	24	14.83	84.50	7.8	33.54	8.2	24.9	2.24
I16	22 Aug 2018	25	14.67	85.08	7.1	33.54	8.2	24.9	1.87
I16	22 Aug 2018	26	14.58	85.07	6.9	33.55	8.1	24.9	1.71
I16	22 Aug 2018	27	14.54	85.25	6.9	33.55	8.1	24.9	1.55
I16	22 Aug 2018	28	14.53	85.51	6.8	33.55	8.1	25.0	1.38
I17	22 Aug 2018	1	23.48	83.58	8.1	33.78	8.3	22.9	0.40
I17	22 Aug 2018	2	23.45	83.45	8.1	33.78	8.3	22.9	0.42
I17	22 Aug 2018	3	23.32	83.65	8.2	33.78	8.3	22.9	0.44
I17	22 Aug 2018	4	22.86	83.75	8.4	33.76	8.3	23.0	0.53
I17	22 Aug 2018	5	21.64	82.80	8.8	33.72	8.3	23.3	0.68
I17	22 Aug 2018	6	20.77	81.96	9.1	33.68	8.3	23.6	0.82
I17	22 Aug 2018	7	20.27	81.40	9.2	33.65	8.3	23.7	0.95
I17	22 Aug 2018	8	19.71	80.85	9.3	33.64	8.3	23.8	1.11
I17	22 Aug 2018	9	19.13	80.83	9.4	33.62	8.3	23.9	1.25
I17	22 Aug 2018	10	18.46	80.82	9.4	33.60	8.3	24.1	1.45
I17	22 Aug 2018	11	17.94	80.56	9.4	33.58	8.3	24.2	1.71
I17	22 Aug 2018	12	17.77	80.37	9.1	33.58	8.3	24.2	1.92
I17	22 Aug 2018	13	17.04	80.22	9.0	33.57	8.3	24.4	2.47
I17	22 Aug 2018	14	16.61	80.06	8.8	33.55	8.3	24.5	2.99
I17	22 Aug 2018	15	16.33	80.60	8.7	33.55	8.3	24.6	3.06
I17	22 Aug 2018	16	16.12	81.45	8.6	33.55	8.2	24.6	2.86
I17	22 Aug 2018	17	15.94	82.09	8.6	33.55	8.2	24.6	2.72
I17	22 Aug 2018	18	15.71	83.06	8.6	33.55	8.2	24.7	2.57

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I17	22 Aug 2018	19	15.63	83.61	8.6	33.54	8.2	24.7	2.39
I17	22 Aug 2018	20	15.41	84.17	8.5	33.54	8.2	24.8	2.28
I17	22 Aug 2018	21	15.26	84.44	8.4	33.54	8.2	24.8	2.34
I17	22 Aug 2018	22	15.12	84.26	8.0	33.54	8.2	24.8	2.49
I17	22 Aug 2018	23	14.99	83.47	7.4	33.54	8.2	24.8	2.78
I17	22 Aug 2018	24	14.88	83.10	7.1	33.54	8.1	24.9	2.43
I17	22 Aug 2018	25	14.80	84.71	7.0	33.54	8.1	24.9	1.77
I18	22 Aug 2018	1	23.76	85.47	7.8	33.81	8.3	22.8	0.46
I18	22 Aug 2018	2	23.73	85.46	7.8	33.81	8.3	22.8	0.42
I18	22 Aug 2018	3	23.44	85.17	8.0	33.79	8.3	22.9	0.46
I18	22 Aug 2018	4	22.62	82.99	8.4	33.78	8.3	23.1	0.59
I18	22 Aug 2018	5	21.37	81.14	9.0	33.70	8.3	23.4	0.92
I18	22 Aug 2018	6	20.73	79.95	9.2	33.67	8.3	23.6	1.17
I18	22 Aug 2018	7	19.10	79.02	9.7	33.62	8.3	23.9	1.58
I18	22 Aug 2018	8	18.72	78.37	9.8	33.58	8.3	24.0	2.29
I18	22 Aug 2018	9	18.46	78.13	9.8	33.57	8.3	24.1	2.70
I18	22 Aug 2018	10	18.23	78.84	9.7	33.57	8.3	24.1	2.82
I18	22 Aug 2018	11	18.03	79.21	9.6	33.56	8.3	24.2	2.97
I18	22 Aug 2018	12	17.34	78.67	9.2	33.54	8.3	24.3	3.79
I18	22 Aug 2018	13	16.49	76.54	8.7	33.45	8.3	24.4	4.84
I18	22 Aug 2018	14	16.21	79.28	8.5	33.39	8.2	24.5	4.40
I18	22 Aug 2018	15	16.22	80.44	8.4	33.39	8.2	24.5	4.09
I18	22 Aug 2018	16	15.94	81.00	8.1	33.40	8.2	24.5	3.57
I18	22 Aug 2018	17	16.00	82.76	7.8	33.48	8.2	24.6	2.93
I18	22 Aug 2018	18	15.70	83.14	7.5	33.53	8.2	24.7	2.68
I18	22 Aug 2018	19	15.59	82.89	7.3	33.54	8.2	24.7	2.59
I2	21 Aug 2018	1	23.69	87.51	7.7	33.80	8.3	22.8	0.27
I2	21 Aug 2018	2	23.69	87.34	7.7	33.80	8.3	22.8	0.28
I2	21 Aug 2018	3	23.61	87.49	7.7	33.80	8.3	22.8	0.30
I2	21 Aug 2018	4	23.35	87.50	7.8	33.79	8.3	22.9	0.33
I2	21 Aug 2018	5	22.66	87.17	8.1	33.77	8.3	23.1	0.37
I2	21 Aug 2018	6	21.94	85.06	8.4	33.74	8.3	23.3	0.65
I2	21 Aug 2018	7	20.99	83.75	8.7	33.70	8.3	23.5	0.82
I2	21 Aug 2018	8	20.05	84.51	8.9	33.66	8.3	23.7	0.81
I2	21 Aug 2018	9	18.92	86.57	9.2	33.63	8.3	24.0	0.63
I2	21 Aug 2018	10	18.29	87.23	9.3	33.59	8.3	24.1	0.52
I2	21 Aug 2018	11	17.82	86.94	9.2	33.58	8.3	24.2	0.62
I2	21 Aug 2018	12	17.42	85.63	9.2	33.56	8.3	24.3	0.78
I2	21 Aug 2018	13	17.31	84.96	9.2	33.56	8.2	24.3	0.95
I2	21 Aug 2018	14	17.23	84.79	9.1	33.56	8.2	24.4	1.07
I2	21 Aug 2018	15	17.08	85.10	9.1	33.56	8.2	24.4	1.08
I2	21 Aug 2018	16	17.03	85.24	9.0	33.56	8.2	24.4	1.10
I2	21 Aug 2018	17	16.98	85.61	9.0	33.57	8.2	24.4	1.06
I2	21 Aug 2018	18	16.77	85.88	8.9	33.57	8.2	24.5	1.10
I2	21 Aug 2018	19	16.49	86.14	8.8	33.57	8.2	24.5	1.14
I2	21 Aug 2018	20	16.10	86.49	8.8	33.56	8.2	24.6	1.11
I2	21 Aug 2018	21	15.84	86.68	8.7	33.55	8.2	24.7	1.09
I2	21 Aug 2018	22	15.38	87.03	8.6	33.54	8.2	24.8	1.10
I2	21 Aug 2018	23	15.19	87.20	8.5	33.53	8.2	24.8	1.09
I2	21 Aug 2018	24	15.06	87.35	8.4	33.52	8.2	24.8	1.10
I2	21 Aug 2018	25	15.00	87.34	8.3	33.52	8.2	24.8	1.08
I2	21 Aug 2018	26	14.97	87.22	8.3	33.53	8.2	24.8	1.19
I2	21 Aug 2018	27	14.95	87.23	8.3	33.53	8.2	24.8	1.25

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I2	21 Aug 2018	28	14.94	86.96	8.2	33.53	8.2	24.9	1.40
I2	21 Aug 2018	29	14.92	86.26	8.1	33.54	8.2	24.9	1.64
I2	21 Aug 2018	30	14.75	85.81	8.1	33.54	8.2	24.9	1.86
I2	21 Aug 2018	31	14.53	85.67	8.0	33.53	8.2	24.9	2.11
I2	21 Aug 2018	32	14.40	84.94	7.8	33.54	8.2	25.0	2.34
I20	22 Aug 2018	1	23.92	87.37	7.6	33.83	8.3	22.8	0.31
I20	22 Aug 2018	2	23.77	87.11	7.6	33.81	8.3	22.8	0.35
I20	22 Aug 2018	3	23.24	87.59	7.6	33.79	8.3	22.9	0.34
I20	22 Aug 2018	4	22.83	88.30	7.7	33.77	8.2	23.0	0.27
I20	22 Aug 2018	5	22.56	88.53	7.7	33.75	8.2	23.1	0.24
I20	22 Aug 2018	6	22.27	88.72	7.7	33.74	8.2	23.2	0.25
I20	22 Aug 2018	7	21.72	88.88	7.8	33.72	8.2	23.3	0.20
I20	22 Aug 2018	8	20.51	88.93	8.1	33.68	8.2	23.6	0.23
I20	22 Aug 2018	9	19.57	88.84	8.4	33.64	8.2	23.8	0.23
I20	22 Aug 2018	10	19.49	88.81	8.5	33.63	8.2	23.8	0.16
I20	22 Aug 2018	11	19.41	88.82	8.3	33.63	8.2	23.9	0.15
I20	22 Aug 2018	12	18.85	88.65	8.4	33.60	8.2	24.0	0.13
I20	22 Aug 2018	13	18.11	88.83	8.6	33.58	8.2	24.2	0.13
I20	22 Aug 2018	14	18.04	89.01	8.6	33.57	8.2	24.2	0.10
I20	22 Aug 2018	15	18.01	89.08	8.6	33.56	8.2	24.2	0.18
I20	22 Aug 2018	16	17.99	89.13	8.5	33.56	8.2	24.2	0.17
I20	22 Aug 2018	17	17.79	89.22	8.4	33.56	8.2	24.2	0.15
I20	22 Aug 2018	18	17.41	89.37	8.5	33.55	8.2	24.3	0.15
I20	22 Aug 2018	19	17.31	89.46	8.5	33.55	8.2	24.3	0.15
I20	22 Aug 2018	20	17.16	89.39	8.5	33.55	8.2	24.4	0.17
I20	22 Aug 2018	21	16.97	89.36	8.5	33.55	8.2	24.4	0.21
I20	22 Aug 2018	22	16.77	89.33	8.5	33.54	8.2	24.4	0.23
I20	22 Aug 2018	23	16.34	89.20	8.6	33.53	8.2	24.5	0.23
I20	22 Aug 2018	24	16.23	89.22	8.6	33.52	8.2	24.6	0.24
I20	22 Aug 2018	25	16.17	89.18	8.6	33.52	8.2	24.6	0.24
I20	22 Aug 2018	26	16.14	89.19	8.6	33.52	8.2	24.6	0.27
I20	22 Aug 2018	27	16.09	89.09	8.6	33.52	8.2	24.6	0.27
I20	22 Aug 2018	28	15.96	89.04	8.6	33.52	8.2	24.6	0.33
I20	22 Aug 2018	29	15.89	89.00	8.6	33.52	8.2	24.6	0.33
I20	22 Aug 2018	30	15.88	88.96	8.6	33.52	8.2	24.6	0.35
I20	22 Aug 2018	31	15.79	88.98	8.5	33.52	8.2	24.7	0.40
I20	22 Aug 2018	32	15.36	88.81	8.5	33.53	8.2	24.8	0.51
I20	22 Aug 2018	33	15.14	88.11	8.5	33.53	8.2	24.8	0.71
I20	22 Aug 2018	34	14.82	87.49	8.5	33.52	8.2	24.9	0.92
I20	22 Aug 2018	35	14.68	87.17	8.5	33.51	8.2	24.9	1.22
I20	22 Aug 2018	36	14.49	86.64	8.5	33.51	8.2	24.9	1.59
I20	22 Aug 2018	37	14.30	86.10	8.4	33.50	8.2	25.0	1.82
I20	22 Aug 2018	38	14.01	86.72	8.2	33.50	8.2	25.0	1.70
I20	22 Aug 2018	39	13.94	87.35	8.1	33.51	8.2	25.0	1.52
I20	22 Aug 2018	40	13.92	87.57	8.0	33.51	8.2	25.1	1.34
I20	22 Aug 2018	41	13.90	87.97	7.9	33.51	8.2	25.1	1.23
I20	22 Aug 2018	42	13.89	88.06	7.8	33.52	8.2	25.1	1.14
I20	22 Aug 2018	43	13.87	88.13	7.6	33.52	8.1	25.1	1.01
I20	22 Aug 2018	44	13.85	88.39	7.4	33.53	8.1	25.1	0.93
I20	22 Aug 2018	45	13.82	88.36	7.1	33.54	8.1	25.1	0.86
I20	22 Aug 2018	46	13.67	88.39	7.0	33.54	8.1	25.1	0.76
I20	22 Aug 2018	47	13.53	88.72	7.0	33.54	8.1	25.2	0.71
I20	22 Aug 2018	48	13.37	88.81	6.8	33.55	8.1	25.2	0.72
I20	22 Aug 2018	49	13.24	88.92	6.6	33.55	8.1	25.2	0.68

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I20	22 Aug 2018	50	13.13	88.76	6.5	33.55	8.1	25.2	0.62
I20	22 Aug 2018	51	13.10	88.89	6.5	33.55	8.1	25.2	0.58
I20	22 Aug 2018	52	13.07	88.89	6.4	33.55	8.0	25.3	0.56
I20	22 Aug 2018	53	13.03	88.84	6.3	33.55	8.0	25.3	0.55
I20	22 Aug 2018	54	12.98	88.76	6.3	33.55	8.0	25.3	0.55
I20	22 Aug 2018	55	12.96	88.71	6.2	33.55	8.0	25.3	0.53
I21	22 Aug 2018	1	23.86	87.52	7.6	33.83	8.3	22.8	0.36
I21	22 Aug 2018	2	23.86	86.92	7.6	33.83	8.3	22.8	0.37
I21	22 Aug 2018	3	23.81	87.39	7.6	33.82	8.3	22.8	0.43
I21	22 Aug 2018	4	23.44	87.39	7.8	33.79	8.3	22.9	0.45
I21	22 Aug 2018	5	23.03	87.47	7.8	33.77	8.3	23.0	0.43
I21	22 Aug 2018	6	21.62	87.27	8.0	33.73	8.3	23.4	0.37
I21	22 Aug 2018	7	20.50	87.81	8.2	33.68	8.3	23.6	0.32
I21	22 Aug 2018	8	19.89	88.15	8.3	33.65	8.3	23.8	0.27
I21	22 Aug 2018	9	19.34	88.50	8.5	33.63	8.3	23.9	0.34
I21	22 Aug 2018	10	18.82	88.19	8.6	33.61	8.3	24.0	0.31
I21	22 Aug 2018	11	18.19	87.70	8.7	33.59	8.3	24.1	0.37
I21	22 Aug 2018	12	17.85	87.71	8.8	33.57	8.3	24.2	0.37
I21	22 Aug 2018	13	17.68	87.91	8.8	33.56	8.3	24.2	0.32
I21	22 Aug 2018	14	17.48	88.24	8.8	33.56	8.3	24.3	0.29
I21	22 Aug 2018	15	17.36	88.69	8.7	33.55	8.3	24.3	0.24
I21	22 Aug 2018	16	17.17	88.98	8.6	33.54	8.2	24.4	0.27
I21	22 Aug 2018	17	16.77	89.24	8.5	33.53	8.2	24.4	0.27
I21	22 Aug 2018	18	16.60	89.22	8.6	33.52	8.2	24.5	0.29
I21	22 Aug 2018	19	16.51	89.04	8.6	33.52	8.2	24.5	0.35
I21	22 Aug 2018	20	16.44	88.74	8.6	33.52	8.2	24.5	0.43
I21	22 Aug 2018	21	16.46	88.63	8.6	33.53	8.2	24.5	0.54
I21	22 Aug 2018	22	16.26	87.76	8.3	33.54	8.2	24.6	0.81
I21	22 Aug 2018	23	15.77	85.66	7.9	33.54	8.2	24.7	1.39
I21	22 Aug 2018	24	15.34	83.94	7.7	33.54	8.2	24.8	1.91
I21	22 Aug 2018	25	15.17	84.23	7.8	33.54	8.2	24.8	2.13
I21	22 Aug 2018	26	15.05	84.79	8.0	33.53	8.2	24.8	2.14
I21	22 Aug 2018	27	14.94	85.50	8.1	33.54	8.2	24.9	1.92
I21	22 Aug 2018	28	14.75	86.41	8.2	33.53	8.2	24.9	1.65
I21	22 Aug 2018	29	14.62	86.71	8.2	33.53	8.2	24.9	1.57
I21	22 Aug 2018	30	14.45	86.94	8.1	33.52	8.2	25.0	1.54
I21	22 Aug 2018	31	14.34	86.82	8.0	33.53	8.2	25.0	1.53
I21	22 Aug 2018	32	14.29	86.84	7.9	33.53	8.2	25.0	1.59
I21	22 Aug 2018	33	14.16	86.42	7.7	33.53	8.2	25.0	1.91
I21	22 Aug 2018	34	14.09	85.51	7.3	33.54	8.1	25.0	2.25
I21	22 Aug 2018	35	14.04	85.68	7.0	33.54	8.1	25.1	2.20
I21	22 Aug 2018	36	14.01	86.38	6.9	33.54	8.1	25.1	1.68
I21	22 Aug 2018	37	14.00	87.05	6.8	33.54	8.1	25.1	1.25
I21	22 Aug 2018	38	14.00	87.52	6.8	33.55	8.1	25.1	1.05
I21	22 Aug 2018	39	13.99	87.58	6.8	33.55	8.1	25.1	0.96
I21	22 Aug 2018	40	13.99	87.66	6.8	33.55	8.1	25.1	0.84
I21	22 Aug 2018	41	13.98	87.44	6.8	33.55	8.1	25.1	0.75
I22	22 Aug 2018	1	23.53	84.22	7.9	33.80	8.3	22.9	0.44
I22	22 Aug 2018	2	23.48	82.46	7.9	33.80	8.3	22.9	0.41
I22	22 Aug 2018	3	23.35	84.87	7.9	33.80	8.3	22.9	0.41
I22	22 Aug 2018	4	22.82	85.70	8.1	33.77	8.3	23.1	0.50
I22	22 Aug 2018	5	22.10	83.96	8.6	33.73	8.3	23.2	0.71
I22	22 Aug 2018	6	21.32	80.63	9.0	33.69	8.3	23.4	1.06

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I22	22 Aug 2018	7	20.32	77.31	9.4	33.65	8.3	23.6	1.57
I22	22 Aug 2018	8	19.46	77.40	9.6	33.63	8.3	23.9	2.07
I22	22 Aug 2018	9	18.74	77.02	9.5	33.60	8.3	24.0	2.43
I22	22 Aug 2018	10	18.10	78.19	9.3	33.58	8.3	24.2	2.62
I22	22 Aug 2018	11	17.53	78.47	9.2	33.57	8.3	24.3	2.91
I22	22 Aug 2018	12	17.11	79.20	9.0	33.56	8.3	24.4	3.10
I22	22 Aug 2018	13	16.76	79.70	8.9	33.55	8.3	24.5	3.23
I22	22 Aug 2018	14	16.51	80.42	8.8	33.54	8.3	24.5	3.25
I22	22 Aug 2018	15	16.26	81.05	8.6	33.54	8.2	24.6	3.13
I22	22 Aug 2018	16	15.96	81.98	8.5	33.54	8.2	24.6	2.92
I22	22 Aug 2018	17	15.67	82.74	8.4	33.54	8.2	24.7	2.74
I22	22 Aug 2018	18	15.34	83.54	8.5	33.53	8.2	24.8	2.56
I22	22 Aug 2018	19	15.15	84.66	8.5	33.52	8.2	24.8	2.38
I22	22 Aug 2018	20	15.04	85.21	8.4	33.52	8.2	24.8	2.23
I22	22 Aug 2018	21	14.91	85.64	8.3	33.52	8.2	24.9	2.12
I22	22 Aug 2018	22	14.83	86.21	8.2	33.52	8.2	24.9	2.02
I22	22 Aug 2018	23	14.80	86.21	8.1	33.52	8.2	24.9	1.93
I22	22 Aug 2018	24	14.74	86.03	7.9	33.53	8.2	24.9	1.95
I22	22 Aug 2018	25	14.65	85.36	7.6	33.53	8.2	24.9	2.01
I22	22 Aug 2018	26	14.58	85.10	7.4	33.54	8.2	24.9	1.97
I22	22 Aug 2018	27	14.57	85.65	7.2	33.54	8.1	24.9	1.69
I22	22 Aug 2018	28	14.54	85.66	7.1	33.54	8.1	24.9	1.46
I23	22 Aug 2018	1	23.58	84.20	7.9	33.79	8.3	22.9	0.60
I23	22 Aug 2018	2	23.51	84.11	7.9	33.80	8.3	22.9	0.63
I23	22 Aug 2018	3	23.42	84.26	8.0	33.79	8.3	22.9	0.62
I23	22 Aug 2018	4	23.38	84.15	8.0	33.79	8.3	22.9	0.67
I23	22 Aug 2018	5	23.23	83.75	8.1	33.78	8.3	22.9	0.82
I23	22 Aug 2018	6	21.72	80.90	8.8	33.76	8.3	23.3	0.99
I23	22 Aug 2018	7	20.71	79.58	9.4	33.68	8.3	23.6	1.38
I23	22 Aug 2018	8	20.41	78.79	9.5	33.65	8.3	23.6	1.67
I23	22 Aug 2018	9	19.75	78.37	9.7	33.64	8.3	23.8	1.92
I23	22 Aug 2018	10	19.10	78.13	9.7	33.62	8.3	23.9	2.26
I23	22 Aug 2018	11	18.27	78.01	9.7	33.59	8.3	24.1	2.76
I23	22 Aug 2018	12	17.78	78.49	9.6	33.56	8.3	24.2	3.18
I23	22 Aug 2018	13	17.58	78.78	9.6	33.54	8.3	24.3	3.40
I23	22 Aug 2018	14	17.26	79.49	9.5	33.53	8.3	24.3	3.40
I23	22 Aug 2018	15	16.99	80.12	9.2	33.51	8.3	24.4	3.57
I23	22 Aug 2018	16	16.51	80.02	8.7	33.49	8.3	24.5	3.79
I23	22 Aug 2018	17	15.98	81.28	8.3	33.40	8.2	24.5	3.58
I23	22 Aug 2018	18	15.78	82.97	8.1	33.43	8.2	24.6	3.11
I23	22 Aug 2018	19	15.81	83.07	7.9	33.50	8.2	24.6	2.87
I23	22 Aug 2018	20	15.76	81.82	7.3	33.54	8.2	24.7	2.75
I23	22 Aug 2018	21	15.21	84.26	7.1	33.55	8.1	24.8	1.67
I27	22 Aug 2018	1	23.17	79.52	8.2	33.76	8.3	22.9	0.64
I27	22 Aug 2018	2	23.15	79.71	8.2	33.77	8.3	23.0	0.67
I27	22 Aug 2018	3	23.08	79.89	8.2	33.76	8.3	23.0	0.75
I27	22 Aug 2018	4	22.77	79.64	8.3	33.75	8.3	23.0	0.90
I27	22 Aug 2018	5	22.51	79.15	8.4	33.74	8.3	23.1	1.09
I27	22 Aug 2018	6	21.70	78.26	8.9	33.70	8.3	23.3	1.37
I27	22 Aug 2018	7	20.38	76.93	9.4	33.65	8.3	23.6	1.71
I27	22 Aug 2018	8	19.72	76.36	9.5	33.63	8.3	23.8	2.16
I27	22 Aug 2018	9	18.83	76.17	9.5	33.60	8.3	24.0	2.52
I27	22 Aug 2018	10	18.21	76.68	9.4	33.58	8.3	24.1	2.67

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I27	22 Aug 2018	11	17.89	77.19	9.2	33.58	8.3	24.2	2.77
I27	22 Aug 2018	12	17.31	78.02	9.0	33.56	8.3	24.3	2.70
I27	22 Aug 2018	13	16.61	79.41	8.8	33.55	8.3	24.5	2.54
I27	22 Aug 2018	14	16.25	80.51	8.7	33.54	8.2	24.6	2.54
I27	22 Aug 2018	15	16.13	80.56	8.6	33.54	8.2	24.6	2.67
I27	22 Aug 2018	16	15.79	80.86	8.6	33.54	8.2	24.7	2.74
I27	22 Aug 2018	17	15.57	81.42	8.6	33.53	8.2	24.7	2.77
I27	22 Aug 2018	18	15.35	81.48	8.6	33.52	8.2	24.8	2.91
I27	22 Aug 2018	19	15.33	81.76	8.5	33.53	8.2	24.8	2.95
I27	22 Aug 2018	20	15.17	82.48	8.4	33.53	8.2	24.8	2.76
I27	22 Aug 2018	21	15.03	83.24	8.4	33.53	8.2	24.8	2.38
I27	22 Aug 2018	22	14.93	84.39	8.3	33.53	8.2	24.9	2.05
I27	22 Aug 2018	23	14.77	85.24	8.2	33.53	8.2	24.9	1.78
I27	22 Aug 2018	24	14.67	85.24	7.8	33.53	8.2	24.9	1.81
I27	22 Aug 2018	25	14.64	85.16	7.7	33.53	8.2	24.9	1.84
I27	22 Aug 2018	26	14.61	84.70	7.6	33.54	8.2	24.9	1.97
I27	22 Aug 2018	27	14.56	84.32	7.4	33.54	8.2	24.9	1.95
I27	22 Aug 2018	28	14.55	84.48	7.4	33.54	8.1	24.9	1.79
I28	23 Aug 2018	1	24.06	83.44	7.6	33.83	8.2	22.7	0.40
I28	23 Aug 2018	2	24.07	84.01	7.6	33.83	8.2	22.7	0.35
I28	23 Aug 2018	3	23.61	82.78	7.5	33.81	8.2	22.9	0.27
I28	23 Aug 2018	4	21.88	87.13	7.8	33.75	8.2	23.3	0.22
I28	23 Aug 2018	5	21.08	87.64	8.0	33.70	8.2	23.5	0.13
I28	23 Aug 2018	6	20.46	88.34	8.1	33.66	8.2	23.6	0.10
I28	23 Aug 2018	7	20.08	88.71	8.2	33.64	8.2	23.7	0.05
I28	23 Aug 2018	8	19.85	88.86	8.2	33.63	8.2	23.8	0.04
I28	23 Aug 2018	9	19.38	88.78	8.2	33.63	8.2	23.9	0.04
I28	23 Aug 2018	10	18.55	88.99	8.5	33.60	8.2	24.1	0.03
I28	23 Aug 2018	11	18.28	89.01	8.5	33.58	8.2	24.1	0.04
I28	23 Aug 2018	12	17.85	89.14	8.5	33.56	8.2	24.2	0.01
I28	23 Aug 2018	13	17.73	89.28	8.5	33.56	8.2	24.2	0.02
I28	23 Aug 2018	14	17.68	89.35	8.4	33.56	8.2	24.2	0.01
I28	23 Aug 2018	15	17.58	89.38	8.5	33.56	8.2	24.3	0.00
I28	23 Aug 2018	16	17.46	89.34	8.5	33.56	8.2	24.3	0.00
I28	23 Aug 2018	17	17.27	89.40	8.5	33.55	8.2	24.3	0.01
I28	23 Aug 2018	18	17.14	89.38	8.4	33.55	8.2	24.4	0.02
I28	23 Aug 2018	19	16.86	89.36	8.5	33.54	8.2	24.4	0.01
I28	23 Aug 2018	20	16.82	89.35	8.5	33.54	8.2	24.4	0.03
I28	23 Aug 2018	21	16.74	89.32	8.4	33.54	8.2	24.5	0.05
I28	23 Aug 2018	22	16.66	89.32	8.5	33.54	8.2	24.5	0.06
I28	23 Aug 2018	23	16.64	89.33	8.5	33.54	8.2	24.5	0.07
I28	23 Aug 2018	24	16.52	89.32	8.5	33.54	8.2	24.5	0.08
I28	23 Aug 2018	25	16.38	89.29	8.5	33.53	8.2	24.5	0.09
I28	23 Aug 2018	26	16.28	89.29	8.6	33.53	8.2	24.6	0.09
I28	23 Aug 2018	27	16.25	89.27	8.5	33.53	8.2	24.6	0.09
I28	23 Aug 2018	28	16.17	89.25	8.5	33.53	8.2	24.6	0.12
I28	23 Aug 2018	29	16.12	89.17	8.5	33.53	8.2	24.6	0.13
I28	23 Aug 2018	30	15.89	89.04	8.5	33.52	8.2	24.6	0.19
I28	23 Aug 2018	31	15.69	88.90	8.5	33.52	8.2	24.7	0.23
I28	23 Aug 2018	32	15.43	88.77	8.4	33.52	8.2	24.7	0.30
I28	23 Aug 2018	33	14.88	88.52	8.6	33.51	8.2	24.9	0.46
I28	23 Aug 2018	34	14.69	88.12	8.6	33.51	8.2	24.9	0.61
I28	23 Aug 2018	35	14.54	87.83	8.5	33.51	8.2	24.9	0.70
I28	23 Aug 2018	36	14.46	87.52	8.4	33.51	8.2	24.9	0.88

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I28	23 Aug 2018	37	14.42	87.30	8.4	33.51	8.1	24.9	1.03
I28	23 Aug 2018	38	14.32	86.92	8.3	33.51	8.1	25.0	1.27
I28	23 Aug 2018	39	14.04	86.74	8.1	33.51	8.1	25.0	1.57
I28	23 Aug 2018	40	13.94	87.63	7.8	33.52	8.1	25.1	1.50
I28	23 Aug 2018	41	13.89	87.77	7.7	33.52	8.1	25.1	1.37
I28	23 Aug 2018	42	13.85	88.03	7.6	33.53	8.1	25.1	1.28
I28	23 Aug 2018	43	13.82	88.18	7.6	33.53	8.1	25.1	1.23
I28	23 Aug 2018	44	13.77	88.32	7.5	33.53	8.1	25.1	1.19
I28	23 Aug 2018	45	13.75	88.35	7.5	33.53	8.1	25.1	1.15
I28	23 Aug 2018	46	13.74	88.41	7.4	33.53	8.1	25.1	1.14
I28	23 Aug 2018	47	13.72	88.46	7.3	33.53	8.1	25.1	1.10
I28	23 Aug 2018	48	13.65	88.51	7.2	33.54	8.1	25.1	1.07
I28	23 Aug 2018	49	13.59	88.66	7.1	33.54	8.1	25.1	1.01
I28	23 Aug 2018	50	13.39	88.67	6.9	33.54	8.0	25.2	0.87
I28	23 Aug 2018	51	13.33	88.92	6.8	33.54	8.0	25.2	0.81
I28	23 Aug 2018	52	13.30	89.02	6.7	33.54	8.0	25.2	0.82
I28	23 Aug 2018	53	13.25	88.88	6.7	33.54	8.0	25.2	0.76
I28	23 Aug 2018	54	13.15	88.46	6.5	33.55	8.0	25.2	0.79
I28	23 Aug 2018	55	13.06	88.33	6.4	33.55	8.0	25.3	0.78
I29	23 Aug 2018	1	23.66	85.97	7.8	33.80	8.2	22.8	0.50
I29	23 Aug 2018	2	23.23	84.95	7.9	33.79	8.2	23.0	0.69
I29	23 Aug 2018	3	22.92	82.89	7.9	33.78	8.2	23.0	0.95
I29	23 Aug 2018	4	22.04	81.16	8.1	33.76	8.2	23.3	1.26
I29	23 Aug 2018	5	21.08	77.32	8.2	33.72	8.2	23.5	1.71
I29	23 Aug 2018	6	20.27	75.83	8.4	33.68	8.2	23.7	1.89
I29	23 Aug 2018	7	20.05	79.80	8.6	33.66	8.2	23.7	1.65
I29	23 Aug 2018	8	20.18	83.38	8.4	33.65	8.2	23.7	1.53
I29	23 Aug 2018	9	19.25	85.64	8.3	33.63	8.2	23.9	0.92
I29	23 Aug 2018	10	18.28	88.06	8.4	33.60	8.2	24.1	0.50
I29	23 Aug 2018	11	17.68	88.75	8.6	33.57	8.2	24.3	0.29
I29	23 Aug 2018	12	17.37	89.06	8.7	33.55	8.2	24.3	0.20
I29	23 Aug 2018	13	17.25	89.01	8.7	33.55	8.2	24.3	0.18
I29	23 Aug 2018	14	17.12	88.85	8.7	33.54	8.2	24.4	0.22
I29	23 Aug 2018	15	17.05	88.68	8.7	33.55	8.2	24.4	0.27
I29	23 Aug 2018	16	16.86	88.27	8.6	33.54	8.2	24.4	0.35
I29	23 Aug 2018	17	16.59	88.07	8.6	33.55	8.2	24.5	0.45
I29	23 Aug 2018	18	16.26	87.81	8.6	33.53	8.2	24.6	0.56
I29	23 Aug 2018	19	15.78	87.73	8.5	33.52	8.2	24.7	0.72
I29	23 Aug 2018	20	15.70	87.75	8.5	33.52	8.2	24.7	0.66
I29	23 Aug 2018	21	15.64	87.56	8.4	33.52	8.2	24.7	0.66
I29	23 Aug 2018	22	15.55	87.41	8.3	33.53	8.2	24.7	0.72
I29	23 Aug 2018	23	15.27	87.01	8.2	33.54	8.2	24.8	0.84
I29	23 Aug 2018	24	14.81	86.69	8.1	33.54	8.2	24.9	1.09
I29	23 Aug 2018	25	14.62	86.63	8.0	33.53	8.1	24.9	1.25
I29	23 Aug 2018	26	14.57	86.38	7.8	33.54	8.1	24.9	1.44
I29	23 Aug 2018	27	14.51	85.99	7.7	33.54	8.1	25.0	1.66
I29	23 Aug 2018	28	14.49	85.65	7.5	33.54	8.1	25.0	1.76
I29	23 Aug 2018	29	14.46	85.55	7.4	33.54	8.1	25.0	1.88
I29	23 Aug 2018	30	14.42	84.83	7.3	33.54	8.1	25.0	2.02
I29	23 Aug 2018	31	14.37	85.06	7.2	33.55	8.1	25.0	2.03
I29	23 Aug 2018	32	14.30	85.22	7.1	33.55	8.1	25.0	2.01
I29	23 Aug 2018	33	14.21	85.28	6.9	33.55	8.1	25.0	1.73
I29	23 Aug 2018	34	14.13	86.24	6.8	33.55	8.1	25.0	1.20
I29	23 Aug 2018	35	14.11	86.66	6.7	33.55	8.0	25.0	0.89

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I29	23 Aug 2018	36	14.10	86.77	6.7	33.55	8.0	25.0	0.73
I29	23 Aug 2018	37	14.09	86.79	6.7	33.55	8.0	25.0	0.62
I29	23 Aug 2018	38	14.09	86.79	6.7	33.55	8.0	25.0	0.63
I3	21 Aug 2018	1	23.46	85.95	7.9	33.79	8.3	22.9	0.42
I3	21 Aug 2018	2	23.43	86.52	7.9	33.79	8.3	22.9	0.47
I3	21 Aug 2018	3	23.32	86.52	7.9	33.78	8.3	22.9	0.49
I3	21 Aug 2018	4	22.67	86.16	8.1	33.76	8.3	23.1	0.54
I3	21 Aug 2018	5	21.89	85.69	8.4	33.74	8.3	23.3	0.65
I3	21 Aug 2018	6	20.42	84.91	8.9	33.66	8.3	23.6	0.87
I3	21 Aug 2018	7	19.86	84.63	9.1	33.63	8.3	23.8	1.04
I3	21 Aug 2018	8	19.43	84.50	9.2	33.61	8.3	23.9	1.11
I3	21 Aug 2018	9	19.21	84.41	9.3	33.61	8.3	23.9	1.24
I3	21 Aug 2018	10	19.02	84.31	9.3	33.60	8.3	23.9	1.30
I3	21 Aug 2018	11	18.56	83.92	9.4	33.59	8.3	24.1	1.35
I3	21 Aug 2018	12	18.04	84.27	9.6	33.58	8.3	24.2	1.30
I3	21 Aug 2018	13	17.62	84.66	9.4	33.59	8.3	24.3	1.20
I3	21 Aug 2018	14	16.91	85.24	9.3	33.56	8.3	24.4	1.10
I3	21 Aug 2018	15	16.58	85.78	9.2	33.55	8.2	24.5	1.08
I3	21 Aug 2018	16	16.50	86.31	8.9	33.54	8.2	24.5	1.02
I3	21 Aug 2018	17	15.93	86.70	8.8	33.51	8.2	24.6	1.00
I3	21 Aug 2018	18	15.78	87.13	8.7	33.51	8.2	24.7	1.02
I3	21 Aug 2018	19	15.70	86.78	8.7	33.52	8.2	24.7	1.09
I3	21 Aug 2018	20	15.63	86.82	8.6	33.52	8.2	24.7	1.14
I3	21 Aug 2018	21	15.51	86.68	8.3	33.53	8.2	24.7	1.22
I3	21 Aug 2018	22	15.29	85.86	8.2	33.54	8.2	24.8	1.47
I3	21 Aug 2018	23	14.97	85.33	7.9	33.54	8.2	24.9	1.84
I3	21 Aug 2018	24	14.64	84.33	7.3	33.54	8.1	24.9	1.96
I3	21 Aug 2018	25	14.59	86.13	7.0	33.54	8.1	24.9	1.60
I3	21 Aug 2018	26	14.59	86.92	6.9	33.54	8.1	24.9	1.37
I3	21 Aug 2018	27	14.58	87.12	6.9	33.54	8.1	24.9	1.22
I30	23 Aug 2018	1	23.42	81.34	8.2	33.66	8.3	22.8	0.50
I30	23 Aug 2018	2	23.36	82.28	8.1	33.77	8.3	22.9	0.57
I30	23 Aug 2018	3	23.02	82.57	8.1	33.76	8.3	23.0	0.69
I30	23 Aug 2018	4	21.90	81.87	8.2	33.73	8.2	23.3	0.81
I30	23 Aug 2018	5	20.84	82.73	8.3	33.69	8.2	23.5	0.86
I30	23 Aug 2018	6	19.52	83.58	8.6	33.64	8.2	23.9	0.87
I30	23 Aug 2018	7	19.33	83.98	8.8	33.62	8.2	23.9	0.97
I30	23 Aug 2018	8	19.23	83.84	8.7	33.61	8.2	23.9	1.05
I30	23 Aug 2018	9	19.06	83.79	8.7	33.61	8.2	23.9	1.09
I30	23 Aug 2018	10	18.94	83.60	8.5	33.60	8.2	24.0	1.15
I30	23 Aug 2018	11	17.33	83.17	8.7	33.56	8.2	24.3	1.33
I30	23 Aug 2018	12	16.63	82.98	8.6	33.55	8.2	24.5	1.41
I30	23 Aug 2018	13	16.30	84.25	8.6	33.54	8.2	24.6	1.42
I30	23 Aug 2018	14	16.07	85.27	8.6	33.53	8.2	24.6	1.36
I30	23 Aug 2018	15	15.72	85.58	8.4	33.53	8.2	24.7	1.45
I30	23 Aug 2018	16	15.36	85.43	8.2	33.53	8.2	24.8	1.56
I30	23 Aug 2018	17	15.32	85.07	8.1	33.53	8.2	24.8	1.65
I30	23 Aug 2018	18	15.30	85.08	8.0	33.53	8.2	24.8	1.69
I30	23 Aug 2018	19	15.26	84.94	7.9	33.53	8.1	24.8	1.72
I30	23 Aug 2018	20	15.22	84.27	7.7	33.54	8.1	24.8	1.87
I30	23 Aug 2018	21	15.18	83.86	7.4	33.54	8.1	24.8	2.02
I30	23 Aug 2018	22	15.08	83.46	7.2	33.55	8.1	24.8	2.03
I30	23 Aug 2018	23	14.82	83.58	7.1	33.55	8.1	24.9	1.65

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I30	23 Aug 2018	24	14.83	84.40	7.1	33.54	8.1	24.9	1.48
I30	23 Aug 2018	25	14.63	84.62	7.1	33.55	8.1	24.9	1.12
I30	23 Aug 2018	26	14.61	85.07	7.1	33.55	8.1	24.9	0.88
I30	23 Aug 2018	27	14.63	85.12	7.1	33.55	8.1	24.9	0.81
I30	23 Aug 2018	28	14.60	85.13	7.0	33.55	8.1	24.9	0.74
I31	23 Aug 2018	1	23.06	77.45	8.5	33.72	8.3	22.9	0.84
I31	23 Aug 2018	2	21.57	77.36	9.1	33.68	8.3	23.3	0.95
I31	23 Aug 2018	3	20.45	76.95	9.6	33.64	8.3	23.6	1.12
I31	23 Aug 2018	4	19.34	76.88	10.0	33.60	8.3	23.9	1.56
I31	23 Aug 2018	5	18.76	75.75	10.1	33.58	8.3	24.0	2.20
I31	23 Aug 2018	6	18.34	75.05	10.1	33.56	8.3	24.1	2.68
I31	23 Aug 2018	7	17.92	75.93	10.0	33.54	8.3	24.2	3.01
I31	23 Aug 2018	8	17.54	77.04	9.7	33.52	8.3	24.3	3.18
I31	23 Aug 2018	9	17.26	77.57	9.4	33.52	8.2	24.3	3.26
I31	23 Aug 2018	10	16.75	78.17	9.0	33.51	8.2	24.4	3.29
I31	23 Aug 2018	11	16.40	79.37	8.7	33.50	8.2	24.5	3.42
I31	23 Aug 2018	12	16.20	80.06	8.5	33.50	8.2	24.5	3.45
I31	23 Aug 2018	13	16.03	80.57	8.3	33.51	8.2	24.6	3.59
I31	23 Aug 2018	14	16.00	80.57	8.2	33.51	8.2	24.6	3.70
I31	23 Aug 2018	15	16.00	80.54	8.1	33.52	8.2	24.6	3.71
I31	23 Aug 2018	16	15.98	80.56	7.9	33.52	8.1	24.6	3.59
I31	23 Aug 2018	17	15.90	80.72	7.5	33.53	8.1	24.6	3.27
I31	23 Aug 2018	18	15.51	81.78	7.1	33.54	8.1	24.7	2.57
I31	23 Aug 2018	19	15.33	82.55	6.8	33.54	8.1	24.8	1.87
I33	23 Aug 2018	1	23.77	87.48	7.7	33.81	8.2	22.8	0.30
I33	23 Aug 2018	2	23.77	87.44	7.7	33.81	8.2	22.8	0.35
I33	23 Aug 2018	3	23.76	87.33	7.6	33.81	8.2	22.8	0.37
I33	23 Aug 2018	4	23.61	87.37	7.6	33.80	8.2	22.8	0.39
I33	23 Aug 2018	5	22.17	87.19	8.1	33.73	8.2	23.2	0.45
I33	23 Aug 2018	6	21.48	86.80	8.4	33.69	8.2	23.4	0.54
I33	23 Aug 2018	7	20.71	86.45	8.8	33.66	8.2	23.6	0.54
I33	23 Aug 2018	8	20.17	86.30	8.9	33.64	8.2	23.7	0.60
I33	23 Aug 2018	9	19.76	86.28	8.8	33.62	8.2	23.8	0.60
I33	23 Aug 2018	10	18.78	86.10	8.8	33.59	8.2	24.0	0.67
I33	23 Aug 2018	11	18.25	86.67	8.9	33.58	8.2	24.1	0.54
I33	23 Aug 2018	12	18.05	87.02	8.9	33.57	8.2	24.2	0.56
I33	23 Aug 2018	13	17.87	87.10	8.8	33.56	8.2	24.2	0.54
I33	23 Aug 2018	14	17.79	87.19	8.8	33.56	8.2	24.2	0.53
I33	23 Aug 2018	15	17.72	87.11	8.8	33.56	8.2	24.2	0.50
I33	23 Aug 2018	16	17.56	87.15	8.8	33.56	8.2	24.3	0.56
I33	23 Aug 2018	17	17.48	86.89	8.6	33.56	8.2	24.3	0.67
I33	23 Aug 2018	18	17.22	86.04	8.5	33.56	8.2	24.4	0.81
I33	23 Aug 2018	19	16.71	86.30	8.4	33.56	8.2	24.5	0.94
I33	23 Aug 2018	20	15.99	86.14	8.2	33.55	8.2	24.6	1.09
I33	23 Aug 2018	21	15.25	85.68	8.1	33.54	8.1	24.8	1.26
I33	23 Aug 2018	22	15.00	85.80	8.0	33.52	8.1	24.8	1.35
I33	23 Aug 2018	23	14.94	85.69	7.9	33.52	8.1	24.8	1.38
I33	23 Aug 2018	24	14.90	85.72	7.8	33.53	8.1	24.9	1.37
I33	23 Aug 2018	25	14.80	85.75	7.7	33.53	8.1	24.9	1.29
I33	23 Aug 2018	26	14.73	85.82	7.7	33.53	8.1	24.9	1.29
I33	23 Aug 2018	27	14.63	85.93	7.6	33.53	8.1	24.9	1.30
I33	23 Aug 2018	28	14.51	86.14	7.6	33.54	8.1	24.9	1.19
I33	23 Aug 2018	29	14.46	86.41	7.4	33.53	8.1	25.0	1.17

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I33	23 Aug 2018	30	14.17	86.56	7.3	33.54	8.1	25.0	0.99
I34	23 Aug 2018	1	23.05	84.83	7.9	33.77	8.2	23.0	0.63
I34	23 Aug 2018	2	22.99	84.78	7.9	33.77	8.2	23.0	0.78
I34	23 Aug 2018	3	21.93	84.07	8.1	33.74	8.2	23.3	1.64
I34	23 Aug 2018	4	21.70	79.51	8.2	33.72	8.2	23.3	2.36
I34	23 Aug 2018	5	21.70	77.50	8.2	33.72	8.2	23.3	2.72
I34	23 Aug 2018	6	21.69	76.03	8.1	33.72	8.2	23.3	3.04
I34	23 Aug 2018	7	21.66	75.41	7.9	33.72	8.2	23.3	3.27
I34	23 Aug 2018	8	20.67	74.61	8.0	33.70	8.2	23.6	3.55
I34	23 Aug 2018	9	19.19	74.20	8.4	33.64	8.2	23.9	3.67
I34	23 Aug 2018	10	18.43	75.17	8.5	33.61	8.2	24.1	3.63
I34	23 Aug 2018	11	17.09	77.59	8.6	33.57	8.2	24.4	3.23
I34	23 Aug 2018	12	16.73	80.32	8.5	33.54	8.2	24.5	2.64
I34	23 Aug 2018	13	16.39	83.40	8.5	33.52	8.2	24.5	2.27
I34	23 Aug 2018	14	16.21	84.05	8.2	33.54	8.2	24.6	2.29
I34	23 Aug 2018	15	15.55	83.97	8.0	33.53	8.1	24.7	2.30
I34	23 Aug 2018	16	15.53	83.63	7.9	33.53	8.1	24.7	2.51
I34	23 Aug 2018	17	15.54	82.89	7.7	33.53	8.1	24.7	2.82
I34	23 Aug 2018	18	15.42	82.11	7.4	33.54	8.1	24.8	3.18
I34	23 Aug 2018	19	14.97	82.18	7.2	33.54	8.1	24.9	2.92
I35	23 Aug 2018	1	23.77	77.16	8.3	33.73	8.3	22.8	0.58
I35	23 Aug 2018	2	23.77	77.16	8.3	33.73	8.3	22.8	0.59
I35	23 Aug 2018	3	23.52	77.19	8.4	33.73	8.3	22.8	0.65
I35	23 Aug 2018	4	21.48	77.80	9.3	33.72	8.3	23.4	0.79
I35	23 Aug 2018	5	20.31	76.66	9.9	33.65	8.3	23.6	1.11
I35	23 Aug 2018	6	19.78	74.75	10.2	33.62	8.3	23.8	1.58
I35	23 Aug 2018	7	18.78	74.21	10.3	33.61	8.3	24.0	2.17
I35	23 Aug 2018	8	17.56	75.99	10.3	33.57	8.3	24.3	2.37
I35	23 Aug 2018	9	17.05	77.99	9.9	33.53	8.3	24.4	2.35
I35	23 Aug 2018	10	16.78	78.07	9.4	33.53	8.3	24.4	2.67
I35	23 Aug 2018	11	16.48	77.91	8.7	33.52	8.2	24.5	3.20
I35	23 Aug 2018	12	16.29	78.71	8.1	33.52	8.2	24.5	3.44
I35	23 Aug 2018	13	16.13	79.19	7.9	33.52	8.2	24.6	3.61
I35	23 Aug 2018	14	16.03	79.63	7.8	33.52	8.2	24.6	3.55
I35	23 Aug 2018	15	15.79	79.65	7.5	33.53	8.1	24.7	3.62
I35	23 Aug 2018	16	15.55	79.85	7.2	33.53	8.1	24.7	3.43
I35	23 Aug 2018	17	15.51	80.39	7.1	33.53	8.1	24.7	3.14
I35	23 Aug 2018	18	15.50	80.41	7.0	33.54	8.1	24.7	2.91
I35	23 Aug 2018	19	15.48	80.39	7.0	33.54	8.1	24.7	2.79
I36	23 Aug 2018	1	23.52	76.80	8.2	33.73	8.3	22.8	0.71
I36	23 Aug 2018	2	23.37	76.39	8.3	33.73	8.3	22.9	0.75
I36	23 Aug 2018	3	22.76	76.42	8.5	33.73	8.3	23.0	0.90
I36	23 Aug 2018	4	21.48	75.91	8.8	33.71	8.3	23.4	1.22
I36	23 Aug 2018	5	19.47	74.09	9.3	33.66	8.3	23.9	1.90
I36	23 Aug 2018	6	18.63	71.96	9.5	33.61	8.3	24.1	2.62
I36	23 Aug 2018	7	18.20	72.33	9.4	33.58	8.3	24.1	3.27
I36	23 Aug 2018	8	17.87	73.15	8.5	33.57	8.2	24.2	3.72
I36	23 Aug 2018	9	17.61	72.33	7.4	33.57	8.2	24.3	4.62
I36	23 Aug 2018	10	17.33	72.23	6.9	33.56	8.1	24.3	5.57
I36	23 Aug 2018	11	17.23	73.86	7.0	33.55	8.1	24.3	5.17
I37	23 Aug 2018	1	22.47	77.84	8.2	33.75	8.2	23.1	1.74

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I37	23 Aug 2018	2	21.92	77.34	8.2	33.74	8.2	23.3	2.06
I37	23 Aug 2018	3	20.11	76.39	8.5	33.67	8.2	23.7	2.84
I37	23 Aug 2018	4	19.44	75.19	8.6	33.63	8.2	23.9	3.41
I37	23 Aug 2018	5	18.59	74.32	8.5	33.61	8.2	24.1	3.95
I37	23 Aug 2018	6	17.48	74.07	8.3	33.57	8.2	24.3	4.43
I37	23 Aug 2018	7	16.77	75.32	8.1	33.55	8.1	24.5	4.81
I37	23 Aug 2018	8	16.73	76.53	8.0	33.54	8.1	24.5	4.91
I37	23 Aug 2018	9	16.72	76.98	7.8	33.54	8.1	24.5	4.97
I37	23 Aug 2018	10	16.70	76.87	7.8	33.54	8.1	24.5	4.92
I37	23 Aug 2018	11	16.66	76.83	7.7	33.55	8.1	24.5	4.64
I37	23 Aug 2018	12	16.59	77.22	7.7	33.55	8.1	24.5	4.69
I38	23 Aug 2018	1	23.69	77.97	8.2	33.73	8.3	22.8	0.54
I38	23 Aug 2018	2	23.68	77.76	8.2	33.73	8.3	22.8	0.58
I38	23 Aug 2018	3	23.23	78.13	8.4	33.72	8.3	22.9	0.73
I38	23 Aug 2018	4	21.89	77.03	8.9	33.68	8.3	23.2	1.02
I38	23 Aug 2018	5	19.88	76.02	9.5	33.63	8.3	23.8	1.45
I38	23 Aug 2018	6	18.96	75.03	9.3	33.59	8.3	24.0	1.77
I38	23 Aug 2018	7	18.42	75.24	9.4	33.58	8.2	24.1	1.96
I38	23 Aug 2018	8	18.01	74.82	9.2	33.57	8.2	24.2	2.32
I38	23 Aug 2018	9	17.76	74.90	8.0	33.56	8.2	24.2	2.82
I38	23 Aug 2018	10	17.63	76.14	7.2	33.57	8.1	24.3	3.23
I38	23 Aug 2018	11	17.53	75.21	7.1	33.57	8.1	24.3	3.60
I4	21 Aug 2018	1	23.17	81.87	8.0	33.74	8.3	22.9	0.56
I4	21 Aug 2018	2	23.15	82.50	8.1	33.74	8.3	22.9	0.58
I4	21 Aug 2018	3	23.08	82.49	8.1	33.74	8.3	23.0	0.67
I4	21 Aug 2018	4	22.74	81.66	8.2	33.73	8.3	23.0	0.91
I4	21 Aug 2018	5	22.26	80.27	8.3	33.69	8.3	23.1	1.24
I4	21 Aug 2018	6	20.82	76.15	8.3	33.68	8.3	23.5	1.79
I4	21 Aug 2018	7	19.20	72.70	8.9	33.61	8.3	23.9	2.51
I4	21 Aug 2018	8	18.79	76.77	9.1	33.59	8.3	24.0	2.64
I4	21 Aug 2018	9	17.89	79.93	9.1	33.58	8.3	24.2	2.35
I4	21 Aug 2018	10	17.50	80.93	9.0	33.56	8.2	24.3	2.19
I4	21 Aug 2018	11	17.19	80.79	8.6	33.55	8.2	24.4	2.40
I4	21 Aug 2018	12	16.96	79.11	8.5	33.55	8.2	24.4	2.74
I4	21 Aug 2018	13	16.81	79.09	8.2	33.55	8.2	24.4	2.95
I4	21 Aug 2018	14	16.75	79.23	7.8	33.55	8.2	24.5	2.99
I4	21 Aug 2018	15	16.69	79.04	7.4	33.56	8.1	24.5	2.83
I4	21 Aug 2018	16	16.39	79.70	7.1	33.57	8.1	24.6	2.67
I4	21 Aug 2018	17	16.07	82.02	6.9	33.56	8.1	24.6	2.35
I4	21 Aug 2018	18	15.94	83.42	6.8	33.55	8.1	24.6	2.23
I5	21 Aug 2018	1	22.92	81.01	8.1	33.72	8.3	23.0	0.78
I5	21 Aug 2018	2	22.81	80.91	8.1	33.73	8.3	23.0	0.80
I5	21 Aug 2018	3	22.50	79.96	7.9	33.71	8.3	23.1	0.99
I5	21 Aug 2018	4	22.10	78.74	7.6	33.70	8.3	23.2	1.34
I5	21 Aug 2018	5	21.46	76.22	7.3	33.65	8.2	23.3	1.63
I5	21 Aug 2018	6	19.73	73.22	8.0	33.63	8.2	23.8	2.16
I5	21 Aug 2018	7	18.66	74.09	8.7	33.59	8.2	24.0	2.70
I5	21 Aug 2018	8	18.27	75.63	9.1	33.58	8.3	24.1	2.78
I5	21 Aug 2018	9	17.88	79.06	9.0	33.56	8.3	24.2	2.65
I5	21 Aug 2018	10	17.63	79.29	8.6	33.56	8.2	24.3	2.73
I5	21 Aug 2018	11	17.31	77.68	7.9	33.57	8.2	24.3	2.92
I5	21 Aug 2018	12	16.94	75.79	7.6	33.56	8.2	24.4	2.77

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I5	21 Aug 2018	13	16.90	75.18	7.5	33.56	8.2	24.4	2.54
I5	21 Aug 2018	14	16.93	73.38	7.5	33.56	8.2	24.4	2.43
I6	21 Aug 2018	1	23.33	85.88	7.9	33.78	8.3	22.9	0.24
I6	21 Aug 2018	2	23.30	85.78	7.9	33.78	8.3	22.9	0.26
I6	21 Aug 2018	3	23.17	86.07	8.0	33.77	8.3	23.0	0.30
I6	21 Aug 2018	4	22.88	85.96	8.1	33.76	8.3	23.0	0.38
I6	21 Aug 2018	5	21.94	85.02	8.4	33.72	8.3	23.3	0.59
I6	21 Aug 2018	6	20.29	82.70	9.2	33.64	8.3	23.6	0.96
I6	21 Aug 2018	7	19.74	81.86	9.6	33.61	8.3	23.8	1.18
I6	21 Aug 2018	8	19.58	81.21	9.7	33.60	8.3	23.8	1.46
I6	21 Aug 2018	9	19.16	80.75	10.0	33.59	8.3	23.9	1.83
I6	21 Aug 2018	10	18.91	79.38	10.1	33.59	8.3	24.0	2.08
I6	21 Aug 2018	11	18.15	80.22	10.0	33.58	8.3	24.1	2.04
I6	21 Aug 2018	12	17.67	81.52	9.8	33.57	8.3	24.3	2.02
I6	21 Aug 2018	13	17.39	81.04	9.5	33.56	8.3	24.3	2.30
I6	21 Aug 2018	14	17.20	80.49	9.3	33.56	8.3	24.4	2.63
I6	21 Aug 2018	15	16.92	79.95	8.8	33.56	8.2	24.4	3.10
I6	21 Aug 2018	16	16.53	79.08	8.6	33.55	8.2	24.5	3.67
I6	21 Aug 2018	17	16.49	78.86	8.1	33.55	8.2	24.5	3.91
I6	21 Aug 2018	18	16.23	81.27	7.6	33.55	8.1	24.6	3.25
I6	21 Aug 2018	19	16.04	82.57	7.9	33.55	8.2	24.6	2.85
I6	21 Aug 2018	20	15.63	83.21	7.8	33.55	8.2	24.7	2.73
I6	21 Aug 2018	21	15.18	83.59	7.5	33.54	8.1	24.8	2.65
I6	21 Aug 2018	22	15.11	83.38	7.4	33.53	8.1	24.8	2.78
I6	21 Aug 2018	23	15.08	83.30	7.3	33.54	8.1	24.8	2.85
I6	21 Aug 2018	24	15.01	84.63	7.0	33.54	8.1	24.8	2.16
I6	21 Aug 2018	25	14.97	86.96	6.8	33.54	8.1	24.9	1.12
I7	21 Aug 2018	1	23.72	88.67	7.4	33.82	8.2	22.8	0.23
I7	21 Aug 2018	2	23.72	88.57	7.4	33.82	8.2	22.8	0.23
I7	21 Aug 2018	3	23.72	88.71	7.4	33.82	8.2	22.8	0.21
I7	21 Aug 2018	4	23.72	88.67	7.4	33.82	8.2	22.8	0.20
I7	21 Aug 2018	5	23.71	88.75	7.4	33.82	8.2	22.8	0.23
I7	21 Aug 2018	6	23.64	88.79	7.4	33.81	8.2	22.8	0.26
I7	21 Aug 2018	7	23.44	88.80	7.5	33.80	8.2	22.9	0.23
I7	21 Aug 2018	8	23.24	88.76	7.5	33.78	8.2	22.9	0.24
I7	21 Aug 2018	9	22.76	88.70	7.5	33.76	8.2	23.1	0.24
I7	21 Aug 2018	10	21.22	88.65	7.9	33.72	8.2	23.5	0.23
I7	21 Aug 2018	11	19.95	88.85	8.2	33.65	8.2	23.7	0.17
I7	21 Aug 2018	12	18.88	89.15	8.5	33.61	8.2	24.0	0.12
I7	21 Aug 2018	13	18.28	89.43	8.6	33.58	8.2	24.1	0.10
I7	21 Aug 2018	14	18.04	89.41	8.5	33.56	8.2	24.2	0.12
I7	21 Aug 2018	15	17.62	89.53	8.5	33.55	8.2	24.3	0.11
I7	21 Aug 2018	16	17.52	89.60	8.5	33.54	8.2	24.3	0.11
I7	21 Aug 2018	17	17.38	89.58	8.5	33.54	8.2	24.3	0.11
I7	21 Aug 2018	18	17.29	89.51	8.5	33.54	8.2	24.3	0.11
I7	21 Aug 2018	19	17.19	89.55	8.4	33.54	8.2	24.3	0.11
I7	21 Aug 2018	20	17.10	89.47	8.4	33.54	8.2	24.4	0.10
I7	21 Aug 2018	21	16.96	89.54	8.5	33.54	8.2	24.4	0.10
I7	21 Aug 2018	22	16.90	89.53	8.5	33.54	8.2	24.4	0.11
I7	21 Aug 2018	23	16.81	89.49	8.5	33.54	8.2	24.4	0.13
I7	21 Aug 2018	24	16.74	89.46	8.5	33.54	8.2	24.5	0.15
I7	21 Aug 2018	25	16.74	89.49	8.5	33.54	8.2	24.5	0.15
I7	21 Aug 2018	26	16.71	89.49	8.4	33.54	8.2	24.5	0.15

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I7	21 Aug 2018	27	16.50	89.39	8.5	33.55	8.2	24.5	0.18
I7	21 Aug 2018	28	16.34	89.24	8.5	33.54	8.2	24.6	0.23
I7	21 Aug 2018	29	16.16	89.11	8.5	33.54	8.2	24.6	0.25
I7	21 Aug 2018	30	15.83	88.82	8.5	33.54	8.2	24.7	0.33
I7	21 Aug 2018	31	15.49	88.59	8.5	33.54	8.2	24.7	0.44
I7	21 Aug 2018	32	14.99	88.27	8.6	33.52	8.2	24.8	0.58
I7	21 Aug 2018	33	14.91	88.13	8.6	33.51	8.2	24.8	0.67
I7	21 Aug 2018	34	14.69	87.78	8.6	33.50	8.2	24.9	0.89
I7	21 Aug 2018	35	14.57	87.56	8.6	33.50	8.2	24.9	1.05
I7	21 Aug 2018	36	14.53	87.76	8.5	33.50	8.2	24.9	1.04
I7	21 Aug 2018	37	14.49	87.82	8.4	33.51	8.2	24.9	1.09
I7	21 Aug 2018	38	14.39	87.68	8.3	33.52	8.2	25.0	1.08
I7	21 Aug 2018	39	14.31	87.64	8.1	33.52	8.2	25.0	1.11
I7	21 Aug 2018	40	14.09	87.90	7.9	33.53	8.1	25.0	1.06
I7	21 Aug 2018	41	14.05	87.72	7.7	33.53	8.1	25.0	1.01
I7	21 Aug 2018	42	14.05	88.20	7.6	33.53	8.1	25.0	0.96
I7	21 Aug 2018	43	14.02	88.00	7.5	33.54	8.1	25.1	0.91
I7	21 Aug 2018	44	13.97	88.15	7.3	33.54	8.1	25.1	0.92
I7	21 Aug 2018	45	13.93	88.03	7.2	33.54	8.1	25.1	0.91
I7	21 Aug 2018	46	13.88	87.81	7.1	33.54	8.1	25.1	0.95
I7	21 Aug 2018	47	13.80	87.95	6.9	33.55	8.1	25.1	0.97
I7	21 Aug 2018	48	13.65	87.92	6.7	33.55	8.1	25.1	0.89
I7	21 Aug 2018	49	13.53	87.92	6.6	33.55	8.0	25.2	0.80
I7	21 Aug 2018	50	13.43	88.05	6.5	33.55	8.0	25.2	0.70
I7	21 Aug 2018	51	13.34	88.09	6.5	33.55	8.0	25.2	0.57
I7	21 Aug 2018	52	13.25	88.33	6.5	33.55	8.0	25.2	0.48
I8	21 Aug 2018	1	24.01	86.67	7.5	33.83	8.3	22.8	0.16
I8	21 Aug 2018	2	23.97	86.77	7.5	33.83	8.3	22.8	0.16
I8	21 Aug 2018	3	23.91	86.82	7.5	33.83	8.3	22.8	0.21
I8	21 Aug 2018	4	23.88	86.87	7.6	33.82	8.3	22.8	0.19
I8	21 Aug 2018	5	23.83	87.05	7.6	33.82	8.3	22.8	0.18
I8	21 Aug 2018	6	23.76	86.98	7.6	33.82	8.3	22.8	0.19
I8	21 Aug 2018	7	23.63	86.89	7.7	33.81	8.3	22.9	0.26
I8	21 Aug 2018	8	23.34	86.78	7.8	33.80	8.3	22.9	0.29
I8	21 Aug 2018	9	23.16	86.83	7.8	33.78	8.3	23.0	0.33
I8	21 Aug 2018	10	23.13	86.78	7.8	33.78	8.3	23.0	0.37
I8	21 Aug 2018	11	22.47	85.99	8.1	33.77	8.3	23.2	0.40
I8	21 Aug 2018	12	21.64	84.59	8.6	33.73	8.3	23.4	0.52
I8	21 Aug 2018	13	21.12	82.76	8.9	33.70	8.3	23.5	0.73
I8	21 Aug 2018	14	20.11	82.38	9.0	33.68	8.3	23.7	0.90
I8	21 Aug 2018	15	18.57	82.84	9.3	33.63	8.3	24.1	1.00
I8	21 Aug 2018	16	17.71	83.05	9.3	33.60	8.3	24.3	1.10
I8	21 Aug 2018	17	17.15	83.24	9.2	33.57	8.3	24.4	1.23
I8	21 Aug 2018	18	16.76	84.04	9.0	33.56	8.3	24.5	1.37
I8	21 Aug 2018	19	16.63	84.16	9.0	33.55	8.3	24.5	1.44
I8	21 Aug 2018	20	16.55	84.00	8.9	33.55	8.3	24.5	1.54
I8	21 Aug 2018	21	16.36	84.03	8.8	33.56	8.3	24.6	1.71
I8	21 Aug 2018	22	16.16	84.45	8.8	33.55	8.2	24.6	1.75
I8	21 Aug 2018	23	15.77	85.19	8.7	33.55	8.2	24.7	1.67
I8	21 Aug 2018	24	15.58	85.83	8.6	33.54	8.2	24.7	1.49
I8	21 Aug 2018	25	15.21	86.09	8.4	33.54	8.2	24.8	1.44
I8	21 Aug 2018	26	14.92	86.39	8.3	33.53	8.2	24.9	1.45
I8	21 Aug 2018	27	14.91	86.31	8.2	33.53	8.2	24.9	1.58
I8	21 Aug 2018	28	14.87	86.38	8.2	33.53	8.2	24.9	1.64

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
I8	21 Aug 2018	29	14.87	86.41	8.2	33.53	8.2	24.9	1.61
I8	21 Aug 2018	30	14.76	86.03	8.0	33.54	8.2	24.9	1.74
I8	21 Aug 2018	31	14.62	85.27	7.7	33.54	8.2	24.9	1.97
I8	21 Aug 2018	32	14.46	85.11	7.5	33.55	8.2	25.0	2.09
I8	21 Aug 2018	33	14.35	85.26	7.5	33.55	8.1	25.0	2.13
I8	21 Aug 2018	34	14.26	85.13	7.3	33.55	8.1	25.0	2.19
I8	21 Aug 2018	35	14.20	84.95	7.1	33.55	8.1	25.0	2.03
I8	21 Aug 2018	36	14.20	84.59	7.1	33.55	8.1	25.0	1.98
I9	21 Aug 2018	1	23.37	84.84	7.0	33.76	8.3	22.9	0.42
I9	21 Aug 2018	2	23.37	84.70	7.4	33.76	8.3	22.9	0.49
I9	21 Aug 2018	3	23.36	85.10	7.4	33.77	8.3	22.9	0.33
I9	21 Aug 2018	4	23.25	85.14	7.1	33.84	8.3	23.0	0.34
I9	21 Aug 2018	5	22.75	84.85	7.0	NA	8.3	23.4	0.29
I9	21 Aug 2018	6	22.36	84.19	7.1	NA	8.3	23.5	0.30
I9	21 Aug 2018	7	21.87	83.82	7.1	NA	8.3	23.7	0.28
I9	21 Aug 2018	8	21.31	83.33	7.4	NA	8.3	24.0	0.29
I9	21 Aug 2018	9	19.45	82.37	8.2	NA	8.3	24.6	0.30
I9	21 Aug 2018	10	18.73	82.41	8.8	34.02	8.3	24.4	0.32
I9	21 Aug 2018	11	18.13	82.48	9.2	33.84	8.3	24.4	0.55
I9	21 Aug 2018	12	17.65	82.69	9.4	33.72	8.3	24.4	0.96
I9	21 Aug 2018	13	17.33	82.97	9.5	33.64	8.3	24.4	1.38
I9	21 Aug 2018	14	17.25	83.41	9.6	33.62	8.3	24.4	1.62
I9	21 Aug 2018	15	17.06	83.98	9.4	33.61	8.3	24.4	1.55
I9	21 Aug 2018	16	16.80	84.38	9.1	33.61	8.3	24.5	1.45
I9	21 Aug 2018	17	16.30	84.91	8.8	33.59	8.2	24.6	1.44
I9	21 Aug 2018	18	16.25	84.87	8.6	33.57	8.2	24.6	1.42
I9	21 Aug 2018	19	16.06	84.18	8.1	33.59	8.2	24.6	1.63
I9	21 Aug 2018	20	15.75	83.58	7.8	33.58	8.2	24.7	1.98
I9	21 Aug 2018	21	15.53	83.52	7.7	33.57	8.2	24.8	2.21
I9	21 Aug 2018	22	15.15	83.43	7.7	33.57	8.2	24.8	2.44
I9	21 Aug 2018	23	15.03	83.27	7.7	33.55	8.2	24.8	2.74
I9	21 Aug 2018	24	14.82	83.60	7.2	33.56	8.1	24.9	2.79
I9	21 Aug 2018	25	14.77	85.34	7.0	33.55	8.1	24.9	2.21
I9	21 Aug 2018	26	14.76	85.37	6.9	33.55	8.1	24.9	1.64
I9	21 Aug 2018	27	14.74	85.61	6.8	33.55	8.1	24.9	1.21
I9	21 Aug 2018	28	14.68	85.74	6.7	33.55	8.1	24.9	0.94
I9	21 Aug 2018	29	14.64	85.91	6.7	33.55	8.1	24.9	0.82

NA = not available

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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* (Enter) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Enter
I3	21 Aug 2018	18	AE	LAB DUPLICATE	<2	<2	<2
I8	21 Aug 2018	37	JT	LAB DUPLICATE	4e	2e	<2
I9	21 Aug 2018	27	JT	LAB DUPLICATE	2e	2e	<2
I12	22 Aug 2018	18	JT	LAB DUPLICATE	48	12e	<2
I13	22 Aug 2018	18	JT	LAB DUPLICATE	<2	<2	<2
I14	22 Aug 2018	2	JT	LAB DUPLICATE	<2	<2	<2
I16	22 Aug 2018	18	AR	LAB DUPLICATE	<2	<2	4e
I19	06 Aug 2018	6	AR	LAB DUPLICATE	<2	<2	<2
I19	13 Aug 2018	6	JT	LAB DUPLICATE	<20	2e	<2
I19	20 Aug 2018	6	JT	LAB DUPLICATE	<20	<2	<2
I19	27 Aug 2018	6	AE	LAB DUPLICATE	<2	<2	<2
I20	22 Aug 2018	55	AE	LAB DUPLICATE	2e	<2	2e
I30	23 Aug 2018	27	AE	LAB DUPLICATE	<2	<2	<2
I36	23 Aug 2018	11	AE	FIELD DUPLICATE	<2	<2	<2
I36	23 Aug 2018	11	AE	LAB DUPLICATE	<2	<2	<2
I40	06 Aug 2018	6	AE	LAB DUPLICATE	<2	<2	<2
I40	13 Aug 2018	6	JT	LAB DUPLICATE	10e	<2	<2
I40	20 Aug 2018	6	AR	LAB DUPLICATE	<20	<2	<2
I40	27 Aug 2018	6	AE	LAB DUPLICATE	2e	<2	<2
S12	07 Aug 2018		JT	FIELD DUPLICATE	<20	<2	2e
S12	07 Aug 2018		JT	LAB DUPLICATE	20e	6e	ns
S12	14 Aug 2018		AR	FIELD DUPLICATE	<20	<2	2e
S12	14 Aug 2018		AR	LAB DUPLICATE	<20	<2	2e
S12	21 Aug 2018		AR	FIELD DUPLICATE	<20	<2	2e
S12	21 Aug 2018		AE	LAB DUPLICATE	<20	<2	4e
S12	28 Aug 2018		AE	FIELD DUPLICATE	<20	<2	<2
S12	28 Aug 2018		AE	LAB DUPLICATE	<20	<2	<2

ns = not sampled

ND = no data

