



Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall

(South Bay Water Reclamation Plant)

NPDES Permit No. CA0109045

September 2015



City of San Diego
Ocean Monitoring Program
Public Utilities Department
Environmental Monitoring and Technical Services Division



THE CITY OF SAN DIEGO

October 30, 2015

Mr. David 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 September 2015 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006, NPDES Permit No. CA0109045.

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

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Peter S. Vroom".

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

TDS:asb

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



INTRODUCTION

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 Order No. R9-2013-0006 superseded Order No. R9-2006-0067 effective April 4, 2013.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

MATERIALS AND METHODS

Shore Stations

Water quality monitoring was conducted at 11 stations located along the shore from Playa Blanca, Mexico to Coronado, USA (see station locations map). Three sites are located south of the international border (stations S0, S2, S3), while eight sites are in the United States (stations S4–S6 and S8–12).

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 stations (I19, I24, I25, I26, I32, I39, I40) were sampled according to NPDES permit specifications in order to monitor water quality compliance within a kelp bed-suitable area. The seven kelp stations 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 seven stations are only occasionally located within an area where kelp is actually found. 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.

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.

All water samples were collected using Van Dorn bottles arrayed at the required depths and messenger-tripped in series. Aliquots for bacteriological analyses were drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column profiles of the various physical/chemical parameters were taken using a CTD. The CTD collected these physical/chemical data at a rate of eight scans per second. The data were then

internally averaged using the CTD proprietary software, Seasoft, to create water column profiles equivalent to one reading per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data. However, it should be noted that the CTD measurements and bacteriological samples were taken from separate hydrocasts.

Offshore Stations

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

Bacteriological Reporting and Quality Assurance

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

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

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

- (1) Total coliform density shall not exceed 1000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 200 CFU/100 mL;

^[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.

(3) *Enterococcus* density shall not exceed 35 CFU/100 mL.

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 2015 Quality Assurance Report, which will be completed in March 2016.

SUMMARY OF RESULTS

➤ **Shoreline Water Quality Sampling**

- Because of site access restrictions in Mexico, the South Bay shoreline sampling is carried out on the same day each week (i.e., Tuesday) in order to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the IBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
- During September, each of the eight shore stations located north of the border were in compliance with 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).

mL & F:T ratio >0.1) in the seawater samples collected at station S2 on September 1 and at stations S0 and S3 on September 15.

- Historical analyses of Ocean Plan compliance rates for the South Bay outfall shoreline monitoring stations, combined with the results of satellite imagery data, suggest that outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego's most recent *South Bay Ocean Outfall Annual Receiving Waters Monitoring and Assessment Report* for details (<http://www.sandiego.gov/mwwd/environment/oceanmonitor/reports/index.shtml>).
- Notable visual observations for September included: water flowing from a storm drain at stations S0 and S3. These observations were made on one or more days during the month.

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled five times during September (i.e. September 4, 10, 15, 21, 27).
- During September, all seven of these stations were in compliance with Ocean Plan standards.
- Water column temperatures ranged from 17.33 to 23.63°C. The difference between surface and bottom waters ranged from approximately 0.01 to 5.15°C, indicating the water column was stratified at some of these sites.
- Chlorophyll *a* concentrations ranged from 0.24 to 8.05 µg/L at these stations, suggesting the presence of phytoplankton blooms during the month.
- Nothing of sewage origin was observed at any of the kelp bed stations.

➤ **Offshore Water Quality Sampling**

- Quarterly sampling was not conducted during September at the offshore stations. The next quarterly sampling is scheduled for November 2015.

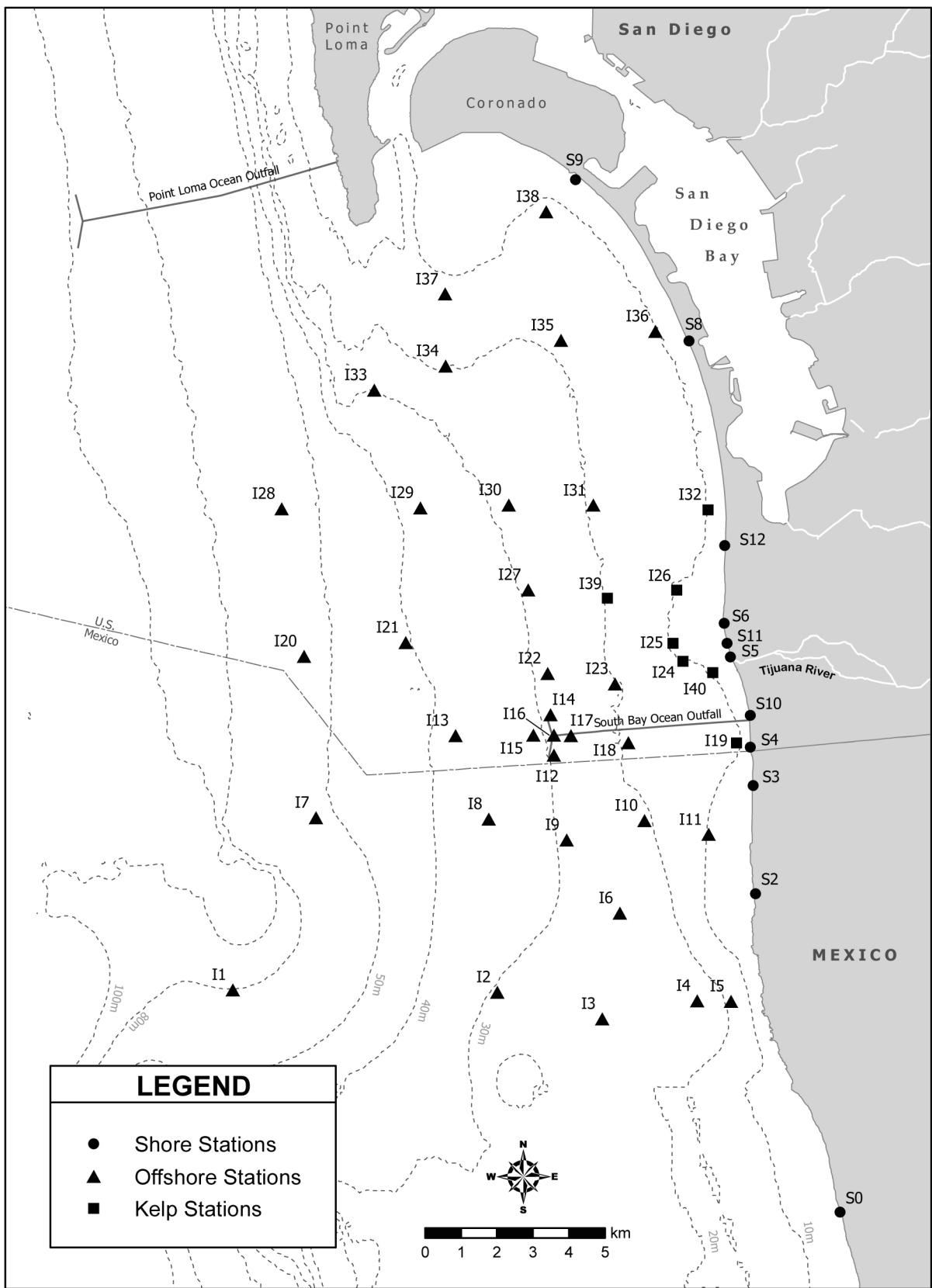


Figure 1.1 Station Map

Shore Stations

Table 2.1

Summary of compliance with the 2012 Ocean Plan's 30-day Geometric Mean standard for total coliforms 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 Sep 2015	33	20	18	32	23	13	13	74
02 Sep 2015	33	20	18	32	23	13	13	74
03 Sep 2015	25*	15*	13*	36*	24*	11*	11*	103*
04 Sep 2015	25*	15*	13*	36*	24*	11*	11*	103*
05 Sep 2015	25*	15*	13*	36*	24*	11*	11*	103*
06 Sep 2015	25*	15*	13*	36*	24*	11*	11*	103*
07 Sep 2015	25*	15*	13*	36*	24*	11*	11*	103*
08 Sep 2015	24	12	9	32	23	13	8	74
09 Sep 2015	24	12	9	32	23	13	8	74
10 Sep 2015	31*	15*	11*	36*	24*	20*	6*	78*
11 Sep 2015	31*	15*	11*	36*	24*	20*	6*	78*
12 Sep 2015	31*	15*	11*	36*	24*	20*	6*	78*
13 Sep 2015	31*	15*	11*	36*	24*	20*	6*	78*
14 Sep 2015	31*	15*	11*	36*	24*	20*	6*	78*
15 Sep 2015	45	25	20	32	23	20	8	94
16 Sep 2015	45	25	20	32	23	20	8	94
17 Sep 2015	42*	26*	20*	36*	20*	20*	11*	89*
18 Sep 2015	42*	26*	20*	36*	20*	20*	11*	89*
19 Sep 2015	42*	26*	20*	36*	20*	20*	11*	89*
20 Sep 2015	42*	26*	20*	36*	20*	20*	11*	89*
21 Sep 2015	42*	26*	20*	36*	20*	20*	11*	89*
22 Sep 2015	23	38	20	32	23	20	13	105
23 Sep 2015	23	38	20	32	23	20	13	105
24 Sep 2015	24*	44*	20*	36*	24*	20*	11*	120*
25 Sep 2015	24*	44*	20*	36*	24*	20*	11*	120*
26 Sep 2015	24*	44*	20*	36*	24*	20*	11*	120*
27 Sep 2015	24*	44*	20*	36*	24*	20*	11*	120*
28 Sep 2015	24*	44*	20*	36*	24*	20*	11*	120*
29 Sep 2015	36	38	32	50	23	32	20	133
30 Sep 2015	36	38	32	50	23	32	20	133

* Geometric mean calculated using an n<5

Table 2.2

Summary of compliance with the 2012 Ocean Plan's 30-day Geometric Mean standard for fecal coliform 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 Sep 2015	3	4	3	4	2	4	2	9
02 Sep 2015	3	4	3	4	2	4	2	9
03 Sep 2015	3*	3*	3*	5*	2*	4*	3*	13*
04 Sep 2015	3*	3*	3*	5*	2*	4*	3*	13*
05 Sep 2015	3*	3*	3*	5*	2*	4*	3*	13*
06 Sep 2015	3*	3*	3*	5*	2*	4*	3*	13*
07 Sep 2015	3*	3*	3*	5*	2*	4*	3*	13*
08 Sep 2015	3	3	3	4	2	4	2	10
09 Sep 2015	3	3	3	4	2	4	2	10
10 Sep 2015	3*	3*	3*	5*	2*	4*	3*	12*
11 Sep 2015	3*	3*	3*	5*	2*	4*	3*	12*
12 Sep 2015	3*	3*	3*	5*	2*	4*	3*	12*
13 Sep 2015	3*	3*	3*	5*	2*	4*	3*	12*
14 Sep 2015	3*	3*	3*	5*	2*	4*	3*	12*
15 Sep 2015	3	3	3	4	2	4	2	9
16 Sep 2015	3	3	3	4	2	4	2	9
17 Sep 2015	3*	2*	3*	4*	2*	2*	3*	8*
18 Sep 2015	3*	2*	3*	4*	2*	2*	3*	8*
19 Sep 2015	3*	2*	3*	4*	2*	2*	3*	8*
20 Sep 2015	3*	2*	3*	4*	2*	2*	3*	8*
21 Sep 2015	3*	2*	3*	4*	2*	2*	3*	8*
22 Sep 2015	2	3	3	4	2	2	2	9
23 Sep 2015	2	3	3	4	2	2	2	9
24 Sep 2015	3*	3*	2*	2*	2*	2*	2*	6*
25 Sep 2015	3*	3*	2*	2*	2*	2*	2*	6*
26 Sep 2015	3*	3*	2*	2*	2*	2*	2*	6*
27 Sep 2015	3*	3*	2*	2*	2*	2*	2*	6*
28 Sep 2015	3*	3*	2*	2*	2*	2*	2*	6*
29 Sep 2015	4	3	2	2	2	2	2	5
30 Sep 2015	4	3	2	2	2	2	2	5

* Geometric mean calculated using an n<5

Table 2.3

Summary of compliance with the 2012 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 Sep 2015	6	9	6	4	4	3	5	6
02 Sep 2015	6	9	6	4	4	3	5	6
03 Sep 2015	5*	8*	6*	4*	4*	3*	5*	8*
04 Sep 2015	5*	8*	6*	4*	4*	3*	5*	8*
05 Sep 2015	5*	8*	6*	4*	4*	3*	5*	8*
06 Sep 2015	5*	8*	6*	4*	4*	3*	5*	8*
07 Sep 2015	5*	8*	6*	4*	4*	3*	5*	8*
08 Sep 2015	4	6	5	4	4	3	4	6
09 Sep 2015	4	6	5	4	4	3	4	6
10 Sep 2015	5*	6*	5*	4*	4*	3*	5*	8*
11 Sep 2015	5*	6*	5*	4*	4*	3*	5*	8*
12 Sep 2015	5*	6*	5*	4*	4*	3*	5*	8*
13 Sep 2015	5*	6*	5*	4*	4*	3*	5*	8*
14 Sep 2015	5*	6*	5*	4*	4*	3*	5*	8*
15 Sep 2015	6	6	5	4	4	6	5	7
16 Sep 2015	6	6	5	4	4	6	5	7
17 Sep 2015	5*	4*	6*	3*	3*	6*	4*	6*
18 Sep 2015	5*	4*	6*	3*	3*	6*	4*	6*
19 Sep 2015	5*	4*	6*	3*	3*	6*	4*	6*
20 Sep 2015	5*	4*	6*	3*	3*	6*	4*	6*
21 Sep 2015	5*	4*	6*	3*	3*	6*	4*	6*
22 Sep 2015	4	6	5	2	3	7	4	5
23 Sep 2015	4	6	5	2	3	7	4	5
24 Sep 2015	5*	5*	3*	3*	2*	10*	3*	3*
25 Sep 2015	5*	5*	3*	3*	2*	10*	3*	3*
26 Sep 2015	5*	5*	3*	3*	2*	10*	3*	3*
27 Sep 2015	5*	5*	3*	3*	2*	10*	3*	3*
28 Sep 2015	5*	5*	3*	3*	2*	10*	3*	3*
29 Sep 2015	8	4	3	2	3	7	4	3
30 Sep 2015	8	4	3	2	3	7	4	3

* Geometric mean calculated using an n<5

Table 2.4

Summary of compliance at the SBOO shore stations with the 2012 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
01 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
15 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.5

Summary of compliance at the SBOO shore stations with the 2012 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
01 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
15 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.6

Summary of compliance at the SBOO shore stations with the 2012 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
01 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
15 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.7

Summary of compliance at the SBOO shore stations with the 2012 Ocean Plan's Single Sample Maximum standard for total coliforms 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
01 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
15 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2015	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

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	01 Sep 2015	1100	20e	<2	6e	0.100
S0	08 Sep 2015	1050	20e	<2	2e	0.100
S0	15 Sep 2015	1136	1400e	62	1400e	0.044
S0	22 Sep 2015	1638	4e	<2	<2	0.500
S0	29 Sep 2015	1220	140e	<2	34e	0.014
S2	01 Sep 2015	955	140e	4e	120	0.029
S2	08 Sep 2015	1000	40e	<2	<2	0.050
S2	15 Sep 2015	1030	380e	<2	100e	0.005
S2	22 Sep 2015	1040	<20	<2	<2	0.100
S2	29 Sep 2015	1125	40e	2e	<2	0.050
S3	01 Sep 2015	920	<20	<2	<2	0.100
S3	08 Sep 2015	925	2e	<2	2e	1.000
S3	15 Sep 2015	942	340e	<2	110	0.006
S3	22 Sep 2015	1020	10e	<2	<2	0.200
S3	29 Sep 2015	1050	20e	<2	2e	0.100
S4	01 Sep 2015	1053	40e	6e	16e	0.150
S4	08 Sep 2015	1140	<20	<2	2e	0.100
S4	15 Sep 2015	1117	<200	<2	10e	0.010
S4	22 Sep 2015	1117	<2	<2	<2	1.000
S4	29 Sep 2015	1059	200e	16e	54	0.080
S5	01 Sep 2015	901	<20	<2	2e	0.100
S5	08 Sep 2015	955	6e	<2	2e	0.333
S5	15 Sep 2015	912	<200	<2	6e	0.010
S5	22 Sep 2015	904	160e	10e	26e	0.062
S5	29 Sep 2015	831	<20	<2	<2	0.100
S6	01 Sep 2015	917	<20	2e	6e	0.100
S6	08 Sep 2015	1010	2e	<2	<2	1.000
S6	15 Sep 2015	930	<200	<2	4e	0.010
S6	22 Sep 2015	918	<20	<2	<2	0.100
S6	29 Sep 2015	847	200e	2e	4e	0.010
S8	01 Sep 2015	821	<200	4e	6e	0.020
S8	08 Sep 2015	830	<20	<2	<2	0.100
S8	15 Sep 2015	827	20e	2e	<2	0.100
S8	22 Sep 2015	829	<20	<2	<2	0.100
S8	29 Sep 2015	753	<200	2e	2e	0.010
S9	01 Sep 2015	756	<20	<2	2e	0.100
S9	08 Sep 2015	813	<20	<2	<2	0.100
S9	15 Sep 2015	809	<20	4e	4e	0.200
S9	22 Sep 2015	808	40e	2e	2e	0.050
S9	29 Sep 2015	733	<20	<2	6e	0.100
S10	01 Sep 2015	1101	<20	4e	4e	0.200

Station	Date	Time	Total	Fecal	Enter	F:T
S10	08 Sep 2015	1145	<20	<2	<2	0.100
S10	15 Sep 2015	1123	<20	2e	100	0.100
S10	22 Sep 2015	1125	<20	<2	12e	0.100
S10	29 Sep 2015	1108	<200	<2	2e	0.010
S11	01 Sep 2015	912	<20	<2	<2	0.100
S11	08 Sep 2015	1006	2e	<2	<2	1.000
S11	15 Sep 2015	923	<20	<2	4e	0.100
S11	22 Sep 2015	913	20e	<2	6e	0.100
S11	29 Sep 2015	842	<200	2e	10e	0.010
S12	01 Sep 2015	928	260e	4e	6e	0.015
S12	08 Sep 2015	1020	<20	4e	<2	0.200
S12	15 Sep 2015	946	<200	4e	6e	0.020
S12	22 Sep 2015	930	<200	<20	<2	0.100
S12	29 Sep 2015	906	<200	<2	<2	0.010

ns = not sampled

Table 2.9

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

Station	Date	Parameter	Value
S0	01 Sep 2015	Arrive Time	1100
S0	01 Sep 2015	Weather	Sunny
S0	01 Sep 2015	Wind Speed (kts)	4.8
S0	01 Sep 2015	Wind Dir	SE
S0	01 Sep 2015	Animal Life	1 Dog; >20 Seagulls
S0	01 Sep 2015	Floatables	None
S0	01 Sep 2015	Water Color	Green
S0	01 Sep 2015	Current Direction	N
S0	01 Sep 2015	Water Temp (C)	22.8
S0	01 Sep 2015	Wave Height Low (ft)	2
S0	01 Sep 2015	High Tide (ft)	5.7
S0	01 Sep 2015	High Tide Time	1135
S0	01 Sep 2015	Low Tide (ft)	0.1
S0	01 Sep 2015	Low Tide Time	525
S0	01 Sep 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec
S0	08 Sep 2015	Arrive Time	1050
S0	08 Sep 2015	Weather	Sunny
S0	08 Sep 2015	Wind Speed (kts)	7.8
S0	08 Sep 2015	Wind Dir	NE
S0	08 Sep 2015	Animal Life	10 Shorebirds; 1 Dog
S0	08 Sep 2015	Floatables	None
S0	08 Sep 2015	Water Color	Green
S0	08 Sep 2015	Current Direction	N
S0	08 Sep 2015	Water Temp (C)	22
S0	08 Sep 2015	Wave Height Low (ft)	4
S0	08 Sep 2015	High Tide (ft)	4.2
S0	08 Sep 2015	High Tide Time	743
S0	08 Sep 2015	Low Tide (ft)	2
S0	08 Sep 2015	Low Tide Time	1302
S0	08 Sep 2015	Comments	Kelp; 1 Person; Water clear; Flow from stormdrain 0.5 L/sec
S0	15 Sep 2015	Arrive Time	1136
S0	15 Sep 2015	Weather	Cloudy
S0	15 Sep 2015	Wind Speed (kts)	11.5
S0	15 Sep 2015	Wind Dir	S
S0	15 Sep 2015	Animal Life	30 Shorebirds
S0	15 Sep 2015	Floatables	None
S0	15 Sep 2015	Water Color	Green
S0	15 Sep 2015	Current Direction	N
S0	15 Sep 2015	Water Temp (C)	22.4
S0	15 Sep 2015	Wave Height Low (ft)	3
S0	15 Sep 2015	High Tide (ft)	5.1
S0	15 Sep 2015	High Tide Time	1041
S0	15 Sep 2015	Low Tide (ft)	0.9
S0	15 Sep 2015	Low Tide Time	1703
S0	15 Sep 2015	Comments	Kelp; 2 Persons; Water clear; Flow from stormdrain 0.5 L/sec
S0	22 Sep 2015	Arrive Time	1638
S0	22 Sep 2015	Weather	Sunny
S0	22 Sep 2015	Wind Speed (kts)	3.3

Station	Date	Parameter	Value
S0	22 Sep 2015	Wind Dir	SW
S0	22 Sep 2015	Animal Life	3 Dogs; >20 Seagulls
S0	22 Sep 2015	Floatables	None
S0	22 Sep 2015	Water Color	Green
S0	22 Sep 2015	Current Direction	S
S0	22 Sep 2015	Water Temp (C)	
S0	22 Sep 2015	Wave Height Low (ft)	2
S0	22 Sep 2015	High Tide (ft)	4.8
S0	22 Sep 2015	High Tide Time	1658
S0	22 Sep 2015	Low Tide (ft)	2.7
S0	22 Sep 2015	Low Tide Time	1056
S0	22 Sep 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec; Thermometer not working
S0	29 Sep 2015	Arrive Time	1220
S0	29 Sep 2015	Weather	Sunny
S0	29 Sep 2015	Wind Speed (kts)	4.5
S0	29 Sep 2015	Wind Dir	NW
S0	29 Sep 2015	Animal Life	2 Dogs; >20 Seagulls
S0	29 Sep 2015	Floatables	None
S0	29 Sep 2015	Water Color	Green
S0	29 Sep 2015	Current Direction	S
S0	29 Sep 2015	Water Temp (C)	0
S0	29 Sep 2015	Wave Height Low (ft)	2
S0	29 Sep 2015	High Tide (ft)	6.3
S0	29 Sep 2015	High Tide Time	1018
S0	29 Sep 2015	Low Tide (ft)	-0.4
S0	29 Sep 2015	Low Tide Time	1652
S0	29 Sep 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec; Thermometer not working
S2	01 Sep 2015	Arrive Time	955
S2	01 Sep 2015	Weather	Sunny
S2	01 Sep 2015	Wind Speed (kts)	3.7
S2	01 Sep 2015	Wind Dir	SE
S2	01 Sep 2015	Animal Life	2 Dogs; >20 Seagulls
S2	01 Sep 2015	Floatables	None
S2	01 Sep 2015	Water Color	Green
S2	01 Sep 2015	Current Direction	N
S2	01 Sep 2015	Water Temp (C)	22.5
S2	01 Sep 2015	Wave Height Low (ft)	2
S2	01 Sep 2015	High Tide (ft)	5.7
S2	01 Sep 2015	High Tide Time	1135
S2	01 Sep 2015	Low Tide (ft)	0.1
S2	01 Sep 2015	Low Tide Time	525
S2	01 Sep 2015	Comments	Kelp; Water turbid; No flow from stormdrain
S2	08 Sep 2015	Arrive Time	1000
S2	08 Sep 2015	Weather	Sunny
S2	08 Sep 2015	Wind Speed (kts)	3.8
S2	08 Sep 2015	Wind Dir	NE
S2	08 Sep 2015	Animal Life	15 Shorebirds; 1 Dog
S2	08 Sep 2015	Floatables	None
S2	08 Sep 2015	Water Color	Green
S2	08 Sep 2015	Current Direction	N

Station	Date	Parameter	Value
S2	08 Sep 2015	Water Temp (C)	22
S2	08 Sep 2015	Wave Height Low (ft)	4
S2	08 Sep 2015	High Tide (ft)	4.2
S2	08 Sep 2015	High Tide Time	743
S2	08 Sep 2015	Low Tide (ft)	2
S2	08 Sep 2015	Low Tide Time	1302
S2	08 Sep 2015	Comments	Kelp; 5 Persons; Water clear; No flow from stormdrain
S2	15 Sep 2015	Arrive Time	1030
S2	15 Sep 2015	Weather	Cloudy
S2	15 Sep 2015	Wind Speed (kts)	18.2
S2	15 Sep 2015	Wind Dir	S
S2	15 Sep 2015	Animal Life	5 Shorebirds; 1 Dog; >20 Dolphins
S2	15 Sep 2015	Floatables	None
S2	15 Sep 2015	Water Color	Green
S2	15 Sep 2015	Current Direction	N
S2	15 Sep 2015	Water Temp (C)	23.5
S2	15 Sep 2015	Wave Height Low (ft)	3
S2	15 Sep 2015	High Tide (ft)	5.1
S2	15 Sep 2015	High Tide Time	1041
S2	15 Sep 2015	Low Tide (ft)	0.9
S2	15 Sep 2015	Low Tide Time	436
S2	15 Sep 2015	Comments	Kelp; 3 Persons; Water clear; No flow from stormdrain
S2	22 Sep 2015	Arrive Time	1040
S2	22 Sep 2015	Weather	Sunny
S2	22 Sep 2015	Wind Speed (kts)	4.2
S2	22 Sep 2015	Wind Dir	SW
S2	22 Sep 2015	Animal Life	3 Dogs; 3 Seagulls
S2	22 Sep 2015	Floatables	None
S2	22 Sep 2015	Water Color	Green
S2	22 Sep 2015	Current Direction	S
S2	22 Sep 2015	Water Temp (C)	
S2	22 Sep 2015	Wave Height Low (ft)	2
S2	22 Sep 2015	High Tide (ft)	3.6
S2	22 Sep 2015	High Tide Time	606
S2	22 Sep 2015	Low Tide (ft)	2.7
S2	22 Sep 2015	Low Tide Time	1056
S2	22 Sep 2015	Comments	Kelp; Water turbid; No flow from stormdrain; Thermometer not working
S2	29 Sep 2015	Arrive Time	1125
S2	29 Sep 2015	Weather	Sunny
S2	29 Sep 2015	Wind Speed (kts)	3.8
S2	29 Sep 2015	Wind Dir	SW
S2	29 Sep 2015	Animal Life	5 Dogs; >20 Seagulls
S2	29 Sep 2015	Floatables	None
S2	29 Sep 2015	Water Color	Green
S2	29 Sep 2015	Current Direction	S
S2	29 Sep 2015	Water Temp (C)	0
S2	29 Sep 2015	Wave Height Low (ft)	2
S2	29 Sep 2015	High Tide (ft)	6.3
S2	29 Sep 2015	High Tide Time	1018
S2	29 Sep 2015	Low Tide (ft)	-0.4
S2	29 Sep 2015	Low Tide Time	1652

Station	Date	Parameter	Value
S2	29 Sep 2015	Comments	Kelp; Water turbid; No flow from stormdrain; Thermometer not working
S3	01 Sep 2015	Arrive Time	920
S3	01 Sep 2015	Weather	Cloudy
S3	01 Sep 2015	Wind Speed (kts)	3.1
S3	01 Sep 2015	Wind Dir	SE
S3	01 Sep 2015	Animal Life	2 Dogs; >20 Seagulls
S3	01 Sep 2015	Floatables	None
S3	01 Sep 2015	Water Color	Green
S3	01 Sep 2015	Current Direction	N
S3	01 Sep 2015	Water Temp (C)	22.8
S3	01 Sep 2015	Wave Height Low (ft)	2
S3	01 Sep 2015	High Tide (ft)	5.7
S3	01 Sep 2015	High Tide Time	1135
S3	01 Sep 2015	Low Tide (ft)	0.1
S3	01 Sep 2015	Low Tide Time	525
S3	01 Sep 2015	Comments	Kelp; Water turbid; No flow from stormdrain
S3	08 Sep 2015	Arrive Time	925
S3	08 Sep 2015	Weather	Sunny
S3	08 Sep 2015	Wind Speed (kts)	3.5
S3	08 Sep 2015	Wind Dir	NE
S3	08 Sep 2015	Animal Life	10 Shorebirds
S3	08 Sep 2015	Floatables	None
S3	08 Sep 2015	Water Color	Green
S3	08 Sep 2015	Current Direction	N
S3	08 Sep 2015	Water Temp (C)	22.8
S3	08 Sep 2015	Wave Height Low (ft)	4
S3	08 Sep 2015	High Tide (ft)	4.2
S3	08 Sep 2015	High Tide Time	743
S3	08 Sep 2015	Low Tide (ft)	2
S3	08 Sep 2015	Low Tide Time	1302
S3	08 Sep 2015	Comments	Kelp; 12 Persons; Water clear; Flow from stormdrain 0.5 L/sec
S3	15 Sep 2015	Arrive Time	942
S3	15 Sep 2015	Weather	Cloudy
S3	15 Sep 2015	Wind Speed (kts)	8.5
S3	15 Sep 2015	Wind Dir	S
S3	15 Sep 2015	Animal Life	5 Shorebirds; 1 Dog
S3	15 Sep 2015	Floatables	None
S3	15 Sep 2015	Water Color	Green
S3	15 Sep 2015	Current Direction	S
S3	15 Sep 2015	Water Temp (C)	22.9
S3	15 Sep 2015	Wave Height Low (ft)	2
S3	15 Sep 2015	High Tide (ft)	5.1
S3	15 Sep 2015	High Tide Time	1041
S3	15 Sep 2015	Low Tide (ft)	0.9
S3	15 Sep 2015	Low Tide Time	436
S3	15 Sep 2015	Comments	Kelp; 3 Persons; 1 Surfer; Water clear; Flow from stormdrain 0.5 L/sec
S3	22 Sep 2015	Arrive Time	1020
S3	22 Sep 2015	Weather	Cloudy
S3	22 Sep 2015	Wind Speed (kts)	4.5

Station	Date	Parameter	Value
S3	22 Sep 2015	Wind Dir	SW
S3	22 Sep 2015	Animal Life	20 Shorebirds; 1 Dog
S3	22 Sep 2015	Floatables	None
S3	22 Sep 2015	Water Color	Green
S3	22 Sep 2015	Current Direction	S
S3	22 Sep 2015	Water Temp (C)	
S3	22 Sep 2015	Wave Height Low (ft)	2
S3	22 Sep 2015	High Tide (ft)	3.6
S3	22 Sep 2015	High Tide Time	606
S3	22 Sep 2015	Low Tide (ft)	2.7
S3	22 Sep 2015	Low Tide Time	1056
S3	22 Sep 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec; Thermometer not working
S3	29 Sep 2015	Arrive Time	1050
S3	29 Sep 2015	Weather	Sunny
S3	29 Sep 2015	Wind Speed (kts)	3.8
S3	29 Sep 2015	Wind Dir	SW
S3	29 Sep 2015	Animal Life	2 Dogs; >20 Seagulls
S3	29 Sep 2015	Floatables	None
S3	29 Sep 2015	Water Color	Green
S3	29 Sep 2015	Current Direction	S
S3	29 Sep 2015	Water Temp (C)	0
S3	29 Sep 2015	Wave Height Low (ft)	2
S3	29 Sep 2015	High Tide (ft)	6.3
S3	29 Sep 2015	High Tide Time	1018
S3	29 Sep 2015	Low Tide (ft)	-0.4
S3	29 Sep 2015	Low Tide Time	1652
S3	29 Sep 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec. Thermometer not working.
S4	01 Sep 2015	Arrive Time	1053
S4	01 Sep 2015	Weather	Partly Cloudy
S4	01 Sep 2015	Wind Speed (kts)	8.1
S4	01 Sep 2015	Wind Dir	SW
S4	01 Sep 2015	Animal Life	3 Shorebirds; 3 Horses; 4 Seagulls
S4	01 Sep 2015	Floatables	None
S4	01 Sep 2015	Water Color	Green
S4	01 Sep 2015	Current Direction	S
S4	01 Sep 2015	Water Temp (C)	23.6
S4	01 Sep 2015	Wave Height Low (ft)	3
S4	01 Sep 2015	High Tide (ft)	5.7
S4	01 Sep 2015	High Tide Time	1135
S4	01 Sep 2015	Low Tide (ft)	0.1
S4	01 Sep 2015	Low Tide Time	525
S4	01 Sep 2015	Comments	Kelp; Seagrass; 3 Persons; Water clear
S4	08 Sep 2015	Arrive Time	1140
S4	08 Sep 2015	Weather	Sunny
S4	08 Sep 2015	Wind Speed (kts)	3.6
S4	08 Sep 2015	Wind Dir	W
S4	08 Sep 2015	Animal Life	None
S4	08 Sep 2015	Floatables	None
S4	08 Sep 2015	Water Color	Green
S4	08 Sep 2015	Current Direction	N

Station	Date	Parameter	Value
S4	08 Sep 2015	Water Temp (C)	23.2
S4	08 Sep 2015	Wave Height Low (ft)	3
S4	08 Sep 2015	High Tide (ft)	4.2
S4	08 Sep 2015	High Tide Time	743
S4	08 Sep 2015	Low Tide (ft)	2
S4	08 Sep 2015	Low Tide Time	1302
S4	08 Sep 2015	Comments	Kelp; Seagrass; Water clear
S4	15 Sep 2015	Arrive Time	1117
S4	15 Sep 2015	Weather	Drizzle
S4	15 Sep 2015	Wind Speed (kts)	18
S4	15 Sep 2015	Wind Dir	S
S4	15 Sep 2015	Animal Life	None
S4	15 Sep 2015	Floatables	None
S4	15 Sep 2015	Water Color	Green
S4	15 Sep 2015	Current Direction	S
S4	15 Sep 2015	Water Temp (C)	23.6
S4	15 Sep 2015	Wave Height Low (ft)	2
S4	15 Sep 2015	High Tide (ft)	5.1
S4	15 Sep 2015	High Tide Time	1041
S4	15 Sep 2015	Low Tide (ft)	0.9
S4	15 Sep 2015	Low Tide Time	1703
S4	15 Sep 2015	Comments	Kelp; Seagrass; Debris; 3 Persons; Water clear
S4	22 Sep 2015	Arrive Time	1117
S4	22 Sep 2015	Weather	Cloudy
S4	22 Sep 2015	Wind Speed (kts)	4.6
S4	22 Sep 2015	Wind Dir	W
S4	22 Sep 2015	Animal Life	None
S4	22 Sep 2015	Floatables	None
S4	22 Sep 2015	Water Color	Green
S4	22 Sep 2015	Current Direction	S
S4	22 Sep 2015	Water Temp (C)	23.4
S4	22 Sep 2015	Wave Height Low (ft)	3
S4	22 Sep 2015	High Tide (ft)	3.6
S4	22 Sep 2015	High Tide Time	606
S4	22 Sep 2015	Low Tide (ft)	2.7
S4	22 Sep 2015	Low Tide Time	1056
S4	22 Sep 2015	Comments	Kelp; Water clear
S4	29 Sep 2015	Arrive Time	1059
S4	29 Sep 2015	Weather	Sunny
S4	29 Sep 2015	Wind Speed (kts)	4.2
S4	29 Sep 2015	Wind Dir	NW
S4	29 Sep 2015	Animal Life	None
S4	29 Sep 2015	Floatables	None
S4	29 Sep 2015	Water Color	Green
S4	29 Sep 2015	Current Direction	S
S4	29 Sep 2015	Water Temp (C)	23.4
S4	29 Sep 2015	Wave Height Low (ft)	2
S4	29 Sep 2015	High Tide (ft)	6.3
S4	29 Sep 2015	High Tide Time	1018
S4	29 Sep 2015	Low Tide (ft)	-0.4
S4	29 Sep 2015	Low Tide Time	1652
S4	29 Sep 2015	Comments	Kelp; Seagrass; Water clear

Station	Date	Parameter	Value
S5	01 Sep 2015	Arrive Time	901
S5	01 Sep 2015	Weather	Cloudy
S5	01 Sep 2015	Wind Speed (kts)	6
S5	01 Sep 2015	Wind Dir	SW
S5	01 Sep 2015	Animal Life	3 Shorebirds
S5	01 Sep 2015	Floatables	None
S5	01 Sep 2015	Water Color	Green
S5	01 Sep 2015	Current Direction	S
S5	01 Sep 2015	Water Temp (C)	22.2
S5	01 Sep 2015	Wave Height Low (ft)	4
S5	01 Sep 2015	High Tide (ft)	5.7
S5	01 Sep 2015	High Tide Time	1135
S5	01 Sep 2015	Low Tide (ft)	0.1
S5	01 Sep 2015	Low Tide Time	525
S5	01 Sep 2015	Comments	Kelp; Seagrass; Water clear
S5	08 Sep 2015	Arrive Time	955
S5	08 Sep 2015	Weather	Sunny
S5	08 Sep 2015	Wind Speed (kts)	3.8
S5	08 Sep 2015	Wind Dir	N
S5	08 Sep 2015	Animal Life	None
S5	08 Sep 2015	Floatables	None
S5	08 Sep 2015	Water Color	Green
S5	08 Sep 2015	Current Direction	N
S5	08 Sep 2015	Water Temp (C)	23.2
S5	08 Sep 2015	Wave Height Low (ft)	3
S5	08 Sep 2015	High Tide (ft)	4.2
S5	08 Sep 2015	High Tide Time	743
S5	08 Sep 2015	Low Tide (ft)	2
S5	08 Sep 2015	Low Tide Time	1302
S5	08 Sep 2015	Comments	Kelp; 4 Joggers; Water clear
S5	15 Sep 2015	Arrive Time	912
S5	15 Sep 2015	Weather	Drizzle
S5	15 Sep 2015	Wind Speed (kts)	19.4
S5	15 Sep 2015	Wind Dir	W
S5	15 Sep 2015	Animal Life	2 Dogs
S5	15 Sep 2015	Floatables	None
S5	15 Sep 2015	Water Color	Green
S5	15 Sep 2015	Current Direction	W
S5	15 Sep 2015	Water Temp (C)	24.6
S5	15 Sep 2015	Wave Height Low (ft)	3
S5	15 Sep 2015	High Tide (ft)	5.1
S5	15 Sep 2015	High Tide Time	1041
S5	15 Sep 2015	Low Tide (ft)	0.9
S5	15 Sep 2015	Low Tide Time	436
S5	15 Sep 2015	Comments	Kelp; Seagrass; 2 Persons; Water clear
S5	22 Sep 2015	Arrive Time	904
S5	22 Sep 2015	Weather	Cloudy
S5	22 Sep 2015	Wind Speed (kts)	3.6
S5	22 Sep 2015	Wind Dir	NW
S5	22 Sep 2015	Animal Life	None
S5	22 Sep 2015	Floatables	None

Station	Date	Parameter	Value
S5	22 Sep 2015	Water Color	Green
S5	22 Sep 2015	Current Direction	S
S5	22 Sep 2015	Water Temp (C)	23.8
S5	22 Sep 2015	Wave Height Low (ft)	3
S5	22 Sep 2015	High Tide (ft)	3.6
S5	22 Sep 2015	High Tide Time	606
S5	22 Sep 2015	Low Tide (ft)	2.7
S5	22 Sep 2015	Low Tide Time	1056
S5	22 Sep 2015	Comments	Kelp; Seagrass; Water clear
S5	29 Sep 2015	Arrive Time	831
S5	29 Sep 2015	Weather	Sunny
S5	29 Sep 2015	Wind Speed (kts)	1.7
S5	29 Sep 2015	Wind Dir	NE
S5	29 Sep 2015	Animal Life	None
S5	29 Sep 2015	Floatables	None
S5	29 Sep 2015	Water Color	Green
S5	29 Sep 2015	Current Direction	S
S5	29 Sep 2015	Water Temp (C)	21.6
S5	29 Sep 2015	Wave Height Low (ft)	3
S5	29 Sep 2015	High Tide (ft)	6.3
S5	29 Sep 2015	High Tide Time	1018
S5	29 Sep 2015	Low Tide (ft)	0.2
S5	29 Sep 2015	Low Tide Time	413
S5	29 Sep 2015	Comments	Kelp; Water clear
S6	01 Sep 2015	Arrive Time	917
S6	01 Sep 2015	Weather	Cloudy
S6	01 Sep 2015	Wind Speed (kts)	3.3
S6	01 Sep 2015	Wind Dir	SW
S6	01 Sep 2015	Animal Life	None
S6	01 Sep 2015	Floatables	None
S6	01 Sep 2015	Water Color	Green
S6	01 Sep 2015	Current Direction	S
S6	01 Sep 2015	Water Temp (C)	23.6
S6	01 Sep 2015	Wave Height Low (ft)	3
S6	01 Sep 2015	High Tide (ft)	5.7
S6	01 Sep 2015	High Tide Time	1135
S6	01 Sep 2015	Low Tide (ft)	0.1
S6	01 Sep 2015	Low Tide Time	525
S6	01 Sep 2015	Comments	Kelp; Seagrass; 3 Persons; Water clear
S6	08 Sep 2015	Arrive Time	1010
S6	08 Sep 2015	Weather	Sunny
S6	08 Sep 2015	Wind Speed (kts)	5.6
S6	08 Sep 2015	Wind Dir	N
S6	08 Sep 2015	Animal Life	None
S6	08 Sep 2015	Floatables	None
S6	08 Sep 2015	Water Color	Green
S6	08 Sep 2015	Current Direction	N
S6	08 Sep 2015	Water Temp (C)	23.2
S6	08 Sep 2015	Wave Height Low (ft)	2
S6	08 Sep 2015	High Tide (ft)	4.2
S6	08 Sep 2015	High Tide Time	743
S6	08 Sep 2015	Low Tide (ft)	2

Station	Date	Parameter	Value
S6	08 Sep 2015	Low Tide Time	1302
S6	08 Sep 2015	Comments	Kelp; Water clear
S6	15 Sep 2015	Arrive Time	930
S6	15 Sep 2015	Weather	Cloudy
S6	15 Sep 2015	Wind Speed (kts)	16.1
S6	15 Sep 2015	Wind Dir	S
S6	15 Sep 2015	Animal Life	None
S6	15 Sep 2015	Floatables	None
S6	15 Sep 2015	Water Color	Green
S6	15 Sep 2015	Current Direction	S
S6	15 Sep 2015	Water Temp (C)	23.6
S6	15 Sep 2015	Wave Height Low (ft)	3
S6	15 Sep 2015	High Tide (ft)	5.1
S6	15 Sep 2015	High Tide Time	1041
S6	15 Sep 2015	Low Tide (ft)	0.9
S6	15 Sep 2015	Low Tide Time	436
S6	15 Sep 2015	Comments	Kelp; Seagrass; Water clear
S6	22 Sep 2015	Arrive Time	918
S6	22 Sep 2015	Weather	Cloudy
S6	22 Sep 2015	Wind Speed (kts)	5.2
S6	22 Sep 2015	Wind Dir	NW
S6	22 Sep 2015	Animal Life	None
S6	22 Sep 2015	Floatables	None
S6	22 Sep 2015	Water Color	Green
S6	22 Sep 2015	Current Direction	S
S6	22 Sep 2015	Water Temp (C)	23.6
S6	22 Sep 2015	Wave Height Low (ft)	2
S6	22 Sep 2015	High Tide (ft)	3.6
S6	22 Sep 2015	High Tide Time	606
S6	22 Sep 2015	Low Tide (ft)	2.7
S6	22 Sep 2015	Low Tide Time	1056
S6	22 Sep 2015	Comments	Seagrass; Water clear
S6	29 Sep 2015	Arrive Time	847
S6	29 Sep 2015	Weather	Sunny
S6	29 Sep 2015	Wind Speed (kts)	2.1
S6	29 Sep 2015	Wind Dir	N
S6	29 Sep 2015	Animal Life	None
S6	29 Sep 2015	Floatables	None
S6	29 Sep 2015	Water Color	Green
S6	29 Sep 2015	Current Direction	S
S6	29 Sep 2015	Water Temp (C)	23.4
S6	29 Sep 2015	Wave Height Low (ft)	2
S6	29 Sep 2015	High Tide (ft)	6.3
S6	29 Sep 2015	High Tide Time	1018
S6	29 Sep 2015	Low Tide (ft)	0.2
S6	29 Sep 2015	Low Tide Time	413
S6	29 Sep 2015	Comments	Kelp; Seagrass; Water clear
S8	01 Sep 2015	Arrive Time	821
S8	01 Sep 2015	Weather	Cloudy
S8	01 Sep 2015	Wind Speed (kts)	3.6
S8	01 Sep 2015	Wind Dir	SW

Station	Date	Parameter	Value
S8	01 Sep 2015	Animal Life	3 Shorebirds
S8	01 Sep 2015	Floatables	None
S8	01 Sep 2015	Water Color	Green
S8	01 Sep 2015	Current Direction	S
S8	01 Sep 2015	Water Temp (C)	21.8
S8	01 Sep 2015	Wave Height Low (ft)	3
S8	01 Sep 2015	High Tide (ft)	5.7
S8	01 Sep 2015	High Tide Time	1135
S8	01 Sep 2015	Low Tide (ft)	0.1
S8	01 Sep 2015	Low Tide Time	525
S8	01 Sep 2015	Comments	Kelp; Seagrass; 4 Persons; Water clear
S8	08 Sep 2015	Arrive Time	830
S8	08 Sep 2015	Weather	Sunny
S8	08 Sep 2015	Wind Speed (kts)	2.1
S8	08 Sep 2015	Wind Dir	N
S8	08 Sep 2015	Animal Life	4 Shorebirds
S8	08 Sep 2015	Floatables	None
S8	08 Sep 2015	Water Color	Green
S8	08 Sep 2015	Current Direction	N
S8	08 Sep 2015	Water Temp (C)	23.2
S8	08 Sep 2015	Wave Height Low (ft)	2
S8	08 Sep 2015	High Tide (ft)	4.2
S8	08 Sep 2015	High Tide Time	743
S8	08 Sep 2015	Low Tide (ft)	2
S8	08 Sep 2015	Low Tide Time	1302
S8	08 Sep 2015	Comments	Kelp; Seagrass; 4 Persons; Water clear
S8	15 Sep 2015	Arrive Time	827
S8	15 Sep 2015	Weather	Cloudy
S8	15 Sep 2015	Wind Speed (kts)	9
S8	15 Sep 2015	Wind Dir	S
S8	15 Sep 2015	Animal Life	7 Shorebirds; 2 Birds
S8	15 Sep 2015	Floatables	None
S8	15 Sep 2015	Water Color	Green
S8	15 Sep 2015	Current Direction	S
S8	15 Sep 2015	Water Temp (C)	24
S8	15 Sep 2015	Wave Height Low (ft)	2
S8	15 Sep 2015	High Tide (ft)	5.1
S8	15 Sep 2015	High Tide Time	1041
S8	15 Sep 2015	Low Tide (ft)	0.9
S8	15 Sep 2015	Low Tide Time	436
S8	15 Sep 2015	Comments	Kelp; Seagrass; 1 Person; Water clear
S8	22 Sep 2015	Arrive Time	829
S8	22 Sep 2015	Weather	Cloudy
S8	22 Sep 2015	Wind Speed (kts)	2.5
S8	22 Sep 2015	Wind Dir	NW
S8	22 Sep 2015	Animal Life	None
S8	22 Sep 2015	Floatables	None
S8	22 Sep 2015	Water Color	Green
S8	22 Sep 2015	Current Direction	S
S8	22 Sep 2015	Water Temp (C)	22.8
S8	22 Sep 2015	Wave Height Low (ft)	3
S8	22 Sep 2015	High Tide (ft)	3.6

Station	Date	Parameter	Value
S8	22 Sep 2015	High Tide Time	606
S8	22 Sep 2015	Low Tide (ft)	2.7
S8	22 Sep 2015	Low Tide Time	1056
S8	22 Sep 2015	Comments	Kelp; Water clear
S8	29 Sep 2015	Arrive Time	753
S8	29 Sep 2015	Weather	Sunny
S8	29 Sep 2015	Wind Speed (kts)	2.6
S8	29 Sep 2015	Wind Dir	NE
S8	29 Sep 2015	Animal Life	None
S8	29 Sep 2015	Floatables	None
S8	29 Sep 2015	Water Color	Green
S8	29 Sep 2015	Current Direction	S
S8	29 Sep 2015	Water Temp (C)	20.4
S8	29 Sep 2015	Wave Height Low (ft)	3
S8	29 Sep 2015	High Tide (ft)	6.3
S8	29 Sep 2015	High Tide Time	1018
S8	29 Sep 2015	Low Tide (ft)	0.2
S8	29 Sep 2015	Low Tide Time	413
S8	29 Sep 2015	Comments	Kelp; Water clear
S9	01 Sep 2015	Arrive Time	756
S9	01 Sep 2015	Weather	Cloudy
S9	01 Sep 2015	Wind Speed (kts)	3.4
S9	01 Sep 2015	Wind Dir	SW
S9	01 Sep 2015	Animal Life	None
S9	01 Sep 2015	Floatables	None
S9	01 Sep 2015	Water Color	Green
S9	01 Sep 2015	Current Direction	S
S9	01 Sep 2015	Water Temp (C)	22.4
S9	01 Sep 2015	Wave Height Low (ft)	3
S9	01 Sep 2015	High Tide (ft)	5.7
S9	01 Sep 2015	High Tide Time	1135
S9	01 Sep 2015	Low Tide (ft)	0.1
S9	01 Sep 2015	Low Tide Time	525
S9	01 Sep 2015	Comments	Kelp; Seagrass; 21 Joggers; 2 Swimmers; Water clear
S9	08 Sep 2015	Arrive Time	813
S9	08 Sep 2015	Weather	Sunny
S9	08 Sep 2015	Wind Speed (kts)	2.9
S9	08 Sep 2015	Wind Dir	N
S9	08 Sep 2015	Animal Life	None
S9	08 Sep 2015	Floatables	None
S9	08 Sep 2015	Water Color	Green
S9	08 Sep 2015	Current Direction	N
S9	08 Sep 2015	Water Temp (C)	23.2
S9	08 Sep 2015	Wave Height Low (ft)	2
S9	08 Sep 2015	High Tide (ft)	4.2
S9	08 Sep 2015	High Tide Time	743
S9	08 Sep 2015	Low Tide (ft)	2
S9	08 Sep 2015	Low Tide Time	1302
S9	08 Sep 2015	Comments	Water turbid
S9	15 Sep 2015	Arrive Time	809
S9	15 Sep 2015	Weather	Cloudy

Station	Date	Parameter	Value
S9	15 Sep 2015	Wind Speed (kts)	9.1
S9	15 Sep 2015	Wind Dir	S
S9	15 Sep 2015	Animal Life	1 Shorebird
S9	15 Sep 2015	Floatables	None
S9	15 Sep 2015	Water Color	Green
S9	15 Sep 2015	Current Direction	S
S9	15 Sep 2015	Water Temp (C)	24.8
S9	15 Sep 2015	Wave Height Low (ft)	2
S9	15 Sep 2015	High Tide (ft)	5.1
S9	15 Sep 2015	High Tide Time	1041
S9	15 Sep 2015	Low Tide (ft)	0.9
S9	15 Sep 2015	Low Tide Time	436
S9	15 Sep 2015	Comments	Kelp; Seagrass; 1 Jogger; 1 Person; Water clear
S9	22 Sep 2015	Arrive Time	808
S9	22 Sep 2015	Weather	Cloudy
S9	22 Sep 2015	Wind Speed (kts)	2.9
S9	22 Sep 2015	Wind Dir	NW
S9	22 Sep 2015	Animal Life	None
S9	22 Sep 2015	Floatables	None
S9	22 Sep 2015	Water Color	Green
S9	22 Sep 2015	Current Direction	S
S9	22 Sep 2015	Water Temp (C)	22.4
S9	22 Sep 2015	Wave Height Low (ft)	2
S9	22 Sep 2015	High Tide (ft)	3.6
S9	22 Sep 2015	High Tide Time	606
S9	22 Sep 2015	Low Tide (ft)	2.7
S9	22 Sep 2015	Low Tide Time	1056
S9	22 Sep 2015	Comments	Kelp; Water clear
S9	29 Sep 2015	Arrive Time	733
S9	29 Sep 2015	Weather	Sunny
S9	29 Sep 2015	Wind Speed (kts)	0.1
S9	29 Sep 2015	Wind Dir	N
S9	29 Sep 2015	Animal Life	None
S9	29 Sep 2015	Floatables	None
S9	29 Sep 2015	Water Color	Green
S9	29 Sep 2015	Current Direction	S
S9	29 Sep 2015	Water Temp (C)	19.4
S9	29 Sep 2015	Wave Height Low (ft)	2
S9	29 Sep 2015	High Tide (ft)	6.3
S9	29 Sep 2015	High Tide Time	1018
S9	29 Sep 2015	Low Tide (ft)	0.2
S9	29 Sep 2015	Low Tide Time	413
S9	29 Sep 2015	Comments	Seagrass; Water clear
S10	01 Sep 2015	Arrive Time	1101
S10	01 Sep 2015	Weather	Partly Cloudy
S10	01 Sep 2015	Wind Speed (kts)	6.2
S10	01 Sep 2015	Wind Dir	SW
S10	01 Sep 2015	Animal Life	None
S10	01 Sep 2015	Floatables	None
S10	01 Sep 2015	Water Color	Green
S10	01 Sep 2015	Current Direction	S
S10	01 Sep 2015	Water Temp (C)	23.1

Station	Date	Parameter	Value
S10	01 Sep 2015	Wave Height Low (ft)	3
S10	01 Sep 2015	High Tide (ft)	5.7
S10	01 Sep 2015	High Tide Time	1135
S10	01 Sep 2015	Low Tide (ft)	0.1
S10	01 Sep 2015	Low Tide Time	525
S10	01 Sep 2015	Comments	Kelp; Seagrass; Water clear; No flow at dairy mart rd @ 1130 on 9/1/15 JF
S10	08 Sep 2015	Arrive Time	1145
S10	08 Sep 2015	Weather	Sunny
S10	08 Sep 2015	Wind Speed (kts)	4
S10	08 Sep 2015	Wind Dir	W
S10	08 Sep 2015	Animal Life	None
S10	08 Sep 2015	Floatables	None
S10	08 Sep 2015	Water Color	Green
S10	08 Sep 2015	Current Direction	N
S10	08 Sep 2015	Water Temp (C)	23.2
S10	08 Sep 2015	Wave Height Low (ft)	3
S10	08 Sep 2015	High Tide (ft)	4.2
S10	08 Sep 2015	High Tide Time	743
S10	08 Sep 2015	Low Tide (ft)	2
S10	08 Sep 2015	Low Tide Time	1302
S10	08 Sep 2015	Comments	Kelp; 2 Swimmers; Water clear; No flow at dairy mart rd 9/8/15 1200 JF
S10	15 Sep 2015	Arrive Time	1123
S10	15 Sep 2015	Weather	Drizzle
S10	15 Sep 2015	Wind Speed (kts)	14.9
S10	15 Sep 2015	Wind Dir	S
S10	15 Sep 2015	Animal Life	None
S10	15 Sep 2015	Floatables	None
S10	15 Sep 2015	Water Color	Green
S10	15 Sep 2015	Current Direction	S
S10	15 Sep 2015	Water Temp (C)	23.6
S10	15 Sep 2015	Wave Height Low (ft)	2
S10	15 Sep 2015	High Tide (ft)	5.1
S10	15 Sep 2015	High Tide Time	1041
S10	15 Sep 2015	Low Tide (ft)	0.9
S10	15 Sep 2015	Low Tide Time	1703
S10	15 Sep 2015	Comments	Kelp; Seagrass; Debris; Water clear
S10	22 Sep 2015	Arrive Time	1125
S10	22 Sep 2015	Weather	Cloudy
S10	22 Sep 2015	Wind Speed (kts)	5.2
S10	22 Sep 2015	Wind Dir	W
S10	22 Sep 2015	Animal Life	None
S10	22 Sep 2015	Floatables	None
S10	22 Sep 2015	Water Color	Green
S10	22 Sep 2015	Current Direction	S
S10	22 Sep 2015	Water Temp (C)	24.6
S10	22 Sep 2015	Wave Height Low (ft)	3
S10	22 Sep 2015	High Tide (ft)	3.6
S10	22 Sep 2015	High Tide Time	606
S10	22 Sep 2015	Low Tide (ft)	2.7
S10	22 Sep 2015	Low Tide Time	1056

Station	Date	Parameter	Value
S10	22 Sep 2015	Comments	Kelp; Water clear; Flow at dairy mart rd @1154 on 9/22/15 JF
S10	29 Sep 2015	Arrive Time	1108
S10	29 Sep 2015	Weather	Sunny
S10	29 Sep 2015	Wind Speed (kts)	5.2
S10	29 Sep 2015	Wind Dir	NW
S10	29 Sep 2015	Animal Life	None
S10	29 Sep 2015	Floatables	None
S10	29 Sep 2015	Water Color	Green
S10	29 Sep 2015	Current Direction	S
S10	29 Sep 2015	Water Temp (C)	22.8
S10	29 Sep 2015	Wave Height Low (ft)	2
S10	29 Sep 2015	High Tide (ft)	6.3
S10	29 Sep 2015	High Tide Time	1018
S10	29 Sep 2015	Low Tide (ft)	-0.4
S10	29 Sep 2015	Low Tide Time	1652
S10	29 Sep 2015	Comments	Kelp; Seagrass; Water clear
S11	01 Sep 2015	Arrive Time	912
S11	01 Sep 2015	Weather	Cloudy
S11	01 Sep 2015	Wind Speed (kts)	3.5
S11	01 Sep 2015	Wind Dir	SW
S11	01 Sep 2015	Animal Life	None
S11	01 Sep 2015	Floatables	None
S11	01 Sep 2015	Water Color	Green
S11	01 Sep 2015	Current Direction	S
S11	01 Sep 2015	Water Temp (C)	22.8
S11	01 Sep 2015	Wave Height Low (ft)	3
S11	01 Sep 2015	High Tide (ft)	5.7
S11	01 Sep 2015	High Tide Time	1135
S11	01 Sep 2015	Low Tide (ft)	0.1
S11	01 Sep 2015	Low Tide Time	525
S11	01 Sep 2015	Comments	Kelp; Seagrass; 5 Persons; Water clear
S11	08 Sep 2015	Arrive Time	1006
S11	08 Sep 2015	Weather	Sunny
S11	08 Sep 2015	Wind Speed (kts)	5.4
S11	08 Sep 2015	Wind Dir	N
S11	08 Sep 2015	Animal Life	None
S11	08 Sep 2015	Floatables	None
S11	08 Sep 2015	Water Color	Green
S11	08 Sep 2015	Current Direction	N
S11	08 Sep 2015	Water Temp (C)	23.2
S11	08 Sep 2015	Wave Height Low (ft)	3
S11	08 Sep 2015	High Tide (ft)	4.2
S11	08 Sep 2015	High Tide Time	743
S11	08 Sep 2015	Low Tide (ft)	2
S11	08 Sep 2015	Low Tide Time	1302
S11	08 Sep 2015	Comments	Kelp; Water clear
S11	15 Sep 2015	Arrive Time	923
S11	15 Sep 2015	Weather	Cloudy
S11	15 Sep 2015	Wind Speed (kts)	15.1
S11	15 Sep 2015	Wind Dir	S
S11	15 Sep 2015	Animal Life	3 Shorebirds

Station	Date	Parameter	Value
S11	15 Sep 2015	Floatables	None
S11	15 Sep 2015	Water Color	Green
S11	15 Sep 2015	Current Direction	S
S11	15 Sep 2015	Water Temp (C)	23.4
S11	15 Sep 2015	Wave Height Low (ft)	3
S11	15 Sep 2015	High Tide (ft)	5.1
S11	15 Sep 2015	High Tide Time	1041
S11	15 Sep 2015	Low Tide (ft)	0.9
S11	15 Sep 2015	Low Tide Time	436
S11	15 Sep 2015	Comments	Kelp; Seagrass; Water clear
S11	22 Sep 2015	Arrive Time	913
S11	22 Sep 2015	Weather	Cloudy
S11	22 Sep 2015	Wind Speed (kts)	3.6
S11	22 Sep 2015	Wind Dir	NW
S11	22 Sep 2015	Animal Life	None
S11	22 Sep 2015	Floatables	None
S11	22 Sep 2015	Water Color	Green
S11	22 Sep 2015	Current Direction	S
S11	22 Sep 2015	Water Temp (C)	24.4
S11	22 Sep 2015	Wave Height Low (ft)	3
S11	22 Sep 2015	High Tide (ft)	3.6
S11	22 Sep 2015	High Tide Time	606
S11	22 Sep 2015	Low Tide (ft)	2.7
S11	22 Sep 2015	Low Tide Time	1056
S11	22 Sep 2015	Comments	Kelp; Water clear
S11	29 Sep 2015	Arrive Time	842
S11	29 Sep 2015	Weather	Sunny
S11	29 Sep 2015	Wind Speed (kts)	1.3
S11	29 Sep 2015	Wind Dir	NW
S11	29 Sep 2015	Animal Life	None
S11	29 Sep 2015	Floatables	None
S11	29 Sep 2015	Water Color	Green
S11	29 Sep 2015	Current Direction	S
S11	29 Sep 2015	Water Temp (C)	22.4
S11	29 Sep 2015	Wave Height Low (ft)	3
S11	29 Sep 2015	High Tide (ft)	6.3
S11	29 Sep 2015	High Tide Time	1018
S11	29 Sep 2015	Low Tide (ft)	0.2
S11	29 Sep 2015	Low Tide Time	413
S11	29 Sep 2015	Comments	Kelp; Seagrass; Water clear
S12	01 Sep 2015	Arrive Time	928
S12	01 Sep 2015	Weather	Cloudy
S12	01 Sep 2015	Wind Speed (kts)	3.1
S12	01 Sep 2015	Wind Dir	SW
S12	01 Sep 2015	Animal Life	4 Shorebirds; 4 Dogs; 5 Seagulls
S12	01 Sep 2015	Floatables	None
S12	01 Sep 2015	Water Color	Green
S12	01 Sep 2015	Current Direction	S
S12	01 Sep 2015	Water Temp (C)	23.2
S12	01 Sep 2015	Wave Height Low (ft)	2
S12	01 Sep 2015	High Tide (ft)	5.7
S12	01 Sep 2015	High Tide Time	1135

Station	Date	Parameter	Value
S12	01 Sep 2015	Low Tide (ft)	0.1
S12	01 Sep 2015	Low Tide Time	525
S12	01 Sep 2015	Comments	Kelp; Seagrass; 2 Joggers; 3 Persons; Water clear
S12	08 Sep 2015	Arrive Time	1020
S12	08 Sep 2015	Weather	Sunny
S12	08 Sep 2015	Wind Speed (kts)	5.6
S12	08 Sep 2015	Wind Dir	W
S12	08 Sep 2015	Animal Life	None
S12	08 Sep 2015	Floatables	None
S12	08 Sep 2015	Water Color	Green
S12	08 Sep 2015	Current Direction	N
S12	08 Sep 2015	Water Temp (C)	23.2
S12	08 Sep 2015	Wave Height Low (ft)	2
S12	08 Sep 2015	High Tide (ft)	4.2
S12	08 Sep 2015	High Tide Time	743
S12	08 Sep 2015	Low Tide (ft)	2
S12	08 Sep 2015	Low Tide Time	1302
S12	08 Sep 2015	Comments	Kelp; Seagrass; Water clear
S12	15 Sep 2015	Arrive Time	946
S12	15 Sep 2015	Weather	Cloudy
S12	15 Sep 2015	Wind Speed (kts)	10.1
S12	15 Sep 2015	Wind Dir	S
S12	15 Sep 2015	Animal Life	None
S12	15 Sep 2015	Floatables	None
S12	15 Sep 2015	Water Color	Green
S12	15 Sep 2015	Current Direction	S
S12	15 Sep 2015	Water Temp (C)	23.8
S12	15 Sep 2015	Wave Height Low (ft)	3
S12	15 Sep 2015	High Tide (ft)	5.1
S12	15 Sep 2015	High Tide Time	1041
S12	15 Sep 2015	Low Tide (ft)	0.9
S12	15 Sep 2015	Low Tide Time	436
S12	15 Sep 2015	Comments	Kelp; Seagrass; Water clear
S12	22 Sep 2015	Arrive Time	930
S12	22 Sep 2015	Weather	Cloudy
S12	22 Sep 2015	Wind Speed (kts)	4.8
S12	22 Sep 2015	Wind Dir	W
S12	22 Sep 2015	Animal Life	None
S12	22 Sep 2015	Floatables	None
S12	22 Sep 2015	Water Color	Green
S12	22 Sep 2015	Current Direction	S
S12	22 Sep 2015	Water Temp (C)	24.8
S12	22 Sep 2015	Wave Height Low (ft)	3
S12	22 Sep 2015	High Tide (ft)	3.6
S12	22 Sep 2015	High Tide Time	606
S12	22 Sep 2015	Low Tide (ft)	2.7
S12	22 Sep 2015	Low Tide Time	1056
S12	22 Sep 2015	Comments	Kelp; Seagrass; Water clear
S12	29 Sep 2015	Arrive Time	906
S12	29 Sep 2015	Weather	Sunny
S12	29 Sep 2015	Wind Speed (kts)	1.1

Station	Date	Parameter	Value
S12	29 Sep 2015	Wind Dir	N
S12	29 Sep 2015	Animal Life	None
S12	29 Sep 2015	Floatables	None
S12	29 Sep 2015	Water Color	Green
S12	29 Sep 2015	Current Direction	S
S12	29 Sep 2015	Water Temp (C)	22.2
S12	29 Sep 2015	Wave Height Low (ft)	3
S12	29 Sep 2015	High Tide (ft)	6.3
S12	29 Sep 2015	High Tide Time	1018
S12	29 Sep 2015	Low Tide (ft)	0.2
S12	29 Sep 2015	Low Tide Time	413
S12	29 Sep 2015	Comments	Kelp; Seagrass; Water clear

Kelp Stations

Table 3.1

Summary of compliance with the 2012 Ocean Plan's 30-day Geometric Mean standard for total coliforms 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 Sep 2015	4	2	3	3	4	2	4
02 Sep 2015	4	2	3	3	4	2	4
03 Sep 2015	4	2	3	3	4	2	4
04 Sep 2015	5	3	4	3	4	2	4
05 Sep 2015	5	3	4	3	5	2	4
06 Sep 2015	5	3	4	3	5	2	4
07 Sep 2015	5	3	4	3	5	2	4
08 Sep 2015	5	3	4	3	5	2	4
09 Sep 2015	5	3	4	3	5	2	4
10 Sep 2015	4	5	5	3	4	2	4
11 Sep 2015	4	5	5	3	4	2	4
12 Sep 2015	5	6	6	2	4	2	4
13 Sep 2015	5	6	6	2	4	2	4
14 Sep 2015	5	6	6	2	4	2	4
15 Sep 2015	7	5	8	2	4	2	5
16 Sep 2015	7	5	8	2	4	2	5
17 Sep 2015	7	5	8	2	4	2	5
18 Sep 2015	7	6	10	2	5	2	7
19 Sep 2015	7	6	10	2	5	2	7
20 Sep 2015	7	6	10	2	5	2	7
21 Sep 2015	6	5	10	3	6	2	7
22 Sep 2015	6	5	10	3	6	2	7
23 Sep 2015	6	5	10	3	6	2	7
24 Sep 2015	4	6	9	3	6	2	9
25 Sep 2015	4	6	9	3	6	2	9
26 Sep 2015	4	6	9	3	6	2	9
27 Sep 2015	5	7	8	3	7	2	9
28 Sep 2015	5	7	8	3	7	2	9
29 Sep 2015	5	9	11	3	8	2	9
30 Sep 2015	5	9	11	3	8	2	9

* Geometric mean calculated using an n<5

Table 3.2

Summary of compliance with the 2012 Ocean Plan's 30-day Geometric Mean standard for fecal coliform 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 Sep 2015	2	2	2	2	2	2	2
02 Sep 2015	2	2	2	2	2	2	2
03 Sep 2015	2	2	2	2	2	2	2
04 Sep 2015	2	2	2	2	2	2	2
05 Sep 2015	2	2	2	2	2	2	2
06 Sep 2015	2	2	2	2	2	2	2
07 Sep 2015	2	2	2	2	2	2	2
08 Sep 2015	2	2	2	2	2	2	2
09 Sep 2015	2	2	2	2	2	2	2
10 Sep 2015	2	2	2	2	2	2	2
11 Sep 2015	2	2	2	2	2	2	2
12 Sep 2015	2	2	2	2	2	2	2
13 Sep 2015	2	2	2	2	2	2	2
14 Sep 2015	2	2	2	2	2	2	2
15 Sep 2015	2	2	2	2	2	2	2
16 Sep 2015	2	2	2	2	2	2	2
17 Sep 2015	2	2	2	2	2	2	2
18 Sep 2015	2	2	2	2	2	2	2
19 Sep 2015	2	2	2	2	2	2	2
20 Sep 2015	2	2	2	2	2	2	2
21 Sep 2015	2	2	2	2	2	2	2
22 Sep 2015	2	2	2	2	2	2	2
23 Sep 2015	2	2	2	2	2	2	2
24 Sep 2015	2	2	2	2	2	2	2
25 Sep 2015	2	2	2	2	2	2	2
26 Sep 2015	2	2	2	2	2	2	2
27 Sep 2015	2	2	2	2	2	2	2
28 Sep 2015	2	2	2	2	2	2	2
29 Sep 2015	2	2	2	2	2	2	2
30 Sep 2015	2	2	2	2	2	2	2

* Geometric mean calculated using an n<5

Table 3.3

Summary of compliance with the 2012 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 Sep 2015	2	2	3	2	2	2	2
02 Sep 2015	2	2	3	2	2	2	2
03 Sep 2015	2	2	3	2	2	2	2
04 Sep 2015	2	2	2	2	2	2	2
05 Sep 2015	2	2	2	2	2	2	2
06 Sep 2015	2	2	2	2	2	2	2
07 Sep 2015	2	2	2	2	2	2	2
08 Sep 2015	2	2	2	2	2	2	2
09 Sep 2015	2	2	2	2	2	2	2
10 Sep 2015	2	2	2	2	2	2	3
11 Sep 2015	2	2	2	2	2	2	3
12 Sep 2015	2	2	2	2	2	2	3
13 Sep 2015	2	2	2	2	2	2	3
14 Sep 2015	2	2	2	2	2	2	3
15 Sep 2015	3	2	3	2	2	2	3
16 Sep 2015	3	2	3	2	2	2	3
17 Sep 2015	3	2	3	2	2	2	3
18 Sep 2015	3	2	3	2	2	2	3
19 Sep 2015	3	2	3	2	2	2	3
20 Sep 2015	3	2	3	2	2	2	3
21 Sep 2015	3	2	3	2	2	2	3
22 Sep 2015	3	2	3	2	2	2	3
23 Sep 2015	3	2	3	2	2	2	3
24 Sep 2015	3	2	3	2	2	2	3
25 Sep 2015	3	2	3	2	2	2	3
26 Sep 2015	3	2	3	2	2	2	3
27 Sep 2015	3	2	3	2	2	2	3
28 Sep 2015	3	2	3	2	2	2	3
29 Sep 2015	3	2	3	2	2	2	3
30 Sep 2015	3	2	3	2	2	2	3

* Geometric mean calculated using an n<5

Table 3.4

Summary of compliance at the SBOO kelp stations with the 2012 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
04 Sep 2015	IC						
10 Sep 2015	IC						
15 Sep 2015	IC						
21 Sep 2015	IC						
27 Sep 2015	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.5

Summary of compliance at the SBOO kelp stations with the 2012 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
04 Sep 2015	IC						
10 Sep 2015	IC						
15 Sep 2015	IC						
21 Sep 2015	IC						
27 Sep 2015	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.6

Summary of compliance at the SBOO kelp stations with the 2012 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
04 Sep 2015	IC						
10 Sep 2015	IC						
15 Sep 2015	IC						
21 Sep 2015	IC						
27 Sep 2015	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.7

Summary of compliance at the SBOO kelp stations with the 2012 Ocean Plan's Single Sample Maximum standard for total coliforms 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
04 Sep 2015	IC						
10 Sep 2015	IC						
15 Sep 2015	IC						
21 Sep 2015	IC						
27 Sep 2015	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

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

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I19	04 Sep 2015	1049	2	6e	<2	<2	0.33	22.9	84.39	7.2	33.48	8.2	ns	ns
I19	04 Sep 2015	1049	6	4e	<2	<2	0.50	22.4	82.74	7.1	33.45	8.2	ns	ns
I19	04 Sep 2015	1049	11	<2	<2	2e	1.00	20.5	70.25	7.2	33.28	8.2	ns	ns
I19	10 Sep 2015	1110	2	<2	<2	<2	1.00	22.1	88.13	7.1	33.41	8.2	ns	ns
I19	10 Sep 2015	1110	6	<2	<2	<2	1.00	21.0	88.10	7.5	33.39	8.2	ns	ns
I19	10 Sep 2015	1110	11	<2	<2	<2	1.00	20.2	87.81	7.3	33.36	8.2	ns	ns
I19	15 Sep 2015	1126	2	<20	6e	14e	0.30	23.1	84.09	7.0	33.38	8.2	ns	ns
I19	15 Sep 2015	1126	6	60e	2e	36e	0.03	23.0	84.25	7.0	33.38	8.2	ns	ns
I19	15 Sep 2015	1126	11	<20	<2	38e	0.10	22.8	82.64	7.0	33.37	8.2	ns	ns
I19	21 Sep 2015	1132	2	<2	<2	<2	1.00	22.6	86.98	7.1	33.37	8.2	ns	ns
I19	21 Sep 2015	1132	6	<2	<2	<2	1.00	22.4	87.38	7.2	33.37	8.2	ns	ns
I19	21 Sep 2015	1132	11	<2	<2	<2	1.00	21.4	83.32	7.0	33.26	8.2	ns	ns
I19	27 Sep 2015	1110	2	<2	<2	<2	1.00	21.3	81.24	8.5	33.36	8.3	ns	ns
I19	27 Sep 2015	1110	6	6e	<2	<2	0.33	20.3	80.57	8.3	33.35	8.2	ns	ns
I19	27 Sep 2015	1110	11	<20	<2	<2	0.10	19.5	72.06	6.8	33.35	8.1	ns	ns
I24	04 Sep 2015	1116	2	<2	<2	<2	1.00	22.8	79.46	7.0	33.48	8.2	ns	ns
I24	04 Sep 2015	1116	6	<20	<2	<2	0.10	21.2	86.54	7.4	33.36	8.2	ns	ns
I24	04 Sep 2015	1116	11	20e	<2	<2	0.10	18.9	69.69	6.8	33.29	8.1	ns	ns
I24	10 Sep 2015	1139	2	<2	<2	<2	1.00	21.2	92.39	7.5	33.40	8.2	ns	ns
I24	10 Sep 2015	1139	6	<2	<2	<2	1.00	20.2	92.84	7.8	33.37	8.2	ns	ns
I24	10 Sep 2015	1139	11	<200	<2	<2	0.01	18.8	91.73	8.0	33.31	8.2	ns	ns
I24	15 Sep 2015	1153	2	4e	<2	<2	0.50	23.1	83.99	6.8	33.34	8.2	ns	ns
I24	15 Sep 2015	1153	6	<2	<2	2e	1.00	23.1	86.98	7.0	33.39	8.2	ns	ns
I24	15 Sep 2015	1153	11	<2	<2	<2	1.00	22.6	83.90	7.2	33.39	8.2	ns	ns
I24	21 Sep 2015	1158	2	<2	<2	<2	1.00	22.7	89.35	7.2	33.39	8.2	ns	ns
I24	21 Sep 2015	1158	6	<2	<2	<2	1.00	22.6	89.30	7.2	33.38	8.2	ns	ns
I24	21 Sep 2015	1158	11	<2	<2	2e	1.00	20.9	78.04	7.2	33.33	8.2	ns	ns
I24	27 Sep 2015	1142	2	10e	<2	<2	0.20	22.8	92.23	7.2	33.37	8.2	ns	ns
I24	27 Sep 2015	1142	6	<2	<2	<2	1.00	21.3	91.50	7.3	33.34	8.2	ns	ns
I24	27 Sep 2015	1142	11	<20	<2	<2	0.10	19.8	78.72	6.8	33.33	8.1	ns	ns
I25	04 Sep 2015	1129	2	<2	<2	<2	1.00	22.5	91.37	7.1	33.47	8.2	ns	ns
I25	04 Sep 2015	1129	6	<2	<2	<2	1.00	21.7	92.87	7.2	33.41	8.2	ns	ns
I25	04 Sep 2015	1129	9	<20	<2	<2	0.10	20.4	88.98	8.2	33.36	8.2	ns	ns
I25	10 Sep 2015	1145	2	<20	<2	<2	0.10	21.7	92.22	7.4	33.41	8.2	ns	ns
I25	10 Sep 2015	1145	6	<20	<2	<2	0.10	20.6	92.72	7.6	33.35	8.2	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I25	10 Sep 2015	1145	9	<2	<2	<2	1.00	19.3	88.01	8.2	33.32	8.2	ns	ns
I25	15 Sep 2015	1210	2	46	<2	8e	0.04	23.1	86.24	7.1	33.37	8.2	ns	ns
I25	15 Sep 2015	1210	6	50	<2	18e	0.04	22.9	88.23	7.2	33.39	8.2	ns	ns
I25	15 Sep 2015	1210	9	20e	<2	8e	0.10	22.6	86.85	7.1	33.38	8.2	ns	ns
I25	21 Sep 2015	1209	2	2e	<2	<2	1.00	22.7	88.60	7.2	33.38	8.2	ns	ns
I25	21 Sep 2015	1209	6	2e	<2	<2	1.00	22.6	88.81	7.1	33.38	8.2	ns	ns
I25	21 Sep 2015	1209	9	<20	<2	<2	0.10	20.9	84.01	7.5	33.33	8.2	ns	ns
I25	27 Sep 2015	1155	2	<2	<2	<2	1.00	23.0	92.08	7.1	33.39	8.2	ns	ns
I25	27 Sep 2015	1155	6	<2	<2	<2	1.00	20.8	91.43	7.1	33.30	8.2	ns	ns
I25	27 Sep 2015	1155	9	8e	<2	<2	0.25	20.0	85.83	7.3	33.32	8.2	ns	ns
I26	04 Sep 2015	1142	2	<2	<2	<2	1.00	22.7	92.76	7.0	33.48	8.2	ns	ns
I26	04 Sep 2015	1142	6	<2	<2	<2	1.00	22.2	92.62	7.1	33.45	8.2	ns	ns
I26	04 Sep 2015	1142	9	2e	<2	<2	1.00	19.8	84.91	7.5	33.32	8.2	ns	ns
I26	10 Sep 2015	1154	2	<2	<2	<2	1.00	22.4	86.96	7.1	33.41	8.2	ns	ns
I26	10 Sep 2015	1154	6	<2	<2	<2	1.00	22.0	90.09	7.2	33.41	8.2	ns	ns
I26	10 Sep 2015	1154	9	<2	<2	<2	1.00	19.6	89.14	7.3	33.32	8.2	ns	ns
I26	15 Sep 2015	1220	2	<2	<2	<2	1.00	23.1	86.26	7.1	33.38	8.2	ns	ns
I26	15 Sep 2015	1220	6	<2	<2	<2	1.00	23.1	87.05	7.2	33.37	8.2	ns	ns
I26	15 Sep 2015	1220	9	<2	<2	<2	1.00	23.1	87.10	7.3	33.37	8.2	ns	ns
I26	21 Sep 2015	1220	2	<2	<2	<2	1.00	22.9	88.58	7.1	33.38	8.2	ns	ns
I26	21 Sep 2015	1220	6	<2	<2	<2	1.00	22.8	88.62	7.0	33.37	8.2	ns	ns
I26	21 Sep 2015	1220	9	<20	<2	<2	0.10	20.9	82.01	6.8	33.31	8.1	ns	ns
I26	27 Sep 2015	1207	2	<2	<2	<2	1.00	22.5	91.79	7.3	33.36	8.2	ns	ns
I26	27 Sep 2015	1207	6	2e	<2	<2	1.00	20.4	91.04	7.5	33.32	8.2	ns	ns
I26	27 Sep 2015	1207	9	4e	<2	<2	0.50	19.9	86.24	7.4	33.32	8.2	ns	ns
I32	04 Sep 2015	1158	2	6e	<2	<2	0.33	22.7	91.64	7.0	33.48	8.2	ns	ns
I32	04 Sep 2015	1158	6	<2	<2	<2	1.00	22.6	90.02	7.1	33.48	8.2	ns	ns
I32	04 Sep 2015	1158	9	<20	<2	<2	0.10	22.3	85.30	7.1	33.46	8.2	ns	ns
I32	10 Sep 2015	1208	2	2e	<2	<2	1.00	22.1	82.91	7.2	33.40	8.2	ns	ns
I32	10 Sep 2015	1208	6	<2	<2	<2	1.00	21.1	84.03	7.2	33.37	8.2	ns	ns
I32	10 Sep 2015	1208	9	<2	<2	<2	1.00	19.8	81.14	7.3	33.33	8.2	ns	ns
I32	15 Sep 2015	1232	2	<20	<2	<2	0.10	23.6	78.43	7.0	33.37	8.2	ns	ns
I32	15 Sep 2015	1232	6	<2	<2	<2	1.00	23.5	79.79	6.9	33.38	8.2	ns	ns
I32	15 Sep 2015	1232	9	<2	<2	<2	1.00	23.4	80.13	6.9	33.40	8.2	ns	ns
I32	21 Sep 2015	1235	2	<20	<2	<2	0.10	22.9	78.67	7.1	33.35	8.2	ns	ns
I32	21 Sep 2015	1235	6	<20	<2	<2	0.10	22.8	81.93	7.0	33.36	8.2	ns	ns
I32	21 Sep 2015	1235	9	<20	<2	<2	0.10	22.7	80.91	7.0	33.37	8.2	ns	ns
I32	27 Sep 2015	1222	2	<20	<2	<2	0.10	22.2	90.34	7.0	33.32	8.2	ns	ns
I32	27 Sep 2015	1222	6	<2	<2	<2	1.00	19.9	76.96	7.6	33.30	8.2	ns	ns
I32	27 Sep 2015	1222	9	<20	<2	<2	0.10	19.6	69.14	7.3	33.31	8.2	ns	ns
I39	04 Sep 2015	1020	2	<2	<2	<2	1.00	22.4	92.75	7.1	33.47	8.2	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I39	04 Sep 2015	1020	12	<2	<2	<2	1.00	18.2	87.38	7.5	33.26	8.2	ns	ns
I39	04 Sep 2015	1020	18	<2	<2	<2	1.00	17.4	87.83	7.6	33.27	8.2	ns	ns
I39	10 Sep 2015	1046	2	<2	<2	<2	1.00	21.8	92.82	7.3	33.42	8.2	ns	ns
I39	10 Sep 2015	1046	12	<2	<2	<2	1.00	18.3	86.89	7.4	33.29	8.1	ns	ns
I39	10 Sep 2015	1046	18	<2	<2	<2	1.00	17.3	85.38	7.7	33.29	8.2	ns	ns
I39	15 Sep 2015	1049	2	<2	<2	<2	1.00	23.1	91.36	7.2	33.41	8.2	ns	ns
I39	15 Sep 2015	1049	12	<2	<2	<2	1.00	23.0	91.65	7.3	33.41	8.2	ns	ns
I39	15 Sep 2015	1049	18	6e	<2	<2	0.33	20.6	86.06	6.7	33.32	8.1	ns	ns
I39	21 Sep 2015	1104	2	<2	<2	<2	1.00	23.0	88.72	7.0	33.39	8.2	ns	ns
I39	21 Sep 2015	1104	12	<2	<2	<2	1.00	19.0	81.51	7.4	33.30	8.2	ns	ns
I39	21 Sep 2015	1104	18	<2	<2	<2	1.00	18.0	81.47	7.2	33.29	8.1	ns	ns
I39	27 Sep 2015	1048	2	<2	<2	<2	1.00	22.3	92.54	7.3	33.38	8.2	ns	ns
I39	27 Sep 2015	1048	12	<2	<2	<2	1.00	19.5	88.14	7.0	33.34	8.1	ns	ns
I39	27 Sep 2015	1048	18	<2	<2	<2	1.00	18.9	84.57	6.6	33.34	8.1	ns	ns
I40	04 Sep 2015	1106	2	40e	<2	<2	0.05	22.8	78.17	7.2	33.47	8.2	ns	ns
I40	04 Sep 2015	1106	6	<20	<2	<2	0.10	21.2	80.27	7.2	33.35	8.2	ns	ns
I40	04 Sep 2015	1106	9	<20	<2	<2	0.10	20.7	66.90	6.8	33.33	8.2	ns	ns
I40	10 Sep 2015	1125	2	<2	<2	<2	1.00	21.5	91.78	7.4	33.40	8.2	ns	ns
I40	10 Sep 2015	1125	6	<2	<2	<20	1.00	20.4	92.44	7.7	33.37	8.2	ns	ns
I40	10 Sep 2015	1125	9	<2	<2	<2	1.00	19.7	90.51	7.8	33.34	8.2	ns	ns
I40	15 Sep 2015	1141	2	<20	<2	<2	0.10	23.1	78.93	7.0	33.38	8.2	ns	ns
I40	15 Sep 2015	1141	6	20e	<2	<2	0.10	23.1	82.42	7.0	33.38	8.2	ns	ns
I40	15 Sep 2015	1141	9	2e	<2	<2	1.00	23.1	83.39	7.1	33.38	8.2	ns	ns
I40	21 Sep 2015	1146	2	<20	<2	<2	0.10	22.5	87.65	7.2	33.38	8.2	ns	ns
I40	21 Sep 2015	1146	6	<2	<2	<2	1.00	22.5	88.18	7.2	33.38	8.2	ns	ns
I40	21 Sep 2015	1146	9	<2	<2	<2	1.00	22.3	87.17	7.1	33.37	8.2	ns	ns
I40	27 Sep 2015	1129	2	2e	<2	<2	1.00	22.6	80.39	7.1	33.37	8.2	ns	ns
I40	27 Sep 2015	1129	6	<20	<2	<2	0.10	21.1	80.04	8.3	33.34	8.2	ns	ns
I40	27 Sep 2015	1129	9	2e	<2	<2	1.00	20.1	77.37	7.9	33.34	8.2	ns	ns

ns = not sampled

Comments

Station	Date	Depth	Parameter	Comments
I40	10 Sep 2015		ENTERO	NO FILTER (LA)

Table 3.9

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

Station	Date	Parameter	Value
I19	04 Sep 2015	Depth (m)	11
I19	04 Sep 2015	Arrive Time	1049
I19	04 Sep 2015	Depart Time	1057
I19	04 Sep 2015	Air Temp (C)	22
I19	04 Sep 2015	Weather	Clear
I19	04 Sep 2015	Visibility (mi)	8
I19	04 Sep 2015	Wind Speed (kts)	4
I19	04 Sep 2015	Wind Dir	NW
I19	04 Sep 2015	Water Color	Green
I19	04 Sep 2015	Wave Ht Low (ft)	3
I19	04 Sep 2015	Wave Period (sec)	9
I19	04 Sep 2015	Sea State	Calm
I19	04 Sep 2015	High Tide (ft)	5.18
I19	04 Sep 2015	High Tide Time	1418
I19	04 Sep 2015	Low Tide (ft)	1.92
I19	04 Sep 2015	Low Tide Time	751
I19	04 Sep 2015	Comments	Kelp debris
I19	10 Sep 2015	Depth (m)	11
I19	10 Sep 2015	Arrive Time	1110
I19	10 Sep 2015	Depart Time	1118
I19	10 Sep 2015	Air Temp (C)	25
I19	10 Sep 2015	Weather	Overcast
I19	10 Sep 2015	Visibility (mi)	11
I19	10 Sep 2015	Wind Speed (kts)	4
I19	10 Sep 2015	Wind Dir	S
I19	10 Sep 2015	Water Color	Greenish-Blue
I19	10 Sep 2015	Wave Ht Low (ft)	4
I19	10 Sep 2015	Wave Period (sec)	13
I19	10 Sep 2015	Sea State	Wind ripples
I19	10 Sep 2015	High Tide (ft)	4.63
I19	10 Sep 2015	High Tide Time	841
I19	10 Sep 2015	Low Tide (ft)	1.41
I19	10 Sep 2015	Low Tide Time	1421
I19	10 Sep 2015	Comments	
I19	15 Sep 2015	Depth (m)	12
I19	15 Sep 2015	Arrive Time	1126
I19	15 Sep 2015	Depart Time	1135
I19	15 Sep 2015	Air Temp (C)	24
I19	15 Sep 2015	Weather	Rain
I19	15 Sep 2015	Visibility (mi)	2
I19	15 Sep 2015	Wind Speed (kts)	12
I19	15 Sep 2015	Wind Dir	S
I19	15 Sep 2015	Water Color	Green
I19	15 Sep 2015	Wave Ht Low (ft)	4
I19	15 Sep 2015	Wave Period (sec)	4
I19	15 Sep 2015	Sea State	Confused swell
I19	15 Sep 2015	High Tide (ft)	5.05
I19	15 Sep 2015	High Tide Time	1041
I19	15 Sep 2015	Low Tide (ft)	0.9

Station	Date	Parameter	Value
I19	15 Sep 2015	Low Tide Time	436
I19	15 Sep 2015	Comments	
I19	21 Sep 2015	Depth (m)	11
I19	21 Sep 2015	Arrive Time	1132
I19	21 Sep 2015	Depart Time	1138
I19	21 Sep 2015	Air Temp (C)	23
I19	21 Sep 2015	Weather	Cloudy
I19	21 Sep 2015	Visibility (mi)	8
I19	21 Sep 2015	Wind Speed (kts)	9
I19	21 Sep 2015	Wind Dir	NE
I19	21 Sep 2015	Water Color	Green
I19	21 Sep 2015	Wave Ht Low (ft)	3
I19	21 Sep 2015	Wave Period (sec)	13
I19	21 Sep 2015	Sea State	Heavy chop
I19	21 Sep 2015	High Tide (ft)	3.2
I19	21 Sep 2015	High Tide Time	458
I19	21 Sep 2015	Low Tide (ft)	2.91
I19	21 Sep 2015	Low Tide Time	908
I19	21 Sep 2015	Comments	
I19	27 Sep 2015	Depth (m)	12
I19	27 Sep 2015	Arrive Time	1110
I19	27 Sep 2015	Depart Time	1123
I19	27 Sep 2015	Air Temp (C)	22
I19	27 Sep 2015	Weather	Haze
I19	27 Sep 2015	Visibility (mi)	6
I19	27 Sep 2015	Wind Speed (kts)	2
I19	27 Sep 2015	Wind Dir	W
I19	27 Sep 2015	Water Color	Greenish-Brown
I19	27 Sep 2015	Wave Ht Low (ft)	3
I19	27 Sep 2015	Wave Period (sec)	13
I19	27 Sep 2015	Sea State	Calm
I19	27 Sep 2015	High Tide (ft)	5.89
I19	27 Sep 2015	High Tide Time	902
I19	27 Sep 2015	Low Tide (ft)	-0.04
I19	27 Sep 2015	Low Tide Time	1517
I19	27 Sep 2015	Comments	
I24	04 Sep 2015	Depth (m)	11
I24	04 Sep 2015	Arrive Time	1116
I24	04 Sep 2015	Depart Time	1124
I24	04 Sep 2015	Air Temp (C)	21
I24	04 Sep 2015	Weather	Clear
I24	04 Sep 2015	Visibility (mi)	10
I24	04 Sep 2015	Wind Speed (kts)	6
I24	04 Sep 2015	Wind Dir	SW
I24	04 Sep 2015	Water Color	Green
I24	04 Sep 2015	Wave Ht Low (ft)	3
I24	04 Sep 2015	Wave Period (sec)	9
I24	04 Sep 2015	Sea State	Calm
I24	04 Sep 2015	High Tide (ft)	5.18
I24	04 Sep 2015	High Tide Time	1418
I24	04 Sep 2015	Low Tide (ft)	1.92
I24	04 Sep 2015	Low Tide Time	751

Station	Date	Parameter	Value
I24	04 Sep 2015	Comments	Kelp debris
I24	10 Sep 2015	Depth (m)	10
I24	10 Sep 2015	Arrive Time	1139
I24	10 Sep 2015	Depart Time	1143
I24	10 Sep 2015	Air Temp (C)	25
I24	10 Sep 2015	Weather	Overcast
I24	10 Sep 2015	Visibility (mi)	11
I24	10 Sep 2015	Wind Speed (kts)	6
I24	10 Sep 2015	Wind Dir	SW
I24	10 Sep 2015	Water Color	Greenish-Blue
I24	10 Sep 2015	Wave Ht Low (ft)	4
I24	10 Sep 2015	Wave Period (sec)	13
I24	10 Sep 2015	Sea State	Wind ripples
I24	10 Sep 2015	High Tide (ft)	4.63
I24	10 Sep 2015	High Tide Time	841
I24	10 Sep 2015	Low Tide (ft)	1.41
I24	10 Sep 2015	Low Tide Time	1421
I24	10 Sep 2015	Comments	
I24	15 Sep 2015	Depth (m)	11
I24	15 Sep 2015	Arrive Time	1153
I24	15 Sep 2015	Depart Time	1202
I24	15 Sep 2015	Air Temp (C)	23
I24	15 Sep 2015	Weather	Rain
I24	15 Sep 2015	Visibility (mi)	2
I24	15 Sep 2015	Wind Speed (kts)	14
I24	15 Sep 2015	Wind Dir	S
I24	15 Sep 2015	Water Color	Green
I24	15 Sep 2015	Wave Ht Low (ft)	4
I24	15 Sep 2015	Wave Period (sec)	4
I24	15 Sep 2015	Sea State	Confused swell
I24	15 Sep 2015	High Tide (ft)	5.05
I24	15 Sep 2015	High Tide Time	1041
I24	15 Sep 2015	Low Tide (ft)	0.9
I24	15 Sep 2015	Low Tide Time	436
I24	15 Sep 2015	Comments	
I24	21 Sep 2015	Depth (m)	11
I24	21 Sep 2015	Arrive Time	1158
I24	21 Sep 2015	Depart Time	1205
I24	21 Sep 2015	Air Temp (C)	23
I24	21 Sep 2015	Weather	Cloudy
I24	21 Sep 2015	Visibility (mi)	6
I24	21 Sep 2015	Wind Speed (kts)	7
I24	21 Sep 2015	Wind Dir	NE
I24	21 Sep 2015	Water Color	Green
I24	21 Sep 2015	Wave Ht Low (ft)	3
I24	21 Sep 2015	Wave Period (sec)	13
I24	21 Sep 2015	Sea State	Heavy chop
I24	21 Sep 2015	High Tide (ft)	3.2
I24	21 Sep 2015	High Tide Time	458
I24	21 Sep 2015	Low Tide (ft)	2.91
I24	21 Sep 2015	Low Tide Time	908
I24	21 Sep 2015	Comments	Kelp debris

Station	Date	Parameter	Value
I24	27 Sep 2015	Depth (m)	11
I24	27 Sep 2015	Arrive Time	1142
I24	27 Sep 2015	Depart Time	1151
I24	27 Sep 2015	Air Temp (C)	22
I24	27 Sep 2015	Weather	Fog
I24	27 Sep 2015	Visibility (mi)	4
I24	27 Sep 2015	Wind Speed (kts)	4
I24	27 Sep 2015	Wind Dir	S
I24	27 Sep 2015	Water Color	Brownish-Green
I24	27 Sep 2015	Wave Ht Low (ft)	3
I24	27 Sep 2015	Wave Period (sec)	13
I24	27 Sep 2015	Sea State	Calm
I24	27 Sep 2015	High Tide (ft)	5.89
I24	27 Sep 2015	High Tide Time	902
I24	27 Sep 2015	Low Tide (ft)	-0.04
I24	27 Sep 2015	Low Tide Time	1517
I24	27 Sep 2015	Comments	
I25	04 Sep 2015	Depth (m)	9
I25	04 Sep 2015	Arrive Time	1129
I25	04 Sep 2015	Depart Time	1136
I25	04 Sep 2015	Air Temp (C)	21
I25	04 Sep 2015	Weather	Clear
I25	04 Sep 2015	Visibility (mi)	10
I25	04 Sep 2015	Wind Speed (kts)	8
I25	04 Sep 2015	Wind Dir	N
I25	04 Sep 2015	Water Color	Green
I25	04 Sep 2015	Wave Ht Low (ft)	3
I25	04 Sep 2015	Wave Period (sec)	9
I25	04 Sep 2015	Sea State	Calm
I25	04 Sep 2015	High Tide (ft)	5.18
I25	04 Sep 2015	High Tide Time	1418
I25	04 Sep 2015	Low Tide (ft)	1.92
I25	04 Sep 2015	Low Tide Time	751
I25	04 Sep 2015	Comments	
I25	10 Sep 2015	Depth (m)	13
I25	10 Sep 2015	Arrive Time	1145
I25	10 Sep 2015	Depart Time	1148
I25	10 Sep 2015	Air Temp (C)	25
I25	10 Sep 2015	Weather	Overcast
I25	10 Sep 2015	Visibility (mi)	11
I25	10 Sep 2015	Wind Speed (kts)	5
I25	10 Sep 2015	Wind Dir	E
I25	10 Sep 2015	Water Color	Greenish-Blue
I25	10 Sep 2015	Wave Ht Low (ft)	4
I25	10 Sep 2015	Wave Period (sec)	13
I25	10 Sep 2015	Sea State	Wind ripples
I25	10 Sep 2015	High Tide (ft)	4.63
I25	10 Sep 2015	High Tide Time	841
I25	10 Sep 2015	Low Tide (ft)	1.41
I25	10 Sep 2015	Low Tide Time	1421
I25	10 Sep 2015	Comments	

Station	Date	Parameter	Value
I25	15 Sep 2015	Depth (m)	10
I25	15 Sep 2015	Arrive Time	1210
I25	15 Sep 2015	Depart Time	1217
I25	15 Sep 2015	Air Temp (C)	23
I25	15 Sep 2015	Weather	Rain
I25	15 Sep 2015	Visibility (mi)	2
I25	15 Sep 2015	Wind Speed (kts)	11
I25	15 Sep 2015	Wind Dir	NE
I25	15 Sep 2015	Water Color	Green
I25	15 Sep 2015	Wave Ht Low (ft)	4
I25	15 Sep 2015	Wave Period (sec)	4
I25	15 Sep 2015	Sea State	Confused swell
I25	15 Sep 2015	High Tide (ft)	5.05
I25	15 Sep 2015	High Tide Time	1041
I25	15 Sep 2015	Low Tide (ft)	0.9
I25	15 Sep 2015	Low Tide Time	436
I25	15 Sep 2015	Comments	
I25	21 Sep 2015	Depth (m)	9
I25	21 Sep 2015	Arrive Time	1209
I25	21 Sep 2015	Depart Time	1216
I25	21 Sep 2015	Air Temp (C)	23
I25	21 Sep 2015	Weather	Cloudy
I25	21 Sep 2015	Visibility (mi)	6
I25	21 Sep 2015	Wind Speed (kts)	4
I25	21 Sep 2015	Wind Dir	W
I25	21 Sep 2015	Water Color	Green
I25	21 Sep 2015	Wave Ht Low (ft)	3
I25	21 Sep 2015	Wave Period (sec)	13
I25	21 Sep 2015	Sea State	Heavy chop
I25	21 Sep 2015	High Tide (ft)	3.2
I25	21 Sep 2015	High Tide Time	458
I25	21 Sep 2015	Low Tide (ft)	2.91
I25	21 Sep 2015	Low Tide Time	908
I25	21 Sep 2015	Comments	
I25	27 Sep 2015	Depth (m)	10
I25	27 Sep 2015	Arrive Time	1155
I25	27 Sep 2015	Depart Time	1157
I25	27 Sep 2015	Air Temp (C)	22
I25	27 Sep 2015	Weather	Fog
I25	27 Sep 2015	Visibility (mi)	4
I25	27 Sep 2015	Wind Speed (kts)	3
I25	27 Sep 2015	Wind Dir	NW
I25	27 Sep 2015	Water Color	Brownish-Green
I25	27 Sep 2015	Wave Ht Low (ft)	3
I25	27 Sep 2015	Wave Period (sec)	13
I25	27 Sep 2015	Sea State	Calm
I25	27 Sep 2015	High Tide (ft)	5.89
I25	27 Sep 2015	High Tide Time	902
I25	27 Sep 2015	Low Tide (ft)	-0.04
I25	27 Sep 2015	Low Tide Time	1517
I25	27 Sep 2015	Comments	
I26	04 Sep 2015	Depth (m)	10

Station	Date	Parameter	Value
I26	04 Sep 2015	Arrive Time	1142
I26	04 Sep 2015	Depart Time	1146
I26	04 Sep 2015	Air Temp (C)	21
I26	04 Sep 2015	Weather	Clear
I26	04 Sep 2015	Visibility (mi)	10
I26	04 Sep 2015	Wind Speed (kts)	8
I26	04 Sep 2015	Wind Dir	S
I26	04 Sep 2015	Water Color	Green
I26	04 Sep 2015	Wave Ht Low (ft)	3
I26	04 Sep 2015	Wave Period (sec)	9
I26	04 Sep 2015	Sea State	Calm
I26	04 Sep 2015	High Tide (ft)	5.18
I26	04 Sep 2015	High Tide Time	1418
I26	04 Sep 2015	Low Tide (ft)	1.92
I26	04 Sep 2015	Low Tide Time	751
I26	04 Sep 2015	Comments	Kelp debris
I26	10 Sep 2015	Depth (m)	11
I26	10 Sep 2015	Arrive Time	1154
I26	10 Sep 2015	Depart Time	1200
I26	10 Sep 2015	Air Temp (C)	25
I26	10 Sep 2015	Weather	Overcast
I26	10 Sep 2015	Visibility (mi)	11
I26	10 Sep 2015	Wind Speed (kts)	5
I26	10 Sep 2015	Wind Dir	NW
I26	10 Sep 2015	Water Color	Greenish-Blue
I26	10 Sep 2015	Wave Ht Low (ft)	4
I26	10 Sep 2015	Wave Period (sec)	13
I26	10 Sep 2015	Sea State	Wind ripples
I26	10 Sep 2015	High Tide (ft)	4.63
I26	10 Sep 2015	High Tide Time	841
I26	10 Sep 2015	Low Tide (ft)	1.41
I26	10 Sep 2015	Low Tide Time	1421
I26	10 Sep 2015	Comments	
I26	15 Sep 2015	Depth (m)	10
I26	15 Sep 2015	Arrive Time	1220
I26	15 Sep 2015	Depart Time	1228
I26	15 Sep 2015	Air Temp (C)	23
I26	15 Sep 2015	Weather	Rain
I26	15 Sep 2015	Visibility (mi)	2
I26	15 Sep 2015	Wind Speed (kts)	15
I26	15 Sep 2015	Wind Dir	E
I26	15 Sep 2015	Water Color	Green
I26	15 Sep 2015	Wave Ht Low (ft)	4
I26	15 Sep 2015	Wave Period (sec)	4
I26	15 Sep 2015	Sea State	Confused swell
I26	15 Sep 2015	High Tide (ft)	5.05
I26	15 Sep 2015	High Tide Time	1041
I26	15 Sep 2015	Low Tide (ft)	0.9
I26	15 Sep 2015	Low Tide Time	436
I26	15 Sep 2015	Comments	
I26	21 Sep 2015	Depth (m)	10
I26	21 Sep 2015	Arrive Time	1220

Station	Date	Parameter	Value
I26	21 Sep 2015	Depart Time	1226
I26	21 Sep 2015	Air Temp (C)	23
I26	21 Sep 2015	Weather	Cloudy
I26	21 Sep 2015	Visibility (mi)	6
I26	21 Sep 2015	Wind Speed (kts)	2
I26	21 Sep 2015	Wind Dir	NE
I26	21 Sep 2015	Water Color	Green
I26	21 Sep 2015	Wave Ht Low (ft)	3
I26	21 Sep 2015	Wave Period (sec)	13
I26	21 Sep 2015	Sea State	Heavy chop
I26	21 Sep 2015	High Tide (ft)	3.2
I26	21 Sep 2015	High Tide Time	458
I26	21 Sep 2015	Low Tide (ft)	2.91
I26	21 Sep 2015	Low Tide Time	908
I26	21 Sep 2015	Comments	
I26	27 Sep 2015	Depth (m)	10
I26	27 Sep 2015	Arrive Time	1207
I26	27 Sep 2015	Depart Time	1210
I26	27 Sep 2015	Air Temp (C)	22
I26	27 Sep 2015	Weather	Fog
I26	27 Sep 2015	Visibility (mi)	4
I26	27 Sep 2015	Wind Speed (kts)	5
I26	27 Sep 2015	Wind Dir	W
I26	27 Sep 2015	Water Color	Brownish-Green
I26	27 Sep 2015	Wave Ht Low (ft)	3
I26	27 Sep 2015	Wave Period (sec)	13
I26	27 Sep 2015	Sea State	Calm
I26	27 Sep 2015	High Tide (ft)	5.89
I26	27 Sep 2015	High Tide Time	902
I26	27 Sep 2015	Low Tide (ft)	-0.04
I26	27 Sep 2015	Low Tide Time	1517
I26	27 Sep 2015	Comments	
I32	04 Sep 2015	Depth (m)	11
I32	04 Sep 2015	Arrive Time	1158
I32	04 Sep 2015	Depart Time	1204
I32	04 Sep 2015	Air Temp (C)	21
I32	04 Sep 2015	Weather	Clear
I32	04 Sep 2015	Visibility (mi)	10
I32	04 Sep 2015	Wind Speed (kts)	8
I32	04 Sep 2015	Wind Dir	E
I32	04 Sep 2015	Water Color	Green
I32	04 Sep 2015	Wave Ht Low (ft)	3
I32	04 Sep 2015	Wave Period (sec)	9
I32	04 Sep 2015	Sea State	Calm
I32	04 Sep 2015	High Tide (ft)	5.18
I32	04 Sep 2015	High Tide Time	1418
I32	04 Sep 2015	Low Tide (ft)	1.92
I32	04 Sep 2015	Low Tide Time	751
I32	04 Sep 2015	Comments	Kelp debris
I32	10 Sep 2015	Depth (m)	10
I32	10 Sep 2015	Arrive Time	1208
I32	10 Sep 2015	Depart Time	1213

Station	Date	Parameter	Value
I32	10 Sep 2015	Air Temp (C)	25
I32	10 Sep 2015	Weather	Overcast
I32	10 Sep 2015	Visibility (mi)	11
I32	10 Sep 2015	Wind Speed (kts)	7
I32	10 Sep 2015	Wind Dir	NE
I32	10 Sep 2015	Water Color	Greenish-Blue
I32	10 Sep 2015	Wave Ht Low (ft)	4
I32	10 Sep 2015	Wave Period (sec)	13
I32	10 Sep 2015	Sea State	Wind ripples
I32	10 Sep 2015	High Tide (ft)	4.63
I32	10 Sep 2015	High Tide Time	841
I32	10 Sep 2015	Low Tide (ft)	1.41
I32	10 Sep 2015	Low Tide Time	1421
I32	10 Sep 2015	Comments	
I32	15 Sep 2015	Depth (m)	11
I32	15 Sep 2015	Arrive Time	1232
I32	15 Sep 2015	Depart Time	1240
I32	15 Sep 2015	Air Temp (C)	23
I32	15 Sep 2015	Weather	Rain
I32	15 Sep 2015	Visibility (mi)	2
I32	15 Sep 2015	Wind Speed (kts)	13
I32	15 Sep 2015	Wind Dir	S
I32	15 Sep 2015	Water Color	Green
I32	15 Sep 2015	Wave Ht Low (ft)	4
I32	15 Sep 2015	Wave Period (sec)	4
I32	15 Sep 2015	Sea State	Confused swell
I32	15 Sep 2015	High Tide (ft)	5.05
I32	15 Sep 2015	High Tide Time	1041
I32	15 Sep 2015	Low Tide (ft)	0.9
I32	15 Sep 2015	Low Tide Time	436
I32	15 Sep 2015	Comments	
I32	21 Sep 2015	Depth (m)	11
I32	21 Sep 2015	Arrive Time	1235
I32	21 Sep 2015	Depart Time	1242
I32	21 Sep 2015	Air Temp (C)	24
I32	21 Sep 2015	Weather	Cloudy
I32	21 Sep 2015	Visibility (mi)	6
I32	21 Sep 2015	Wind Speed (kts)	2
I32	21 Sep 2015	Wind Dir	E
I32	21 Sep 2015	Water Color	Green
I32	21 Sep 2015	Wave Ht Low (ft)	3
I32	21 Sep 2015	Wave Period (sec)	13
I32	21 Sep 2015	Sea State	Heavy chop
I32	21 Sep 2015	High Tide (ft)	3.2
I32	21 Sep 2015	High Tide Time	458
I32	21 Sep 2015	Low Tide (ft)	2.91
I32	21 Sep 2015	Low Tide Time	908
I32	21 Sep 2015	Comments	Kelp debris
I32	27 Sep 2015	Depth (m)	10
I32	27 Sep 2015	Arrive Time	1222
I32	27 Sep 2015	Depart Time	1228
I32	27 Sep 2015	Air Temp (C)	22

Station	Date	Parameter	Value
I32	27 Sep 2015	Weather	Haze
I32	27 Sep 2015	Visibility (mi)	4
I32	27 Sep 2015	Wind Speed (kts)	6
I32	27 Sep 2015	Wind Dir	W
I32	27 Sep 2015	Water Color	Green
I32	27 Sep 2015	Wave Ht Low (ft)	3
I32	27 Sep 2015	Wave Period (sec)	13
I32	27 Sep 2015	Sea State	Calm
I32	27 Sep 2015	High Tide (ft)	5.89
I32	27 Sep 2015	High Tide Time	902
I32	27 Sep 2015	Low Tide (ft)	-0.04
I32	27 Sep 2015	Low Tide Time	1517
I32	27 Sep 2015	Comments	
I39	04 Sep 2015	Depth (m)	18
I39	04 Sep 2015	Arrive Time	1020
I39	04 Sep 2015	Depart Time	1033
I39	04 Sep 2015	Air Temp (C)	22
I39	04 Sep 2015	Weather	Clear
I39	04 Sep 2015	Visibility (mi)	8
I39	04 Sep 2015	Wind Speed (kts)	6
I39	04 Sep 2015	Wind Dir	E
I39	04 Sep 2015	Water Color	Green
I39	04 Sep 2015	Wave Ht Low (ft)	3
I39	04 Sep 2015	Wave Period (sec)	9
I39	04 Sep 2015	Sea State	Calm
I39	04 Sep 2015	High Tide (ft)	5.18
I39	04 Sep 2015	High Tide Time	1418
I39	04 Sep 2015	Low Tide (ft)	1.92
I39	04 Sep 2015	Low Tide Time	751
I39	04 Sep 2015	Comments	Kelp
I39	10 Sep 2015	Depth (m)	14
I39	10 Sep 2015	Arrive Time	1046
I39	10 Sep 2015	Depart Time	1053
I39	10 Sep 2015	Air Temp (C)	25
I39	10 Sep 2015	Weather	Overcast
I39	10 Sep 2015	Visibility (mi)	11
I39	10 Sep 2015	Wind Speed (kts)	4
I39	10 Sep 2015	Wind Dir	N
I39	10 Sep 2015	Water Color	Greenish-Blue
I39	10 Sep 2015	Wave Ht Low (ft)	4
I39	10 Sep 2015	Wave Period (sec)	13
I39	10 Sep 2015	Sea State	Wind ripples
I39	10 Sep 2015	High Tide (ft)	4.63
I39	10 Sep 2015	High Tide Time	841
I39	10 Sep 2015	Low Tide (ft)	1.41
I39	10 Sep 2015	Low Tide Time	1421
I39	10 Sep 2015	Comments	
I39	15 Sep 2015	Depth (m)	20
I39	15 Sep 2015	Arrive Time	1049
I39	15 Sep 2015	Depart Time	1059
I39	15 Sep 2015	Air Temp (C)	23
I39	15 Sep 2015	Weather	Rain

Station	Date	Parameter	Value
I39	15 Sep 2015	Visibility (mi)	2
I39	15 Sep 2015	Wind Speed (kts)	18
I39	15 Sep 2015	Wind Dir	N
I39	15 Sep 2015	Water Color	Green
I39	15 Sep 2015	Wave Ht Low (ft)	3
I39	15 Sep 2015	Wave Period (sec)	4
I39	15 Sep 2015	Sea State	Confused swell
I39	15 Sep 2015	High Tide (ft)	5.05
I39	15 Sep 2015	High Tide Time	1041
I39	15 Sep 2015	Low Tide (ft)	0.9
I39	15 Sep 2015	Low Tide Time	436
I39	15 Sep 2015	Comments	Kelp debris
I39	21 Sep 2015	Depth (m)	19
I39	21 Sep 2015	Arrive Time	1104
I39	21 Sep 2015	Depart Time	1116
I39	21 Sep 2015	Air Temp (C)	23
I39	21 Sep 2015	Weather	Cloudy
I39	21 Sep 2015	Visibility (mi)	8
I39	21 Sep 2015	Wind Speed (kts)	11
I39	21 Sep 2015	Wind Dir	S
I39	21 Sep 2015	Water Color	Green
I39	21 Sep 2015	Wave Ht Low (ft)	3
I39	21 Sep 2015	Wave Period (sec)	13
I39	21 Sep 2015	Sea State	Heavy chop
I39	21 Sep 2015	High Tide (ft)	3.2
I39	21 Sep 2015	High Tide Time	458
I39	21 Sep 2015	Low Tide (ft)	2.91
I39	21 Sep 2015	Low Tide Time	908
I39	21 Sep 2015	Comments	Kelp debris
I39	27 Sep 2015	Depth (m)	19
I39	27 Sep 2015	Arrive Time	1048
I39	27 Sep 2015	Depart Time	1056
I39	27 Sep 2015	Air Temp (C)	22
I39	27 Sep 2015	Weather	Haze
I39	27 Sep 2015	Visibility (mi)	6
I39	27 Sep 2015	Wind Speed (kts)	2
I39	27 Sep 2015	Wind Dir	NE
I39	27 Sep 2015	Water Color	Greenish-Brown
I39	27 Sep 2015	Wave Ht Low (ft)	3
I39	27 Sep 2015	Wave Period (sec)	13
I39	27 Sep 2015	Sea State	Calm
I39	27 Sep 2015	High Tide (ft)	5.89
I39	27 Sep 2015	High Tide Time	902
I39	27 Sep 2015	Low Tide (ft)	-0.04
I39	27 Sep 2015	Low Tide Time	1517
I39	27 Sep 2015	Comments	Kelp
I40	04 Sep 2015	Depth (m)	11
I40	04 Sep 2015	Arrive Time	1106
I40	04 Sep 2015	Depart Time	1112
I40	04 Sep 2015	Air Temp (C)	22
I40	04 Sep 2015	Weather	Clear
I40	04 Sep 2015	Visibility (mi)	8

Station	Date	Parameter	Value
I40	04 Sep 2015	Wind Speed (kts)	2
I40	04 Sep 2015	Wind Dir	NE
I40	04 Sep 2015	Water Color	Green
I40	04 Sep 2015	Wave Ht Low (ft)	3
I40	04 Sep 2015	Wave Period (sec)	9
I40	04 Sep 2015	Sea State	Calm
I40	04 Sep 2015	High Tide (ft)	5.18
I40	04 Sep 2015	High Tide Time	1418
I40	04 Sep 2015	Low Tide (ft)	1.92
I40	04 Sep 2015	Low Tide Time	751
I40	04 Sep 2015	Comments	
I40	10 Sep 2015	Depth (m)	11
I40	10 Sep 2015	Arrive Time	1125
I40	10 Sep 2015	Depart Time	1134
I40	10 Sep 2015	Air Temp (C)	25
I40	10 Sep 2015	Weather	Overcast
I40	10 Sep 2015	Visibility (mi)	11
I40	10 Sep 2015	Wind Speed (kts)	7
I40	10 Sep 2015	Wind Dir	W
I40	10 Sep 2015	Water Color	Greenish-Blue
I40	10 Sep 2015	Wave Ht Low (ft)	4
I40	10 Sep 2015	Wave Period (sec)	13
I40	10 Sep 2015	Sea State	Wind ripples
I40	10 Sep 2015	High Tide (ft)	4.63
I40	10 Sep 2015	High Tide Time	841
I40	10 Sep 2015	Low Tide (ft)	1.41
I40	10 Sep 2015	Low Tide Time	1421
I40	10 Sep 2015	Comments	13 Sea lions on station
I40	15 Sep 2015	Depth (m)	11
I40	15 Sep 2015	Arrive Time	1141
I40	15 Sep 2015	Depart Time	1146
I40	15 Sep 2015	Air Temp (C)	23
I40	15 Sep 2015	Weather	Rain
I40	15 Sep 2015	Visibility (mi)	2
I40	15 Sep 2015	Wind Speed (kts)	10
I40	15 Sep 2015	Wind Dir	SW
I40	15 Sep 2015	Water Color	Green
I40	15 Sep 2015	Wave Ht Low (ft)	4
I40	15 Sep 2015	Wave Period (sec)	4
I40	15 Sep 2015	Sea State	Confused swell
I40	15 Sep 2015	High Tide (ft)	5.05
I40	15 Sep 2015	High Tide Time	1041
I40	15 Sep 2015	Low Tide (ft)	0.9
I40	15 Sep 2015	Low Tide Time	436
I40	15 Sep 2015	Comments	
I40	21 Sep 2015	Depth (m)	11
I40	21 Sep 2015	Arrive Time	1146
I40	21 Sep 2015	Depart Time	1152
I40	21 Sep 2015	Air Temp (C)	23
I40	21 Sep 2015	Weather	Cloudy
I40	21 Sep 2015	Visibility (mi)	8
I40	21 Sep 2015	Wind Speed (kts)	8

Station	Date	Parameter	Value
I40	21 Sep 2015	Wind Dir	E
I40	21 Sep 2015	Water Color	Green
I40	21 Sep 2015	Wave Ht Low (ft)	3
I40	21 Sep 2015	Wave Period (sec)	13
I40	21 Sep 2015	Sea State	Heavy chop
I40	21 Sep 2015	High Tide (ft)	3.2
I40	21 Sep 2015	High Tide Time	458
I40	21 Sep 2015	Low Tide (ft)	2.91
I40	21 Sep 2015	Low Tide Time	908
I40	21 Sep 2015	Comments	
I40	27 Sep 2015	Depth (m)	11
I40	27 Sep 2015	Arrive Time	1129
I40	27 Sep 2015	Depart Time	1139
I40	27 Sep 2015	Air Temp (C)	22
I40	27 Sep 2015	Weather	Fog
I40	27 Sep 2015	Visibility (mi)	4
I40	27 Sep 2015	Wind Speed (kts)	6
I40	27 Sep 2015	Wind Dir	NW
I40	27 Sep 2015	Water Color	Brownish-Green
I40	27 Sep 2015	Wave Ht Low (ft)	3
I40	27 Sep 2015	Wave Period (sec)	13
I40	27 Sep 2015	Sea State	Calm
I40	27 Sep 2015	High Tide (ft)	5.89
I40	27 Sep 2015	High Tide Time	902
I40	27 Sep 2015	Low Tide (ft)	-0.04
I40	27 Sep 2015	Low Tide Time	1517
I40	27 Sep 2015	Comments	

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	04 Sep 2015	1	22.93	84.07	7.1	33.48	8.2	22.8	0.51
I19	04 Sep 2015	2	22.86	84.39	7.2	33.48	8.2	22.8	0.52
I19	04 Sep 2015	3	22.77	85.56	7.2	33.47	8.2	22.8	0.58
I19	04 Sep 2015	4	22.74	85.25	7.3	33.47	8.2	22.9	0.65
I19	04 Sep 2015	5	22.63	84.94	7.2	33.46	8.2	22.9	0.90
I19	04 Sep 2015	6	22.42	82.74	7.1	33.45	8.2	22.9	1.23
I19	04 Sep 2015	7	22.28	77.78	7.1	33.45	8.2	23.0	1.45
I19	04 Sep 2015	8	22.24	76.39	7.0	33.44	8.2	23.0	1.55
I19	04 Sep 2015	9	21.39	76.60	7.1	33.38	8.2	23.2	2.12
I19	04 Sep 2015	10	20.50	70.25	7.2	33.28	8.2	23.3	3.50
I19	10 Sep 2015	1	22.13	87.99	7.1	33.42	8.2	23.0	0.46
I19	10 Sep 2015	2	22.09	88.13	7.1	33.41	8.2	23.0	0.48
I19	10 Sep 2015	3	21.96	88.15	7.1	33.40	8.2	23.0	0.56
I19	10 Sep 2015	4	21.63	86.73	7.2	33.40	8.2	23.1	0.59
I19	10 Sep 2015	5	21.39	86.14	7.3	33.39	8.2	23.2	0.55
I19	10 Sep 2015	6	21.04	88.10	7.5	33.39	8.2	23.3	0.56
I19	10 Sep 2015	7	20.97	90.25	7.6	33.39	8.2	23.3	0.59
I19	10 Sep 2015	8	20.92	90.32	7.4	33.38	8.2	23.3	0.73
I19	10 Sep 2015	9	20.37	90.02	7.4	33.35	8.2	23.4	1.06
I19	10 Sep 2015	10	20.25	87.81	7.3	33.36	8.2	23.4	1.44
I19	15 Sep 2015	1	23.09	83.33	7.0	33.38	8.2	22.7	1.40
I19	15 Sep 2015	2	23.09	84.09	7.0	33.38	8.2	22.7	1.47
I19	15 Sep 2015	3	23.09	84.44	7.0	33.38	8.2	22.7	1.46
I19	15 Sep 2015	4	23.08	84.53	7.0	33.38	8.2	22.7	1.50
I19	15 Sep 2015	5	23.07	84.29	7.0	33.38	8.2	22.7	1.48
I19	15 Sep 2015	6	23.04	84.25	7.0	33.38	8.2	22.7	1.48
I19	15 Sep 2015	7	23.01	83.95	7.0	33.37	8.2	22.7	1.52
I19	15 Sep 2015	8	22.94	83.68	7.0	33.38	8.2	22.7	1.58
I19	15 Sep 2015	9	22.87	83.21	7.0	33.37	8.2	22.7	1.66
I19	15 Sep 2015	10	22.77	82.64	7.0	33.37	8.2	22.8	1.73
I19	21 Sep 2015	1	22.64	86.75	7.0	33.37	8.2	22.8	0.84
I19	21 Sep 2015	2	22.61	86.98	7.1	33.37	8.2	22.8	0.88
I19	21 Sep 2015	3	22.45	87.43	7.1	33.37	8.2	22.9	0.94
I19	21 Sep 2015	4	22.40	87.60	7.1	33.37	8.2	22.9	0.98
I19	21 Sep 2015	5	22.36	87.40	7.1	33.37	8.2	22.9	1.01
I19	21 Sep 2015	6	22.35	87.38	7.2	33.37	8.2	22.9	1.06
I19	21 Sep 2015	7	22.30	87.30	7.2	33.36	8.2	22.9	1.13
I19	21 Sep 2015	8	22.24	87.00	7.1	33.37	8.2	22.9	1.26
I19	21 Sep 2015	9	22.06	86.23	7.0	33.35	8.2	22.9	1.53
I19	21 Sep 2015	10	21.45	83.32	7.0	33.26	8.2	23.0	2.35
I19	27 Sep 2015	1	21.53	81.02	8.3	33.36	8.2	23.1	1.52
I19	27 Sep 2015	2	21.26	81.24	8.5	33.36	8.3	23.2	1.71
I19	27 Sep 2015	3	21.22	82.05	8.6	33.36	8.3	23.2	1.82
I19	27 Sep 2015	4	21.05	82.10	8.5	33.36	8.3	23.2	1.89
I19	27 Sep 2015	5	20.76	81.96	8.4	33.35	8.2	23.3	2.53
I19	27 Sep 2015	6	20.31	80.57	8.3	33.35	8.2	23.4	3.64
I19	27 Sep 2015	7	20.08	78.63	8.2	33.35	8.2	23.5	4.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I19	27 Sep 2015	8	19.86	76.76	7.4	33.35	8.2	23.5	6.41
I19	27 Sep 2015	9	19.57	70.74	7.0	33.35	8.2	23.6	6.29
I19	27 Sep 2015	10	19.50	72.06	6.8	33.35	8.1	23.6	5.43
I24	04 Sep 2015	1	23.00	78.39	7.0	33.49	8.2	22.8	0.71
I24	04 Sep 2015	2	22.76	79.46	7.0	33.48	8.2	22.8	0.52
I24	04 Sep 2015	3	22.51	86.40	7.1	33.46	8.2	22.9	0.36
I24	04 Sep 2015	4	22.19	89.96	7.1	33.44	8.2	23.0	0.37
I24	04 Sep 2015	5	21.95	91.36	7.1	33.42	8.2	23.0	0.59
I24	04 Sep 2015	6	21.25	86.54	7.4	33.36	8.2	23.2	1.15
I24	04 Sep 2015	7	20.90	77.12	7.2	33.34	8.2	23.3	1.48
I24	04 Sep 2015	8	20.22	74.74	7.0	33.32	8.1	23.4	1.92
I24	04 Sep 2015	9	19.65	70.96	6.6	33.30	8.1	23.6	2.44
I24	04 Sep 2015	10	19.30	60.29	6.8	33.29	8.1	23.6	2.01
I24	04 Sep 2015	11	18.91	69.69	6.8	33.29	8.1	23.7	1.46
I24	10 Sep 2015	1	21.69	92.23	7.3	33.41	8.2	23.1	0.27
I24	10 Sep 2015	2	21.23	92.39	7.5	33.40	8.2	23.2	0.27
I24	10 Sep 2015	3	20.65	92.50	7.7	33.38	8.2	23.4	0.27
I24	10 Sep 2015	4	20.39	92.77	7.8	33.38	8.2	23.4	0.29
I24	10 Sep 2015	5	20.29	92.89	7.9	33.37	8.2	23.4	0.34
I24	10 Sep 2015	6	20.22	92.84	7.8	33.37	8.2	23.5	0.39
I24	10 Sep 2015	7	20.17	92.85	7.8	33.37	8.2	23.5	0.45
I24	10 Sep 2015	8	19.84	92.60	7.8	33.35	8.2	23.5	0.55
I24	10 Sep 2015	9	19.11	92.45	7.9	33.30	8.2	23.7	1.02
I24	10 Sep 2015	10	18.80	91.73	8.0	33.31	8.2	23.8	1.26
I24	15 Sep 2015	1	23.14	81.81	6.2	33.35	8.2	22.6	0.76
I24	15 Sep 2015	2	23.14	83.99	6.8	33.34	8.2	22.6	1.57
I24	15 Sep 2015	3	23.14	86.72	6.7	33.36	8.2	22.6	1.75
I24	15 Sep 2015	4	23.14	86.90	6.6	33.37	8.2	22.7	1.55
I24	15 Sep 2015	5	23.14	87.03	6.8	33.38	8.2	22.7	1.66
I24	15 Sep 2015	6	23.14	86.98	7.0	33.39	8.2	22.7	1.60
I24	15 Sep 2015	7	23.09	86.94	7.0	33.40	8.2	22.7	1.67
I24	15 Sep 2015	8	22.94	86.82	7.1	33.41	8.2	22.7	1.66
I24	15 Sep 2015	9	22.72	86.21	7.1	33.40	8.2	22.8	1.69
I24	15 Sep 2015	10	22.59	84.60	7.1	33.38	8.2	22.8	1.71
I24	15 Sep 2015	11	22.55	83.90	7.2	33.39	8.2	22.8	1.67
I24	21 Sep 2015	1	22.71	89.34	7.2	33.39	8.2	22.8	0.51
I24	21 Sep 2015	2	22.70	89.35	7.2	33.39	8.2	22.8	0.53
I24	21 Sep 2015	3	22.69	89.50	7.2	33.38	8.2	22.8	0.58
I24	21 Sep 2015	4	22.63	89.40	7.2	33.38	8.2	22.8	0.63
I24	21 Sep 2015	5	22.63	89.32	7.2	33.38	8.2	22.8	0.66
I24	21 Sep 2015	6	22.63	89.30	7.2	33.38	8.2	22.8	0.69
I24	21 Sep 2015	7	22.54	89.28	7.1	33.37	8.2	22.8	0.80
I24	21 Sep 2015	8	21.92	88.81	7.1	33.34	8.2	23.0	1.22
I24	21 Sep 2015	9	21.41	84.70	7.2	33.33	8.2	23.1	1.65
I24	21 Sep 2015	10	21.08	79.61	7.2	33.33	8.2	23.2	1.85
I24	21 Sep 2015	11	20.95	78.04	7.2	33.33	8.2	23.2	1.87
I24	27 Sep 2015	1	23.30	92.21	7.0	33.39	8.2	22.6	0.49
I24	27 Sep 2015	2	22.78	92.23	7.2	33.37	8.2	22.8	0.48
I24	27 Sep 2015	3	22.55	92.57	7.2	33.38	8.2	22.8	0.49
I24	27 Sep 2015	4	22.15	92.62	7.3	33.36	8.2	22.9	0.58

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I24	27 Sep 2015	5	21.71	92.18	7.3	33.34	8.2	23.0	0.56
I24	27 Sep 2015	6	21.26	91.50	7.3	33.34	8.2	23.2	0.65
I24	27 Sep 2015	7	20.99	90.35	7.6	33.34	8.2	23.2	1.03
I24	27 Sep 2015	8	20.74	86.66	7.3	33.31	8.2	23.3	1.63
I24	27 Sep 2015	9	20.12	81.92	6.8	33.32	8.1	23.4	1.78
I24	27 Sep 2015	10	19.83	78.72	6.8	33.33	8.1	23.5	2.15
I25	04 Sep 2015	1	22.69	91.23	7.0	33.47	8.2	22.9	0.28
I25	04 Sep 2015	2	22.53	91.37	7.1	33.47	8.2	22.9	0.27
I25	04 Sep 2015	3	22.47	92.07	7.0	33.47	8.2	22.9	0.27
I25	04 Sep 2015	4	22.30	92.64	7.1	33.46	8.2	23.0	0.28
I25	04 Sep 2015	5	22.12	92.93	7.1	33.44	8.2	23.0	0.30
I25	04 Sep 2015	6	21.66	92.87	7.2	33.41	8.2	23.1	0.36
I25	04 Sep 2015	7	21.53	92.20	7.2	33.42	8.2	23.1	0.43
I25	04 Sep 2015	8	21.12	91.59	7.8	33.37	8.2	23.2	0.48
I25	04 Sep 2015	9	20.44	88.98	8.2	33.36	8.2	23.4	0.51
I25	10 Sep 2015	1	22.17	92.11	7.2	33.40	8.2	23.0	0.32
I25	10 Sep 2015	2	21.72	92.22	7.4	33.41	8.2	23.1	0.31
I25	10 Sep 2015	3	21.64	92.59	7.4	33.41	8.2	23.1	0.31
I25	10 Sep 2015	4	21.57	92.58	7.4	33.41	8.2	23.1	0.32
I25	10 Sep 2015	5	21.30	92.53	7.4	33.39	8.2	23.2	0.33
I25	10 Sep 2015	6	20.56	92.72	7.6	33.35	8.2	23.4	0.34
I25	10 Sep 2015	7	19.69	92.96	7.9	33.34	8.2	23.6	0.52
I25	10 Sep 2015	8	19.37	92.25	8.0	33.32	8.2	23.6	0.83
I25	10 Sep 2015	9	19.31	88.01	8.2	33.32	8.2	23.7	0.90
I25	15 Sep 2015	1	23.05	83.30	7.1	33.37	8.2	22.7	1.38
I25	15 Sep 2015	2	23.05	86.24	7.1	33.37	8.2	22.7	1.44
I25	15 Sep 2015	3	23.05	88.12	7.1	33.38	8.2	22.7	1.48
I25	15 Sep 2015	4	23.04	88.04	7.1	33.38	8.2	22.7	1.52
I25	15 Sep 2015	5	23.00	88.11	7.1	33.40	8.2	22.7	1.54
I25	15 Sep 2015	6	22.95	88.23	7.2	33.39	8.2	22.7	1.60
I25	15 Sep 2015	7	22.87	87.68	7.2	33.39	8.2	22.8	1.75
I25	15 Sep 2015	8	22.77	86.89	7.2	33.38	8.2	22.8	1.74
I25	15 Sep 2015	9	22.65	86.85	7.1	33.38	8.2	22.8	1.82
I25	21 Sep 2015	1	22.68	88.51	7.2	33.38	8.2	22.8	0.60
I25	21 Sep 2015	2	22.68	88.60	7.2	33.38	8.2	22.8	0.61
I25	21 Sep 2015	3	22.68	88.97	7.2	33.38	8.2	22.8	0.65
I25	21 Sep 2015	4	22.67	88.94	7.2	33.38	8.2	22.8	0.69
I25	21 Sep 2015	5	22.65	88.91	7.2	33.38	8.2	22.8	0.71
I25	21 Sep 2015	6	22.62	88.81	7.1	33.38	8.2	22.8	0.75
I25	21 Sep 2015	7	22.43	88.65	7.1	33.35	8.2	22.8	0.96
I25	21 Sep 2015	8	21.27	87.33	7.4	33.31	8.2	23.1	1.38
I25	21 Sep 2015	9	20.95	84.01	7.5	33.33	8.2	23.2	1.50
I25	27 Sep 2015	1	23.03	92.03	7.1	33.39	8.2	22.7	0.47
I25	27 Sep 2015	2	23.03	92.08	7.1	33.39	8.2	22.7	0.50
I25	27 Sep 2015	3	22.62	92.18	7.2	33.35	8.2	22.8	0.52
I25	27 Sep 2015	4	21.92	92.38	7.4	33.35	8.2	23.0	0.59
I25	27 Sep 2015	5	21.54	91.91	7.3	33.35	8.2	23.1	0.57
I25	27 Sep 2015	6	20.80	91.43	7.1	33.30	8.2	23.3	0.81
I25	27 Sep 2015	7	20.07	89.35	7.2	33.32	8.2	23.5	1.03
I25	27 Sep 2015	8	20.05	86.00	7.2	33.32	8.2	23.5	0.83

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I25	27 Sep 2015	9	20.04	85.83	7.3	33.32	8.2	23.5	0.69
I26	04 Sep 2015	1	22.75	92.68	7.0	33.48	8.2	22.9	0.24
I26	04 Sep 2015	2	22.73	92.76	7.0	33.48	8.2	22.9	0.25
I26	04 Sep 2015	3	22.64	92.79	7.0	33.47	8.2	22.9	0.27
I26	04 Sep 2015	4	22.57	92.73	7.0	33.47	8.2	22.9	0.28
I26	04 Sep 2015	5	22.42	92.71	7.0	33.45	8.2	22.9	0.29
I26	04 Sep 2015	6	22.25	92.62	7.1	33.45	8.2	23.0	0.32
I26	04 Sep 2015	7	22.11	92.43	7.0	33.43	8.2	23.0	0.37
I26	04 Sep 2015	8	21.22	91.97	6.9	33.32	8.2	23.2	0.51
I26	04 Sep 2015	9	19.77	84.91	7.5	33.32	8.2	23.5	0.72
I26	10 Sep 2015	1	22.65	87.23	7.1	33.42	8.2	22.8	0.50
I26	10 Sep 2015	2	22.37	86.96	7.1	33.41	8.2	22.9	0.46
I26	10 Sep 2015	3	22.15	87.01	7.2	33.41	8.2	23.0	0.42
I26	10 Sep 2015	4	22.07	88.74	7.2	33.41	8.2	23.0	0.44
I26	10 Sep 2015	5	22.02	89.86	7.2	33.41	8.2	23.0	0.46
I26	10 Sep 2015	6	21.98	90.09	7.2	33.41	8.2	23.0	0.50
I26	10 Sep 2015	7	21.81	89.86	7.2	33.40	8.2	23.1	0.56
I26	10 Sep 2015	8	21.25	89.14	7.2	33.36	8.2	23.2	0.66
I26	10 Sep 2015	9	19.62	89.14	7.3	33.32	8.2	23.6	0.99
I26	15 Sep 2015	1	23.13	86.04	7.2	33.37	8.2	22.7	1.50
I26	15 Sep 2015	2	23.13	86.26	7.1	33.38	8.2	22.7	1.48
I26	15 Sep 2015	3	23.13	86.27	7.2	33.38	8.2	22.7	1.59
I26	15 Sep 2015	4	23.13	86.44	7.2	33.37	8.2	22.7	1.56
I26	15 Sep 2015	5	23.13	86.58	7.2	33.37	8.2	22.7	1.53
I26	15 Sep 2015	6	23.13	87.05	7.2	33.37	8.2	22.7	1.61
I26	15 Sep 2015	7	23.12	86.92	7.2	33.37	8.2	22.7	1.59
I26	15 Sep 2015	8	23.12	87.10	7.2	33.37	8.2	22.7	1.60
I26	15 Sep 2015	9	23.12	87.10	7.3	33.37	8.2	22.7	1.54
I26	21 Sep 2015	1	22.86	88.39	7.0	33.38	8.2	22.7	0.64
I26	21 Sep 2015	2	22.87	88.58	7.1	33.38	8.2	22.7	0.68
I26	21 Sep 2015	3	22.86	88.80	7.1	33.38	8.2	22.7	0.71
I26	21 Sep 2015	4	22.86	88.73	7.1	33.38	8.2	22.7	0.73
I26	21 Sep 2015	5	22.85	88.68	7.1	33.38	8.2	22.7	0.74
I26	21 Sep 2015	6	22.79	88.62	7.0	33.37	8.2	22.8	0.78
I26	21 Sep 2015	7	22.44	87.98	7.0	33.35	8.2	22.8	0.92
I26	21 Sep 2015	8	21.58	85.09	6.8	33.34	8.2	23.1	1.21
I26	21 Sep 2015	9	20.90	82.01	6.8	33.31	8.1	23.2	1.44
I26	27 Sep 2015	1	22.79	91.86	7.2	33.37	8.2	22.8	0.51
I26	27 Sep 2015	2	22.47	91.79	7.3	33.36	8.2	22.8	0.48
I26	27 Sep 2015	3	21.56	91.94	7.6	33.35	8.2	23.1	0.56
I26	27 Sep 2015	4	21.20	91.64	7.7	33.36	8.2	23.2	0.57
I26	27 Sep 2015	5	20.68	91.09	7.6	33.33	8.2	23.3	0.53
I26	27 Sep 2015	6	20.36	91.04	7.5	33.32	8.2	23.4	0.50
I26	27 Sep 2015	7	20.16	91.26	7.4	33.32	8.2	23.4	0.58
I26	27 Sep 2015	8	19.92	90.27	7.4	33.32	8.2	23.5	0.89
I26	27 Sep 2015	9	19.85	86.24	7.4	33.32	8.2	23.5	1.01
I32	04 Sep 2015	1	22.70	91.22	7.0	33.48	8.2	22.9	0.29
I32	04 Sep 2015	2	22.68	91.64	7.0	33.48	8.2	22.9	0.31
I32	04 Sep 2015	3	22.67	91.47	7.1	33.48	8.2	22.9	0.33

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I32	04 Sep 2015	4	22.65	91.31	7.0	33.48	8.2	22.9	0.35
I32	04 Sep 2015	5	22.63	90.78	7.0	33.48	8.2	22.9	0.39
I32	04 Sep 2015	6	22.57	90.02	7.1	33.48	8.2	22.9	0.46
I32	04 Sep 2015	7	22.50	88.94	7.1	33.47	8.2	22.9	0.52
I32	04 Sep 2015	8	22.41	88.09	7.1	33.47	8.2	22.9	0.63
I32	04 Sep 2015	9	22.31	85.30	7.1	33.46	8.2	23.0	0.83
I32	04 Sep 2015	10	22.03	79.57	7.1	33.41	8.2	23.0	1.36
I32	10 Sep 2015	1	22.38	82.49	7.1	33.41	8.2	22.9	0.51
I32	10 Sep 2015	2	22.12	82.91	7.2	33.40	8.2	23.0	0.53
I32	10 Sep 2015	3	21.93	84.13	7.2	33.40	8.2	23.0	0.57
I32	10 Sep 2015	4	21.79	85.24	7.2	33.40	8.2	23.1	0.70
I32	10 Sep 2015	5	21.56	84.98	7.2	33.38	8.2	23.1	0.83
I32	10 Sep 2015	6	21.15	84.03	7.2	33.37	8.2	23.2	0.98
I32	10 Sep 2015	7	20.74	84.10	7.3	33.36	8.2	23.3	1.17
I32	10 Sep 2015	8	20.23	83.23	7.3	33.34	8.2	23.4	1.40
I32	10 Sep 2015	9	19.81	81.14	7.3	33.33	8.2	23.5	1.71
I32	10 Sep 2015	10	19.50	80.85	7.2	33.32	8.2	23.6	2.70
I32	15 Sep 2015	1	23.63	78.90	7.0	33.37	8.2	22.5	2.32
I32	15 Sep 2015	2	23.61	78.43	7.0	33.37	8.2	22.5	2.48
I32	15 Sep 2015	3	23.59	79.51	7.0	33.38	8.2	22.5	2.61
I32	15 Sep 2015	4	23.59	79.64	7.0	33.38	8.2	22.5	2.70
I32	15 Sep 2015	5	23.58	79.71	7.0	33.38	8.2	22.5	2.78
I32	15 Sep 2015	6	23.54	79.79	6.9	33.38	8.2	22.6	2.77
I32	15 Sep 2015	7	23.48	79.84	7.0	33.39	8.2	22.6	2.69
I32	15 Sep 2015	8	23.40	80.09	7.0	33.40	8.2	22.6	2.65
I32	15 Sep 2015	9	23.36	80.13	6.9	33.40	8.2	22.6	2.57
I32	15 Sep 2015	10	23.35	80.33	7.0	33.40	8.2	22.6	2.52
I32	21 Sep 2015	1	22.85	80.25	7.1	33.35	8.2	22.7	1.31
I32	21 Sep 2015	2	22.85	78.67	7.1	33.35	8.2	22.7	1.50
I32	21 Sep 2015	3	22.84	81.01	7.1	33.35	8.2	22.7	1.58
I32	21 Sep 2015	4	22.83	81.22	7.1	33.35	8.2	22.7	1.59
I32	21 Sep 2015	5	22.80	80.74	7.1	33.36	8.2	22.7	1.58
I32	21 Sep 2015	6	22.79	81.93	7.0	33.36	8.2	22.8	1.57
I32	21 Sep 2015	7	22.77	81.92	7.1	33.36	8.2	22.8	1.57
I32	21 Sep 2015	8	22.74	81.66	7.0	33.36	8.2	22.8	1.69
I32	21 Sep 2015	9	22.68	80.91	7.0	33.37	8.2	22.8	1.93
I32	21 Sep 2015	10	22.67	75.84	7.0	33.37	8.2	22.8	2.18
I32	27 Sep 2015	1	23.10	90.30	6.9	33.38	8.2	22.7	0.47
I32	27 Sep 2015	2	22.24	90.34	7.0	33.32	8.2	22.9	0.66
I32	27 Sep 2015	3	21.19	87.01	7.2	33.27	8.2	23.1	1.00
I32	27 Sep 2015	4	20.36	77.92	7.4	33.30	8.2	23.4	1.24
I32	27 Sep 2015	5	20.13	72.89	7.5	33.30	8.2	23.4	1.36
I32	27 Sep 2015	6	19.91	76.96	7.6	33.30	8.2	23.5	1.55
I32	27 Sep 2015	7	19.78	80.21	7.5	33.30	8.2	23.5	1.77
I32	27 Sep 2015	8	19.66	75.30	7.4	33.30	8.2	23.6	1.92
I32	27 Sep 2015	9	19.60	69.14	7.3	33.31	8.2	23.6	3.36
I39	04 Sep 2015	1	22.52	92.79	7.1	33.47	8.2	22.9	0.27
I39	04 Sep 2015	2	22.41	92.75	7.1	33.47	8.2	22.9	0.28
I39	04 Sep 2015	3	22.28	92.85	7.1	33.46	8.2	23.0	0.30
I39	04 Sep 2015	4	21.92	92.97	7.1	33.43	8.2	23.0	0.33

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I39	04 Sep 2015	5	21.54	92.90	7.1	33.39	8.2	23.1	0.38
I39	04 Sep 2015	6	20.39	92.31	7.3	33.35	8.2	23.4	0.52
I39	04 Sep 2015	7	20.01	90.82	7.5	33.32	8.2	23.5	0.54
I39	04 Sep 2015	8	19.21	91.00	7.6	33.30	8.2	23.7	0.54
I39	04 Sep 2015	9	18.73	91.63	7.6	33.27	8.2	23.8	0.65
I39	04 Sep 2015	10	18.39	90.51	7.5	33.28	8.2	23.9	0.81
I39	04 Sep 2015	11	18.34	88.18	7.5	33.28	8.2	23.9	0.94
I39	04 Sep 2015	12	18.21	87.38	7.5	33.26	8.2	23.9	1.01
I39	04 Sep 2015	13	17.91	86.37	7.6	33.27	8.1	24.0	1.07
I39	04 Sep 2015	14	17.77	85.47	7.7	33.26	8.2	24.0	1.13
I39	04 Sep 2015	15	17.61	88.34	7.8	33.26	8.2	24.0	1.24
I39	04 Sep 2015	16	17.40	88.75	7.7	33.27	8.2	24.1	1.27
I39	04 Sep 2015	17	17.38	87.99	7.7	33.27	8.2	24.1	1.14
I39	04 Sep 2015	18	17.37	87.83	7.6	33.27	8.2	24.1	1.05
I39	10 Sep 2015	1	21.96	92.77	7.2	33.42	8.2	23.0	0.31
I39	10 Sep 2015	2	21.84	92.82	7.3	33.42	8.2	23.1	0.31
I39	10 Sep 2015	3	21.64	92.85	7.3	33.41	8.2	23.1	0.31
I39	10 Sep 2015	4	21.23	92.98	7.5	33.40	8.2	23.2	0.31
I39	10 Sep 2015	5	20.81	92.96	7.6	33.39	8.2	23.3	0.28
I39	10 Sep 2015	6	20.63	92.90	7.6	33.38	8.2	23.4	0.34
I39	10 Sep 2015	7	20.53	92.48	7.7	33.38	8.2	23.4	0.39
I39	10 Sep 2015	8	20.40	92.21	7.7	33.38	8.2	23.4	0.44
I39	10 Sep 2015	9	20.39	92.12	7.6	33.38	8.2	23.4	0.48
I39	10 Sep 2015	10	19.81	92.01	7.5	33.32	8.2	23.5	0.75
I39	10 Sep 2015	11	18.76	91.57	7.4	33.28	8.2	23.8	1.15
I39	10 Sep 2015	12	18.27	86.89	7.4	33.29	8.1	23.9	1.50
I39	10 Sep 2015	13	18.06	83.54	7.6	33.29	8.2	24.0	1.58
I39	10 Sep 2015	14	17.69	78.65	7.8	33.29	8.2	24.0	1.36
I39	10 Sep 2015	15	17.66	76.14	7.8	33.28	8.2	24.0	1.28
I39	10 Sep 2015	16	17.48	76.86	7.9	33.29	8.2	24.1	1.25
I39	10 Sep 2015	17	17.40	82.48	7.8	33.29	8.2	24.1	1.19
I39	10 Sep 2015	18	17.33	85.38	7.7	33.29	8.2	24.1	1.14
I39	15 Sep 2015	1	23.13	91.54	7.2	33.41	8.2	22.7	0.70
I39	15 Sep 2015	2	23.13	91.36	7.2	33.41	8.2	22.7	0.73
I39	15 Sep 2015	3	23.13	91.51	7.2	33.41	8.2	22.7	0.73
I39	15 Sep 2015	4	23.15	91.56	7.2	33.41	8.2	22.7	0.75
I39	15 Sep 2015	5	23.15	91.57	7.2	33.41	8.2	22.7	0.76
I39	15 Sep 2015	6	23.15	91.53	7.1	33.41	8.2	22.7	0.77
I39	15 Sep 2015	7	23.14	91.55	7.2	33.41	8.2	22.7	0.76
I39	15 Sep 2015	8	23.13	91.66	7.2	33.41	8.2	22.7	0.74
I39	15 Sep 2015	9	23.13	91.70	7.2	33.41	8.2	22.7	0.76
I39	15 Sep 2015	10	23.12	91.72	7.2	33.41	8.2	22.7	0.83
I39	15 Sep 2015	11	23.08	91.63	7.3	33.40	8.2	22.7	0.79
I39	15 Sep 2015	12	23.02	91.65	7.3	33.41	8.2	22.7	0.80
I39	15 Sep 2015	13	22.98	91.68	7.2	33.40	8.2	22.7	0.84
I39	15 Sep 2015	14	22.66	91.72	7.2	33.37	8.2	22.8	0.97
I39	15 Sep 2015	15	21.68	91.19	7.2	33.34	8.2	23.0	1.20
I39	15 Sep 2015	16	21.40	90.26	7.0	33.31	8.2	23.1	1.31
I39	15 Sep 2015	17	20.76	88.88	6.9	33.31	8.1	23.3	1.26
I39	15 Sep 2015	18	20.56	86.06	6.7	33.32	8.1	23.3	1.21
I39	21 Sep 2015	1	23.03	86.43	7.0	33.39	8.2	22.7	0.68
I39	21 Sep 2015	2	23.03	88.72	7.0	33.39	8.2	22.7	0.69

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I39	21 Sep 2015	3	22.98	89.59	7.0	33.39	8.2	22.7	0.72
I39	21 Sep 2015	4	22.91	89.80	7.0	33.39	8.2	22.7	0.74
I39	21 Sep 2015	5	22.68	89.86	7.1	33.38	8.2	22.8	0.80
I39	21 Sep 2015	6	22.09	89.58	7.1	33.37	8.2	23.0	0.97
I39	21 Sep 2015	7	21.58	89.02	7.1	33.33	8.2	23.1	1.16
I39	21 Sep 2015	8	20.36	87.80	7.3	33.33	8.2	23.4	1.60
I39	21 Sep 2015	9	19.78	85.92	7.4	33.32	8.2	23.5	2.10
I39	21 Sep 2015	10	19.52	84.16	7.3	33.31	8.2	23.6	2.56
I39	21 Sep 2015	11	19.17	82.57	7.4	33.30	8.2	23.7	2.86
I39	21 Sep 2015	12	19.00	81.51	7.4	33.30	8.2	23.7	3.01
I39	21 Sep 2015	13	18.74	81.49	7.3	33.29	8.2	23.8	3.01
I39	21 Sep 2015	14	18.62	81.71	7.3	33.30	8.1	23.8	3.03
I39	21 Sep 2015	15	18.53	81.21	7.3	33.30	8.1	23.8	2.91
I39	21 Sep 2015	16	18.48	81.02	7.3	33.30	8.1	23.9	2.77
I39	21 Sep 2015	17	18.36	81.38	7.2	33.29	8.1	23.9	2.60
I39	21 Sep 2015	18	17.99	81.47	7.2	33.29	8.1	24.0	2.24
I39	27 Sep 2015	1	22.59	92.63	7.3	33.37	8.2	22.8	0.48
I39	27 Sep 2015	2	22.28	92.54	7.3	33.38	8.2	22.9	0.50
I39	27 Sep 2015	3	22.25	92.31	7.3	33.38	8.2	22.9	0.55
I39	27 Sep 2015	4	22.23	92.10	7.3	33.38	8.2	22.9	0.58
I39	27 Sep 2015	5	21.94	92.09	7.4	33.36	8.2	23.0	0.61
I39	27 Sep 2015	6	21.04	91.44	7.6	33.35	8.2	23.2	0.73
I39	27 Sep 2015	7	20.77	90.95	7.5	33.35	8.2	23.3	0.88
I39	27 Sep 2015	8	20.39	90.86	7.6	33.33	8.2	23.4	0.90
I39	27 Sep 2015	9	20.09	91.07	7.5	33.34	8.2	23.5	1.02
I39	27 Sep 2015	10	19.96	90.95	7.3	33.34	8.2	23.5	1.12
I39	27 Sep 2015	11	19.64	90.43	7.1	33.33	8.2	23.6	1.28
I39	27 Sep 2015	12	19.52	88.14	7.0	33.34	8.1	23.6	1.30
I39	27 Sep 2015	13	19.48	87.27	6.8	33.34	8.1	23.6	1.34
I39	27 Sep 2015	14	19.43	86.82	6.8	33.33	8.1	23.6	1.34
I39	27 Sep 2015	15	19.29	86.25	6.7	33.34	8.1	23.7	1.35
I39	27 Sep 2015	16	19.20	85.91	6.6	33.34	8.1	23.7	1.27
I39	27 Sep 2015	17	19.06	85.40	6.6	33.34	8.1	23.7	1.16
I39	27 Sep 2015	18	18.95	84.57	6.6	33.34	8.1	23.8	0.97
I40	04 Sep 2015	1	22.94	78.04	7.2	33.48	8.2	22.8	0.80
I40	04 Sep 2015	2	22.83	78.17	7.2	33.47	8.2	22.8	0.84
I40	04 Sep 2015	3	22.54	79.09	7.4	33.44	8.2	22.9	1.01
I40	04 Sep 2015	4	22.12	78.99	7.3	33.41	8.2	23.0	1.08
I40	04 Sep 2015	5	21.92	80.26	7.3	33.40	8.2	23.0	1.19
I40	04 Sep 2015	6	21.23	80.27	7.2	33.35	8.2	23.2	1.61
I40	04 Sep 2015	7	20.87	75.13	7.3	33.35	8.2	23.3	2.26
I40	04 Sep 2015	8	20.78	72.09	7.2	33.35	8.2	23.3	2.76
I40	04 Sep 2015	9	20.72	66.90	6.8	33.33	8.2	23.3	3.44
I40	04 Sep 2015	10	19.63	60.28	6.5	33.29	8.1	23.5	4.34
I40	10 Sep 2015	1	21.55	91.55	7.4	33.41	8.2	23.1	0.29
I40	10 Sep 2015	2	21.48	91.78	7.4	33.40	8.2	23.1	0.29
I40	10 Sep 2015	3	21.04	92.02	7.6	33.40	8.2	23.3	0.29
I40	10 Sep 2015	4	20.83	92.14	7.6	33.38	8.2	23.3	0.33
I40	10 Sep 2015	5	20.56	92.29	7.7	33.38	8.2	23.4	0.40
I40	10 Sep 2015	6	20.42	92.44	7.7	33.37	8.2	23.4	0.46
I40	10 Sep 2015	7	20.29	92.32	7.8	33.36	8.2	23.4	0.58
I40	10 Sep 2015	8	19.76	92.06	7.8	33.34	8.2	23.6	0.88

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma-t$)	Chlor ($\mu\text{g/L}$)
I40	10 Sep 2015	9	19.67	90.51	7.8	33.34	8.2	23.6	1.09
I40	10 Sep 2015	10	19.59	87.11	7.5	33.33	8.2	23.6	1.76
I40	15 Sep 2015	1	23.14	66.54	7.0	33.28	8.2	22.6	1.77
I40	15 Sep 2015	2	23.15	78.93	7.0	33.38	8.2	22.7	1.86
I40	15 Sep 2015	3	23.16	81.71	7.0	33.38	8.2	22.7	1.98
I40	15 Sep 2015	4	23.16	81.87	7.0	33.38	8.2	22.7	2.05
I40	15 Sep 2015	5	23.16	81.79	7.0	33.38	8.2	22.7	2.05
I40	15 Sep 2015	6	23.14	82.42	7.0	33.38	8.2	22.7	2.03
I40	15 Sep 2015	7	23.14	83.30	7.1	33.38	8.2	22.7	1.93
I40	15 Sep 2015	8	23.14	83.23	7.0	33.38	8.2	22.7	1.89
I40	15 Sep 2015	9	23.14	83.39	7.1	33.38	8.2	22.7	1.86
I40	15 Sep 2015	10	23.15	82.75	7.0	33.38	8.2	22.7	1.91
I40	21 Sep 2015	1	22.54	85.04	7.1	33.38	8.2	22.8	0.64
I40	21 Sep 2015	2	22.54	87.65	7.2	33.38	8.2	22.8	0.67
I40	21 Sep 2015	3	22.53	88.23	7.1	33.38	8.2	22.8	0.70
I40	21 Sep 2015	4	22.52	88.23	7.1	33.38	8.2	22.8	0.75
I40	21 Sep 2015	5	22.52	88.23	7.2	33.38	8.2	22.8	0.78
I40	21 Sep 2015	6	22.52	88.18	7.2	33.38	8.2	22.8	0.79
I40	21 Sep 2015	7	22.52	88.21	7.2	33.38	8.2	22.8	0.80
I40	21 Sep 2015	8	22.48	88.25	7.1	33.37	8.2	22.8	0.90
I40	21 Sep 2015	9	22.34	87.17	7.1	33.37	8.2	22.9	1.18
I40	21 Sep 2015	10	22.10	83.42	7.1	33.34	8.2	22.9	1.47
I40	27 Sep 2015	1	22.95	83.19	7.1	33.38	8.2	22.7	1.88
I40	27 Sep 2015	2	22.58	80.39	7.1	33.37	8.2	22.8	2.34
I40	27 Sep 2015	3	22.16	73.23	7.1	33.38	8.2	22.9	2.33
I40	27 Sep 2015	4	21.94	72.68	7.0	33.35	8.2	23.0	1.68
I40	27 Sep 2015	5	21.54	79.77	7.2	33.34	8.2	23.1	1.61
I40	27 Sep 2015	6	21.08	80.04	8.3	33.34	8.2	23.2	2.37
I40	27 Sep 2015	7	20.50	79.62	8.6	33.34	8.3	23.4	3.13
I40	27 Sep 2015	8	20.28	81.30	8.3	33.33	8.2	23.4	4.47
I40	27 Sep 2015	9	20.13	77.37	7.9	33.34	8.2	23.5	6.51
I40	27 Sep 2015	10	20.00	72.25	7.2	33.34	8.2	23.5	8.05

NA = not available

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APPENDIX A

Quality Assurance

Table A.1

Summary of bacteriological quality assurance duplicate and split 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
I19	04 Sep 2015	6	ZV	LAB DUPLICATE	<2	<2	<2
I19	10 Sep 2015	6	AR	LAB DUPLICATE	<2	<2	2e
I19	15 Sep 2015	6	LMA	LAB DUPLICATE	60e	<2	26e
I19	21 Sep 2015	6	JT	LAB DUPLICATE	<2	<2	<2
I19	27 Sep 2015	6	ZV	LAB DUPLICATE	<2	<2	<2
I40	04 Sep 2015	6	SR	LAB DUPLICATE	<20	<2	<2
I40	10 Sep 2015	6	ZV	LAB DUPLICATE	<2	<2	<20
I40	15 Sep 2015	6	ZV	LAB DUPLICATE	<2	<2	<2
I40	21 Sep 2015	6	JT	LAB DUPLICATE	<2	<2	<2
I40	27 Sep 2015	6	ZV	LAB DUPLICATE	<20	<2	<2
S12	01 Sep 2015		SR	FIELD DUPLICATE	40e	<2	8e
S12	01 Sep 2015		SR	LAB DUPLICATE	80e	4e	6e
S12	08 Sep 2015		JT	FIELD DUPLICATE	20e	4e	<2
S12	08 Sep 2015		JT	LAB DUPLICATE	40e	2e	<2
S12	15 Sep 2015		ZV	FIELD DUPLICATE	<200	2e	20e
S12	15 Sep 2015		ZV	LAB DUPLICATE	<200	<2	4e
S12	22 Sep 2015		ZV	FIELD DUPLICATE	<200	<2	2e
S12	22 Sep 2015		ZV	LAB DUPLICATE	<20	<2	4e
S12	29 Sep 2015		LMA	FIELD DUPLICATE	<200	<2	6e
S12	29 Sep 2015		LMA	LAB DUPLICATE	<200	2e	2e

