



Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall

(South Bay Water Reclamation Plant)

NPDES Permit No. CA0109045

July 2015



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



THE CITY OF SAN DIEGO

August 31, 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 July 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,

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 Order No. R9-2013-0006 superseded Order No. R9-2006-0067 effective April 4, 2013.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 July, one of the eight shore stations located north of the border were out of compliance with various California Ocean Plan (Ocean Plan) water contact standards (see below); these standards do not apply to stations located in Mexican waters.
 - The 30-day geometric mean standard for *Enterococcus* was exceeded at station S5 on multiple days during the month.

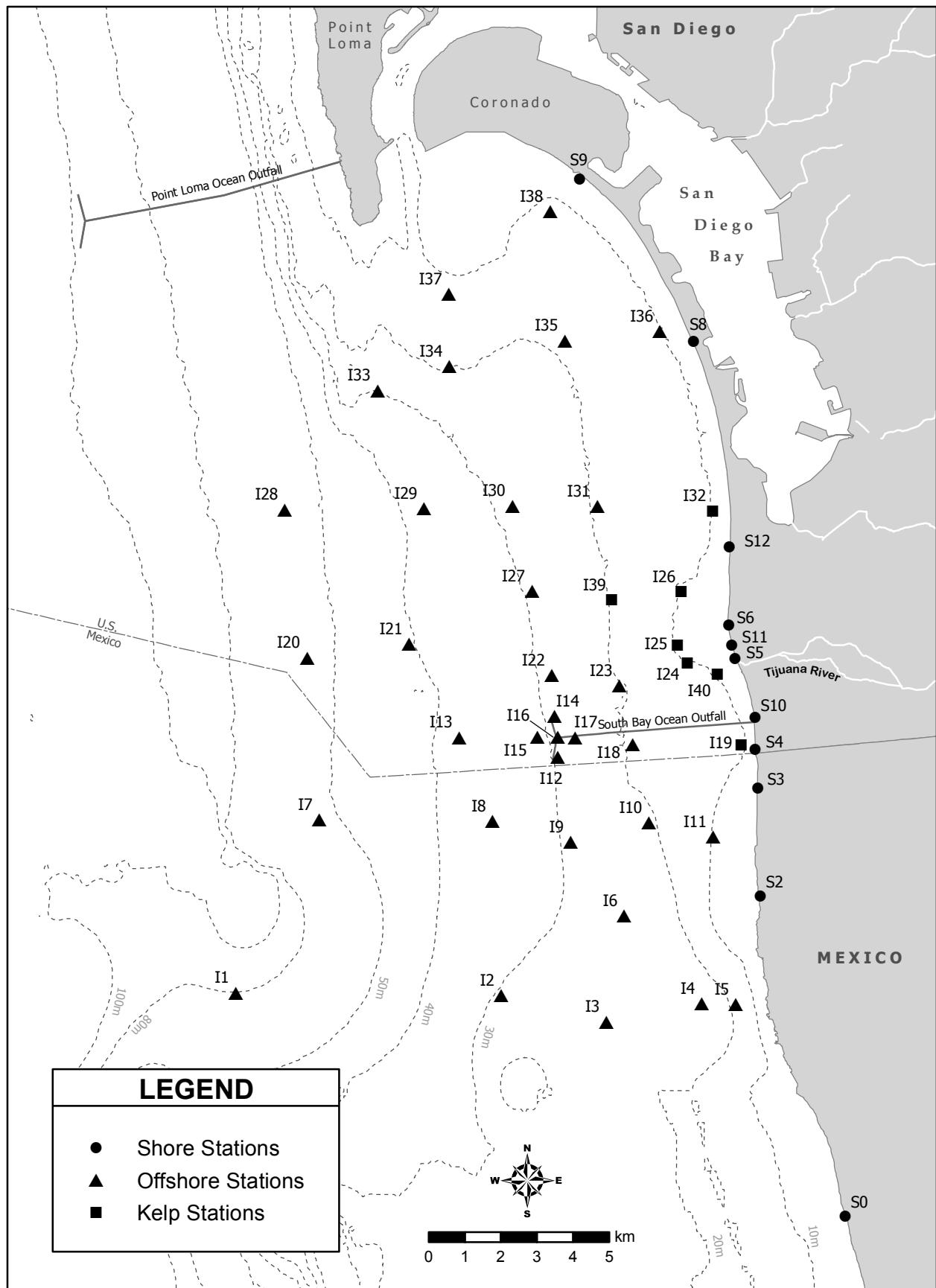
- The single sample maximum (SSM) standards for total coliforms, fecal coliforms, and the standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 were each exceeded at stations S5, S6, S8, S9, S11, and S12 on July 21.
- The SSM standard for *Enterococcus* was exceeded at stations S5, S6, and S11 on July 21.
- Per 2012 Ocean Plan requirements, resamples were collected in response to these SSM exceedances (see Table 2.8 for details).
- 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 *Annual Receiving Waters Monitoring Report for the South Bay Ocean Outfall* for details (<http://www.sandiego.gov/mwwd/environment/reports.shtml>).
- Notable visual observations for July included: water flowing from a storm drain at station S0, a chemical and/or detergent odor and dead fish at stations S5 and S11. 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 July (i.e. July 11, 13, 17, 22, 29).
- During July, all seven of these stations were in compliance with all Ocean Plan standards.
- Water column temperatures ranged from 14.30 to 22.39°C. The difference between surface and bottom waters ranged from approximately 1.09 to 5.72°C, indicating the water column was stratified at these sites.
- Chlorophyll *a* concentrations ranged from 0.37 to 12.66 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 July at the offshore stations. The next quarterly sampling is scheduled for August 2015.



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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 located north of the USA/Mexico border. 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 >1000 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Jul 2015	8	20	13	20	20	5	20	32
02 Jul 2015	6*	20*	11*	20*	20*	4*	20*	36*
03 Jul 2015	6*	20*	11*	20*	20*	4*	20*	36*
04 Jul 2015	6*	20*	11*	20*	20*	4*	20*	36*
05 Jul 2015	6*	20*	11*	20*	20*	4*	20*	36*
06 Jul 2015	6*	20*	11*	20*	20*	4*	20*	36*
07 Jul 2015	8	20	13	20	20	3	20	32
08 Jul 2015	8	20	13	20	20	3	20	32
09 Jul 2015	9*	20*	11*	20*	20*	4*	20*	36*
10 Jul 2015	9*	20*	11*	20*	20*	4*	20*	36*
11 Jul 2015	9*	20*	11*	20*	20*	4*	20*	36*
12 Jul 2015	9*	20*	11*	20*	20*	4*	20*	36*
13 Jul 2015	9*	20*	11*	20*	20*	4*	20*	36*
14 Jul 2015	11	25	13	20	20	5	20	32
15 Jul 2015	11	25	13	20	20	5	20	32
16 Jul 2015	6*	26*	11*	20*	20*	4*	20*	36*
17 Jul 2015	6*	26*	11*	20*	20*	4*	20*	36*
18 Jul 2015	6*	26*	11*	20*	20*	4*	20*	36*
19 Jul 2015	6*	26*	11*	20*	20*	4*	20*	36*
20 Jul 2015	6*	26*	11*	20*	20*	4*	20*	36*
21 Jul 2015	9	95	48	73	85	7	76	121
22 Jul 2015	9	95	48	73	85	7	76	121
23 Jul 2015	13*	361	173	73	98	9*	278	341
24 Jul 2015	13*	672	301	73	98	9*	498	341
25 Jul 2015	13*	672	301	73	98	9*	498	341
26 Jul 2015	13*	476	301	73	98	9*	498	341
27 Jul 2015	13*	476	301	73	98	9*	498	341
28 Jul 2015	14	381	204	59	90	11	315	393
29 Jul 2015	14	381	204	59	90	11	315	393
30 Jul 2015	23*	580	301	73	122	17*	498	450
31 Jul 2015	23*	580	301	73	122	17*	498	450

* 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 located north of the USA/Mexico border. 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 Jul 2015	2	2	3	2	3	2	4	4
02 Jul 2015	2*	3*	4*	2*	3*	2*	4*	5*
03 Jul 2015	2*	3*	4*	2*	3*	2*	4*	5*
04 Jul 2015	2*	3*	4*	2*	3*	2*	4*	5*
05 Jul 2015	2*	3*	4*	2*	3*	2*	4*	5*
06 Jul 2015	2*	3*	4*	2*	3*	2*	4*	5*
07 Jul 2015	2	2	3	2	3	2	4	7
08 Jul 2015	2	2	3	2	3	2	4	7
09 Jul 2015	2*	3*	4*	2*	2*	2*	4*	9*
10 Jul 2015	2*	3*	4*	2*	2*	2*	4*	9*
11 Jul 2015	2*	3*	4*	2*	2*	2*	4*	9*
12 Jul 2015	2*	3*	4*	2*	2*	2*	4*	9*
13 Jul 2015	2*	3*	4*	2*	2*	2*	4*	9*
14 Jul 2015	2	2	4	2	2	2	4	7
15 Jul 2015	2	2	4	2	2	2	4	7
16 Jul 2015	2*	2*	4*	2*	2*	2*	3*	9*
17 Jul 2015	2*	2*	4*	2*	2*	2*	3*	9*
18 Jul 2015	2*	2*	4*	2*	2*	2*	3*	9*
19 Jul 2015	2*	2*	4*	2*	2*	2*	3*	9*
20 Jul 2015	2*	2*	4*	2*	2*	2*	3*	9*
21 Jul 2015	3	11	20	8	11	3	15	29
22 Jul 2015	3	11	20	8	11	3	15	29
23 Jul 2015	3*	68	51	13	16	3*	51	59
24 Jul 2015	3*	111	73	13	16	3*	80	59
25 Jul 2015	3*	111	73	13	16	3*	80	59
26 Jul 2015	3*	88	61	13	16	3*	66	59
27 Jul 2015	3*	88	61	13	16	3*	66	59
28 Jul 2015	3	67	46	13	16	3	49	55
29 Jul 2015	3	67	46	13	16	3	49	55
30 Jul 2015	3*	111	58	19	25	3*	70	66
31 Jul 2015	3*	111	58	19	25	3*	70	66

* 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 located north of the USA/Mexico border. 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 Jul 2015	3	7	5	2	5	2	3	4
02 Jul 2015	3*	6*	4*	3*	4*	2*	4*	3*
03 Jul 2015	3*	6*	4*	3*	4*	2*	4*	3*
04 Jul 2015	3*	6*	4*	3*	4*	2*	4*	3*
05 Jul 2015	3*	6*	4*	3*	4*	2*	4*	3*
06 Jul 2015	3*	6*	4*	3*	4*	2*	4*	3*
07 Jul 2015	4	7	4	2	4	2	3	5
08 Jul 2015	4	7	4	2	4	2	3	5
09 Jul 2015	4*	5*	4*	3*	5*	2*	4*	6*
10 Jul 2015	4*	5*	4*	3*	5*	2*	4*	6*
11 Jul 2015	4*	5*	4*	3*	5*	2*	4*	6*
12 Jul 2015	4*	5*	4*	3*	5*	2*	4*	6*
13 Jul 2015	4*	5*	4*	3*	5*	2*	4*	6*
14 Jul 2015	4	6	4	4	4	3	3	6
15 Jul 2015	4	6	4	4	4	3	3	6
16 Jul 2015	3*	6*	4*	4*	3*	2*	3*	7*
17 Jul 2015	3*	6*	4*	4*	3*	2*	3*	7*
18 Jul 2015	3*	6*	4*	4*	3*	2*	3*	7*
19 Jul 2015	3*	6*	4*	4*	3*	2*	3*	7*
20 Jul 2015	3*	6*	4*	4*	3*	2*	3*	7*
21 Jul 2015	3	25	12	8	6	3	9	11
22 Jul 2015	3	25	12	8	6	3	9	11
23 Jul 2015	3*	78	14	8*	8*	4*	17	18*
24 Jul 2015	3*	80	14	8*	8*	4*	17	18*
25 Jul 2015	3*	80	14	8*	8*	4*	17	18*
26 Jul 2015	3*	80	14	8*	8*	4*	17	18*
27 Jul 2015	3*	80	14	8*	8*	4*	17	18*
28 Jul 2015	3	61	10	6	9	3	16	24
29 Jul 2015	3	61	10	6	9	3	16	24
30 Jul 2015	3*	107	9	8*	12*	4*	19	26*
31 Jul 2015	3*	107	9	8*	12*	4*	19	26*

* Geometric mean calculated using an n<5

Table 2.4

Summary of compliance at the SBOO shore stations located north of the USA/Mexico border 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
07 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
14 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
21 Jul 2015	IC	E	E	E	E	IC	E	E
23 Jul 2015	ns	E	IC	IC	IC	ns	E	IC
24 Jul 2015	ns	E	IC	ns	ns	ns	IC	ns
26 Jul 2015	ns	IC	ns	ns	ns	ns	ns	ns
28 Jul 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 located north of the USA/Mexico border 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
07 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
14 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
21 Jul 2015	IC	E	E	E	E	IC	E	E
23 Jul 2015	ns	E	IC	IC	IC	ns	E	IC
24 Jul 2015	ns	E	E	ns	ns	ns	E	ns
26 Jul 2015	ns	IC	IC	ns	ns	ns	IC	ns
28 Jul 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 located north of the USA/Mexico border 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
07 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
14 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
21 Jul 2015	IC	E	E	IC	IC	IC	E	IC
23 Jul 2015	ns	E	IC	ns	ns	ns	IC	ns
24 Jul 2015	ns	IC	ns	ns	ns	ns	ns	ns
28 Jul 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 located north of the USA/Mexico border 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
07 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
14 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC
21 Jul 2015	IC	E	E	E	E	IC	E	E
23 Jul 2015	ns	E	E	IC	IC	ns	IC	IC
24 Jul 2015	ns	IC	IC	ns	ns	ns	IC	ns
26 Jul 2015	ns	IC	ns	ns	ns	ns	ns	ns
28 Jul 2015	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.8

Concentrations of total coliform (Total), fecal coliform (Fecal), *Enterococcus* (Enter) and the fecal:total coliform ratio (F:T) at each SBOO shore station by sample date. Densities are reported as CFU/100 mL; F:T is unitless. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Enter	F:T
S0	07 Jul 2015	1105	280e	36e	82	0.13
S0	14 Jul 2015	1050	18e	<2	4e	0.11
S0	21 Jul 2015	1105	6e	<2	<2	0.33
S0	28 Jul 2015	1035	20e	<2	<2	0.10
S2	07 Jul 2015	930	<20	2e	<2	0.10
S2	14 Jul 2015	1300	<20	<2	2e	0.10
S2	21 Jul 2015	1020	<2	<2	<2	1.00
S2	28 Jul 2015	1120	2e	<2	<2	1.00
S3	07 Jul 2015	1002	<20	<2	<2	0.10
S3	14 Jul 2015	1215	<20	2e	<2	0.10
S3	21 Jul 2015	955	8e	<2	2e	0.25
S3	28 Jul 2015	1140	<20	<2	<2	0.10
S4	07 Jul 2015	1057	20e	2e	8e	0.10
S4	14 Jul 2015	1058	<20	4e	4e	0.20
S4	21 Jul 2015	1122	36e	8e	2e	0.22
S4	28 Jul 2015	1213	<20	2e	2e	0.10
S5	07 Jul 2015	914	<20	<2	8e	0.10
S5	14 Jul 2015	921	60e	2e	10e	0.03
S5	21 Jul 2015	945	>16000	>12000	11000	0.75
S5	23 Jul 2015	945	>16000	15000e	1600e	0.94
S5	24 Jul 2015	1005	15000	1300e	90	0.09
S5	26 Jul 2015	817	60e	22e	ns	0.37
S5	28 Jul 2015	945	80e	10e	12e	0.12
S6	07 Jul 2015	926	<20	<2	<2	0.10
S6	14 Jul 2015	934	<20	8e	4e	0.40
S6	21 Jul 2015	1001	>16000	>12000	880	0.75
S6	23 Jul 2015	1005	1200e	220e	4e	0.18
S6	24 Jul 2015	1021	4800	460	ns	0.10
S6	26 Jul 2015	852	ns	20e	ns	ns
S6	28 Jul 2015	1026	20e	6e	2e	0.30
S8	07 Jul 2015	755	<20	<2	2e	0.10
S8	14 Jul 2015	804	<20	2e	16e	0.10
S8	21 Jul 2015	825	13000	2600e	72	0.20
S8	23 Jul 2015	838	20e	18e	ns	0.90
S8	28 Jul 2015	818	20e	14e	2e	0.70
S9	07 Jul 2015	736	<20	4e	6e	0.20
S9	14 Jul 2015	744	<20	<2	2e	0.10
S9	21 Jul 2015	800	28000e	4000	98	0.14
S9	23 Jul 2015	802	40e	14e	ns	0.35
S9	28 Jul 2015	754	60e	20e	16e	0.33
S10	07 Jul 2015	1105	<2	<2	<2	1.00

Station	Date	Time	Total	Fecal	Enteric	F:T
S10	14 Jul 2015	1103	20e	2e	4e	0.10
S10	21 Jul 2015	1127	100e	12e	14e	0.12
S10	28 Jul 2015	1151	<20	<2	2e	0.10
S11	07 Jul 2015	922	<20	2e	<2	0.10
S11	14 Jul 2015	929	<20	4e	<2	0.20
S11	21 Jul 2015	956	>16000	>12000	1500e	0.75
S11	23 Jul 2015	957	13000	940	42	0.07
S11	24 Jul 2015	1013	9200	700	ns	0.08
S11	26 Jul 2015	836	ns	22e	ns	ns
S11	28 Jul 2015	1007	20e	6e	10e	0.30
S12	07 Jul 2015	936	20e	28e	16e	1.40
S12	14 Jul 2015	952	<20	2e	6e	0.10
S12	21 Jul 2015	1012	>16000	2800e	64	0.17
S12	23 Jul 2015	902	3600e	200e	ns	0.06
S12	28 Jul 2015	845	800e	40e	80e	0.05

ns = not sampled

Comments

Station	Date	Depth	Parameter	Comments
S11	23 Jul 2015			Resample
S12	23 Jul 2015			Resample
S5	23 Jul 2015			Resample
S6	23 Jul 2015			Resample
S8	23 Jul 2015			Resample
S9	23 Jul 2015			Resample
S11	24 Jul 2015			Resample
S5	24 Jul 2015			Resample
S6	24 Jul 2015			Resample
S11	26 Jul 2015			Resample
S5	26 Jul 2015			Resample
S6	26 Jul 2015			Resample

Table 2.9

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

Station	Date	Parameter	Value
S0	07 Jul 2015	Arrive Time	1105
S0	07 Jul 2015	Weather	Cloudy
S0	07 Jul 2015	Wind Speed (kts)	4
S0	07 Jul 2015	Wind Dir	NE
S0	07 Jul 2015	Animal Life	15 Shorebirds
S0	07 Jul 2015	Floatables	None
S0	07 Jul 2015	Water Color	Green
S0	07 Jul 2015	Current Direction	N
S0	07 Jul 2015	Water Temp (C)	17
S0	07 Jul 2015	Wave Height Low (ft)	2.4
S0	07 Jul 2015	High Tide (ft)	4.7
S0	07 Jul 2015	High Tide Time	1441
S0	07 Jul 2015	Low Tide (ft)	0.2
S0	07 Jul 2015	Low Tide Time	803
S0	07 Jul 2015	Comments	Kelp; 6 Persons; 3 Surfers; Water clear; Flow from stormdrain 0.5 L/sec
S0	14 Jul 2015	Arrive Time	1050
S0	14 Jul 2015	Weather	Cloudy
S0	14 Jul 2015	Wind Speed (kts)	3.4
S0	14 Jul 2015	Wind Dir	NW
S0	14 Jul 2015	Animal Life	15 Shorebirds; 1 Dog
S0	14 Jul 2015	Floatables	None
S0	14 Jul 2015	Water Color	Green
S0	14 Jul 2015	Current Direction	S
S0	14 Jul 2015	Water Temp (C)	16.5
S0	14 Jul 2015	Wave Height Low (ft)	3
S0	14 Jul 2015	High Tide (ft)	4
S0	14 Jul 2015	High Tide Time	930
S0	14 Jul 2015	Low Tide (ft)	1.7
S0	14 Jul 2015	Low Tide Time	1436
S0	14 Jul 2015	Comments	Kelp; 5 Persons; Water clear; No flow from stormdrain
S0	21 Jul 2015	Arrive Time	1105
S0	21 Jul 2015	Weather	Sunny
S0	21 Jul 2015	Wind Speed (kts)	2.8
S0	21 Jul 2015	Wind Dir	SW
S0	21 Jul 2015	Animal Life	2 Dogs; >20 Seagulls
S0	21 Jul 2015	Floatables	None
S0	21 Jul 2015	Water Color	Green
S0	21 Jul 2015	Current Direction	N

Station	Date	Parameter	Value
S0	21 Jul 2015	Water Temp (C)	16.7
S0	21 Jul 2015	Wave Height Low (ft)	1
S0	21 Jul 2015	High Tide (ft)	4.2
S0	21 Jul 2015	High Tide Time	1343
S0	21 Jul 2015	Low Tide (ft)	0.8
S0	21 Jul 2015	Low Tide Time	706
S0	21 Jul 2015	Comments	Kelp; Water turbid; Flow from stormdrain 0.5 L/sec
S0	28 Jul 2015	Arrive Time	1035
S0	28 Jul 2015	Weather	Sunny
S0	28 Jul 2015	Wind Speed (kts)	4.7
S0	28 Jul 2015	Wind Dir	NW
S0	28 Jul 2015	Animal Life	5 Dogs; >20 Seagulls
S0	28 Jul 2015	Floatables	None
S0	28 Jul 2015	Water Color	Green
S0	28 Jul 2015	Current Direction	N
S0	28 Jul 2015	Water Temp (C)	20.6
S0	28 Jul 2015	Wave Height Low (ft)	2
S0	28 Jul 2015	High Tide (ft)	3.7
S0	28 Jul 2015	High Tide Time	819
S0	28 Jul 2015	Low Tide (ft)	1.9
S0	28 Jul 2015	Low Tide Time	1320
S0	28 Jul 2015	Comments	Kelp; >20 Swimmers; Water turbid; Flow from stormdrain 0.5 L/sec
S2	07 Jul 2015	Arrive Time	930
S2	07 Jul 2015	Weather	Cloudy
S2	07 Jul 2015	Wind Speed (kts)	1.6
S2	07 Jul 2015	Wind Dir	NE
S2	07 Jul 2015	Animal Life	15 Shorebirds; 2 Dogs; >20 Dolphin; Crabs on shore
S2	07 Jul 2015	Floatables	None
S2	07 Jul 2015	Water Color	Green
S2	07 Jul 2015	Current Direction	N
S2	07 Jul 2015	Water Temp (C)	19
S2	07 Jul 2015	Wave Height Low (ft)	3
S2	07 Jul 2015	High Tide (ft)	4.7
S2	07 Jul 2015	High Tide Time	1441
S2	07 Jul 2015	Low Tide (ft)	0.2
S2	07 Jul 2015	Low Tide Time	803
S2	07 Jul 2015	Comments	Kelp; Water clear; No flow from stormdrain
S2	14 Jul 2015	Arrive Time	1300
S2	14 Jul 2015	Weather	Cloudy
S2	14 Jul 2015	Wind Speed (kts)	2.9
S2	14 Jul 2015	Wind Dir	NW

Station	Date	Parameter	Value
S2	14 Jul 2015	Animal Life	5 Shorebirds; 1 Dog; 2 Dolphins
S2	14 Jul 2015	Floatables	None
S2	14 Jul 2015	Water Color	Green
S2	14 Jul 2015	Current Direction	S
S2	14 Jul 2015	Water Temp (C)	16.5
S2	14 Jul 2015	Wave Height Low (ft)	3
S2	14 Jul 2015	High Tide (ft)	4
S2	14 Jul 2015	High Tide Time	930
S2	14 Jul 2015	Low Tide (ft)	1.7
S2	14 Jul 2015	Low Tide Time	1436
S2	14 Jul 2015	Comments	Kelp; 10 Persons; Water clear; No flow from stormdrain
S2	21 Jul 2015	Arrive Time	1020
S2	21 Jul 2015	Weather	Sunny
S2	21 Jul 2015	Wind Speed (kts)	3.6
S2	21 Jul 2015	Wind Dir	SW
S2	21 Jul 2015	Animal Life	3 Dogs; >20 Seagulls
S2	21 Jul 2015	Floatables	None
S2	21 Jul 2015	Water Color	Green
S2	21 Jul 2015	Current Direction	N
S2	21 Jul 2015	Water Temp (C)	17
S2	21 Jul 2015	Wave Height Low (ft)	1
S2	21 Jul 2015	High Tide (ft)	4.2
S2	21 Jul 2015	High Tide Time	1343
S2	21 Jul 2015	Low Tide (ft)	0.8
S2	21 Jul 2015	Low Tide Time	706
S2	21 Jul 2015	Comments	Kelp; Water turbid; No flow from stormdrain
S2	28 Jul 2015	Arrive Time	1120
S2	28 Jul 2015	Weather	Sunny
S2	28 Jul 2015	Wind Speed (kts)	2.9
S2	28 Jul 2015	Wind Dir	NW
S2	28 Jul 2015	Animal Life	2 Dogs; >20 Seagulls
S2	28 Jul 2015	Floatables	None
S2	28 Jul 2015	Water Color	Green
S2	28 Jul 2015	Current Direction	N
S2	28 Jul 2015	Water Temp (C)	22
S2	28 Jul 2015	Wave Height Low (ft)	2
S2	28 Jul 2015	High Tide (ft)	3.7
S2	28 Jul 2015	High Tide Time	819
S2	28 Jul 2015	Low Tide (ft)	1.9
S2	28 Jul 2015	Low Tide Time	1320
S2	28 Jul 2015	Comments	Kelp; >20 Swimmers; Water turbid; No flow from stormdrain
S3	07 Jul 2015	Arrive Time	1002

Station	Date	Parameter	Value
S3	07 Jul 2015	Weather	Cloudy
S3	07 Jul 2015	Wind Speed (kts)	1.2
S3	07 Jul 2015	Wind Dir	NE
S3	07 Jul 2015	Animal Life	15 Shorebirds; 2 Dogs
S3	07 Jul 2015	Floatables	None
S3	07 Jul 2015	Water Color	Green
S3	07 Jul 2015	Current Direction	N
S3	07 Jul 2015	Water Temp (C)	19
S3	07 Jul 2015	Wave Height Low (ft)	3
S3	07 Jul 2015	High Tide (ft)	4.7
S3	07 Jul 2015	High Tide Time	1441
S3	07 Jul 2015	Low Tide (ft)	0.2
S3	07 Jul 2015	Low Tide Time	803
S3	07 Jul 2015	Comments	Kelp; 10 Persons; 3 Surfers; Water clear; No flow from stormdrain
S3	14 Jul 2015	Arrive Time	1215
S3	14 Jul 2015	Weather	Cloudy
S3	14 Jul 2015	Wind Speed (kts)	3.5
S3	14 Jul 2015	Wind Dir	NW
S3	14 Jul 2015	Animal Life	15 Shorebirds; 2 Dogs
S3	14 Jul 2015	Floatables	None
S3	14 Jul 2015	Water Color	Green
S3	14 Jul 2015	Current Direction	S
S3	14 Jul 2015	Water Temp (C)	16.5
S3	14 Jul 2015	Wave Height Low (ft)	3
S3	14 Jul 2015	High Tide (ft)	4
S3	14 Jul 2015	High Tide Time	930
S3	14 Jul 2015	Low Tide (ft)	1.7
S3	14 Jul 2015	Low Tide Time	1436
S3	14 Jul 2015	Comments	Kelp; 15 Persons; Water clear; No flow from stormdrain
S3	21 Jul 2015	Arrive Time	955
S3	21 Jul 2015	Weather	Sunny
S3	21 Jul 2015	Wind Speed (kts)	3.2
S3	21 Jul 2015	Wind Dir	SW
S3	21 Jul 2015	Animal Life	2 Dogs; >20 Seagulls
S3	21 Jul 2015	Floatables	None
S3	21 Jul 2015	Water Color	Green
S3	21 Jul 2015	Current Direction	N
S3	21 Jul 2015	Water Temp (C)	17
S3	21 Jul 2015	Wave Height Low (ft)	1
S3	21 Jul 2015	High Tide (ft)	4.2
S3	21 Jul 2015	High Tide Time	1343
S3	21 Jul 2015	Low Tide (ft)	0.8
S3	21 Jul 2015	Low Tide Time	706

Station	Date	Parameter	Value
S3	21 Jul 2015	Comments	Kelp; 6 Surfers; Water turbid; No flow from stormdrain
S3	28 Jul 2015	Arrive Time	1140
S3	28 Jul 2015	Weather	Sunny
S3	28 Jul 2015	Wind Speed (kts)	3.8
S3	28 Jul 2015	Wind Dir	NW
S3	28 Jul 2015	Animal Life	>20 Shorebirds; 4 Dogs
S3	28 Jul 2015	Floatables	None
S3	28 Jul 2015	Water Color	Green
S3	28 Jul 2015	Current Direction	N
S3	28 Jul 2015	Water Temp (C)	22.3
S3	28 Jul 2015	Wave Height Low (ft)	2
S3	28 Jul 2015	High Tide (ft)	3.7
S3	28 Jul 2015	High Tide Time	819
S3	28 Jul 2015	Low Tide (ft)	1.9
S3	28 Jul 2015	Low Tide Time	1320
S3	28 Jul 2015	Comments	Kelp; >20 Swimmers; Water turbid; No flow from stormdrain
S4	07 Jul 2015	Arrive Time	1057
S4	07 Jul 2015	Weather	Overcast
S4	07 Jul 2015	Wind Speed (kts)	2.5
S4	07 Jul 2015	Wind Dir	W
S4	07 Jul 2015	Animal Life	4 Birds
S4	07 Jul 2015	Floatables	None
S4	07 Jul 2015	Water Color	Green
S4	07 Jul 2015	Current Direction	N
S4	07 Jul 2015	Water Temp (C)	19.6
S4	07 Jul 2015	Wave Height Low (ft)	2
S4	07 Jul 2015	High Tide (ft)	4.7
S4	07 Jul 2015	High Tide Time	1441
S4	07 Jul 2015	Low Tide (ft)	0.2
S4	07 Jul 2015	Low Tide Time	803
S4	07 Jul 2015	Comments	Kelp; Seagrass; Water clear
S4	14 Jul 2015	Arrive Time	1058
S4	14 Jul 2015	Weather	Cloudy
S4	14 Jul 2015	Wind Speed (kts)	4.6
S4	14 Jul 2015	Wind Dir	W
S4	14 Jul 2015	Animal Life	None
S4	14 Jul 2015	Floatables	None
S4	14 Jul 2015	Water Color	Green
S4	14 Jul 2015	Current Direction	S
S4	14 Jul 2015	Water Temp (C)	20
S4	14 Jul 2015	Wave Height Low (ft)	2
S4	14 Jul 2015	High Tide (ft)	4

Station	Date	Parameter	Value
S4	14 Jul 2015	High Tide Time	930
S4	14 Jul 2015	Low Tide (ft)	1.7
S4	14 Jul 2015	Low Tide Time	1436
S4	14 Jul 2015	Comments	Kelp; Water clear
S4	21 Jul 2015	Arrive Time	1122
S4	21 Jul 2015	Weather	Sunny
S4	21 Jul 2015	Wind Speed (kts)	2.5
S4	21 Jul 2015	Wind Dir	W
S4	21 Jul 2015	Animal Life	10 Shorebirds
S4	21 Jul 2015	Floatables	None
S4	21 Jul 2015	Water Color	Green
S4	21 Jul 2015	Current Direction	N
S4	21 Jul 2015	Water Temp (C)	23
S4	21 Jul 2015	Wave Height Low (ft)	2
S4	21 Jul 2015	High Tide (ft)	4.2
S4	21 Jul 2015	High Tide Time	1343
S4	21 Jul 2015	Low Tide (ft)	0.8
S4	21 Jul 2015	Low Tide Time	706
S4	21 Jul 2015	Comments	Kelp; Seagrass; Water clear
S4	28 Jul 2015	Arrive Time	1213
S4	28 Jul 2015	Weather	Sunny
S4	28 Jul 2015	Wind Speed (kts)	2.9
S4	28 Jul 2015	Wind Dir	W
S4	28 Jul 2015	Animal Life	None
S4	28 Jul 2015	Floatables	None
S4	28 Jul 2015	Water Color	Green
S4	28 Jul 2015	Current Direction	W
S4	28 Jul 2015	Water Temp (C)	22.9
S4	28 Jul 2015	Wave Height Low (ft)	3
S4	28 Jul 2015	High Tide (ft)	3.7
S4	28 Jul 2015	High Tide Time	819
S4	28 Jul 2015	Low Tide (ft)	1.9
S4	28 Jul 2015	Low Tide Time	1320
S4	28 Jul 2015	Comments	Kelp; Seagrass; Water clear
S5	07 Jul 2015	Arrive Time	914
S5	07 Jul 2015	Weather	Overcast
S5	07 Jul 2015	Wind Speed (kts)	1.3
S5	07 Jul 2015	Wind Dir	W
S5	07 Jul 2015	Animal Life	None
S5	07 Jul 2015	Floatables	None
S5	07 Jul 2015	Water Color	Green
S5	07 Jul 2015	Current Direction	N
S5	07 Jul 2015	Water Temp (C)	19.6
S5	07 Jul 2015	Wave Height Low (ft)	2

Station	Date	Parameter	Value
S5	07 Jul 2015	High Tide (ft)	4.7
S5	07 Jul 2015	High Tide Time	1441
S5	07 Jul 2015	Low Tide (ft)	0.2
S5	07 Jul 2015	Low Tide Time	803
S5	07 Jul 2015	Comments	Kelp; Seagrass; Water clear
S5	14 Jul 2015	Arrive Time	921
S5	14 Jul 2015	Weather	Cloudy
S5	14 Jul 2015	Wind Speed (kts)	6.9
S5	14 Jul 2015	Wind Dir	W
S5	14 Jul 2015	Animal Life	None
S5	14 Jul 2015	Floatables	Plastic bags
S5	14 Jul 2015	Water Color	Green
S5	14 Jul 2015	Current Direction	S
S5	14 Jul 2015	Water Temp (C)	20.5
S5	14 Jul 2015	Wave Height Low (ft)	3
S5	14 Jul 2015	High Tide (ft)	4
S5	14 Jul 2015	High Tide Time	930
S5	14 Jul 2015	Low Tide (ft)	1.7
S5	14 Jul 2015	Low Tide Time	1436
S5	14 Jul 2015	Comments	Kelp; Seagrass; Water clear
S5	21 Jul 2015	Arrive Time	945
S5	21 Jul 2015	Weather	Sunny
S5	21 Jul 2015	Wind Speed (kts)	3.1
S5	21 Jul 2015	Wind Dir	W
S5	21 Jul 2015	Animal Life	20 Birds
S5	21 Jul 2015	Floatables	None
S5	21 Jul 2015	Water Color	Brown
S5	21 Jul 2015	Current Direction	N
S5	21 Jul 2015	Water Temp (C)	23
S5	21 Jul 2015	Wave Height Low (ft)	2
S5	21 Jul 2015	High Tide (ft)	4.2
S5	21 Jul 2015	High Tide Time	1343
S5	21 Jul 2015	Low Tide (ft)	0.8
S5	21 Jul 2015	Low Tide Time	706
S5	21 Jul 2015	Comments	Kelp; Seagrass; Debris; 3 Persons; Water turbid; Chemical odor, dead fish along shoreline
S5	23 Jul 2015	Arrive Time	945
S5	23 Jul 2015	Weather	Partly Cloudy
S5	23 Jul 2015	Wind Speed (kts)	6.5
S5	23 Jul 2015	Wind Dir	NW
S5	23 Jul 2015	Animal Life	None
S5	23 Jul 2015	Floatables	None
S5	23 Jul 2015	Water Color	Green

Station	Date	Parameter	Value
S5	23 Jul 2015	Current Direction	N
S5	23 Jul 2015	Water Temp (C)	23
S5	23 Jul 2015	Wave Height Low (ft)	2
S5	23 Jul 2015	High Tide (ft)	4.3
S5	23 Jul 2015	High Tide Time	1524
S5	23 Jul 2015	Low Tide (ft)	1.6
S5	23 Jul 2015	Low Tide Time	823
S5	23 Jul 2015	Comments	Kelp; Seagrass; Water turbid; Chemical odor
S5	24 Jul 2015	Arrive Time	505
S5	24 Jul 2015	Weather	Sunny
S5	24 Jul 2015	Wind Speed (kts)	5
S5	24 Jul 2015	Wind Dir	W
S5	24 Jul 2015	Animal Life	None
S5	24 Jul 2015	Floatables	None
S5	24 Jul 2015	Water Color	Green
S5	24 Jul 2015	Current Direction	W
S5	24 Jul 2015	Water Temp (C)	23
S5	24 Jul 2015	Wave Height Low (ft)	2
S5	24 Jul 2015	High Tide (ft)	2.9
S5	24 Jul 2015	High Tide Time	346
S5	24 Jul 2015	Low Tide (ft)	2
S5	24 Jul 2015	Low Tide Time	918
S5	24 Jul 2015	Comments	Kelp; Seagrass; Water turbid; Detergent odor present.
S5	26 Jul 2015	Arrive Time	817
S5	26 Jul 2015	Weather	Sunny
S5	26 Jul 2015	Wind Speed (kts)	3.2
S5	26 Jul 2015	Wind Dir	W
S5	26 Jul 2015	Animal Life	None
S5	26 Jul 2015	Floatables	None
S5	26 Jul 2015	Water Color	Green
S5	26 Jul 2015	Current Direction	W
S5	26 Jul 2015	Water Temp (C)	20.3
S5	26 Jul 2015	Wave Height Low (ft)	3
S5	26 Jul 2015	High Tide (ft)	3.1
S5	26 Jul 2015	High Tide Time	646
S5	26 Jul 2015	Low Tide (ft)	2.2
S5	26 Jul 2015	Low Tide Time	1133
S5	26 Jul 2015	Comments	Kelp; Seagrass; Water clear
S5	28 Jul 2015	Arrive Time	945
S5	28 Jul 2015	Weather	Cloudy
S5	28 Jul 2015	Wind Speed (kts)	2.1
S5	28 Jul 2015	Wind Dir	W

Station	Date	Parameter	Value
S5	28 Jul 2015	Animal Life	None
	28 Jul 2015	Floatables	None
	28 Jul 2015	Water Color	Green
	28 Jul 2015	Current Direction	S
	28 Jul 2015	Water Temp (C)	22.1
	28 Jul 2015	Wave Height Low (ft)	3
	28 Jul 2015	High Tide (ft)	3.7
	28 Jul 2015	High Tide Time	819
	28 Jul 2015	Low Tide (ft)	1.9
	28 Jul 2015	Low Tide Time	1320
	28 Jul 2015	Comments	Kelp; Seagrass; Water clear
S6	07 Jul 2015	Arrive Time	926
	07 Jul 2015	Weather	Overcast
	07 Jul 2015	Wind Speed (kts)	1.1
	07 Jul 2015	Wind Dir	W
	07 Jul 2015	Animal Life	None
	07 Jul 2015	Floatables	None
	07 Jul 2015	Water Color	Green
	07 Jul 2015	Current Direction	N
	07 Jul 2015	Water Temp (C)	19.6
	07 Jul 2015	Wave Height Low (ft)	2
	07 Jul 2015	High Tide (ft)	4.7
	07 Jul 2015	High Tide Time	1441
	07 Jul 2015	Low Tide (ft)	0.2
	07 Jul 2015	Low Tide Time	803
	07 Jul 2015	Comments	Kelp; Seagrass; 1 Person; Water clear
S6	14 Jul 2015	Arrive Time	934
	14 Jul 2015	Weather	Cloudy
	14 Jul 2015	Wind Speed (kts)	7.1
	14 Jul 2015	Wind Dir	W
	14 Jul 2015	Animal Life	None
	14 Jul 2015	Floatables	None
	14 Jul 2015	Water Color	Green
	14 Jul 2015	Current Direction	S
	14 Jul 2015	Water Temp (C)	20.4
	14 Jul 2015	Wave Height Low (ft)	3
	14 Jul 2015	High Tide (ft)	4
	14 Jul 2015	High Tide Time	930
	14 Jul 2015	Low Tide (ft)	1.7
	14 Jul 2015	Low Tide Time	1436
	14 Jul 2015	Comments	Kelp; Seagrass; Water clear
S6	21 Jul 2015	Arrive Time	1001
	21 Jul 2015	Weather	Overcast
	21 Jul 2015	Wind Speed (kts)	2.9

Station	Date	Parameter	Value
S6	21 Jul 2015	Wind Dir	W
S6	21 Jul 2015	Animal Life	None
S6	21 Jul 2015	Floatables	None
S6	21 Jul 2015	Water Color	Green
S6	21 Jul 2015	Current Direction	N
S6	21 Jul 2015	Water Temp (C)	23
S6	21 Jul 2015	Wave Height Low (ft)	2
S6	21 Jul 2015	High Tide (ft)	4.2
S6	21 Jul 2015	High Tide Time	1343
S6	21 Jul 2015	Low Tide (ft)	0.8
S6	21 Jul 2015	Low Tide Time	706
S6	21 Jul 2015	Comments	Kelp; Seagrass; Water clear
S6	23 Jul 2015	Arrive Time	1005
S6	23 Jul 2015	Weather	Partly Cloudy
S6	23 Jul 2015	Wind Speed (kts)	7.6
S6	23 Jul 2015	Wind Dir	NW
S6	23 Jul 2015	Animal Life	None
S6	23 Jul 2015	Floatables	None
S6	23 Jul 2015	Water Color	Green
S6	23 Jul 2015	Current Direction	N
S6	23 Jul 2015	Water Temp (C)	22.8
S6	23 Jul 2015	Wave Height Low (ft)	2
S6	23 Jul 2015	High Tide (ft)	4.3
S6	23 Jul 2015	High Tide Time	1524
S6	23 Jul 2015	Low Tide (ft)	1.6
S6	23 Jul 2015	Low Tide Time	823
S6	23 Jul 2015	Comments	Kelp; Seagrass; 3 Persons; Water clear
S6	24 Jul 2015	Arrive Time	1021
S6	24 Jul 2015	Weather	Sunny
S6	24 Jul 2015	Wind Speed (kts)	4
S6	24 Jul 2015	Wind Dir	N
S6	24 Jul 2015	Animal Life	None
S6	24 Jul 2015	Floatables	None
S6	24 Jul 2015	Water Color	Green
S6	24 Jul 2015	Current Direction	N
S6	24 Jul 2015	Water Temp (C)	23
S6	24 Jul 2015	Wave Height Low (ft)	2
S6	24 Jul 2015	High Tide (ft)	4.5
S6	24 Jul 2015	High Tide Time	1621
S6	24 Jul 2015	Low Tide (ft)	2
S6	24 Jul 2015	Low Tide Time	918
S6	24 Jul 2015	Comments	Kelp; Seagrass; 2 Surfers; Water turbid
S6	26 Jul 2015	Arrive Time	852
S6	26 Jul 2015	Weather	Sunny

Station	Date	Parameter	Value
S6	26 Jul 2015	Wind Speed (kts)	3.1
	26 Jul 2015	Wind Dir	W
	26 Jul 2015	Animal Life	None
	26 Jul 2015	Floatables	None
	26 Jul 2015	Water Color	Green
	26 Jul 2015	Current Direction	W
	26 Jul 2015	Water Temp (C)	22.1
	26 Jul 2015	Wave Height Low (ft)	3
	26 Jul 2015	High Tide (ft)	3.1
	26 Jul 2015	High Tide Time	646
	26 Jul 2015	Low Tide (ft)	2.2
	26 Jul 2015	Low Tide Time	1133
	26 Jul 2015	Comments	Kelp; Seagrass; 2 Surfers; Water clear
S6	28 Jul 2015	Arrive Time	1026
	28 Jul 2015	Weather	Cloudy
	28 Jul 2015	Wind Speed (kts)	2.2
	28 Jul 2015	Wind Dir	W
	28 Jul 2015	Animal Life	None
	28 Jul 2015	Floatables	None
	28 Jul 2015	Water Color	Green
	28 Jul 2015	Current Direction	S
	28 Jul 2015	Water Temp (C)	21
	28 Jul 2015	Wave Height Low (ft)	2
	28 Jul 2015	High Tide (ft)	3.7
	28 Jul 2015	High Tide Time	819
	28 Jul 2015	Low Tide (ft)	1.9
	28 Jul 2015	Low Tide Time	1320
	28 Jul 2015	Comments	Kelp; Seagrass; 3 Persons; Water clear
S8	07 Jul 2015	Arrive Time	755
	07 Jul 2015	Weather	Drizzle
	07 Jul 2015	Wind Speed (kts)	2.9
	07 Jul 2015	Wind Dir	W
	07 Jul 2015	Animal Life	None
	07 Jul 2015	Floatables	None
	07 Jul 2015	Water Color	Green
	07 Jul 2015	Current Direction	N
	07 Jul 2015	Water Temp (C)	19.6
	07 Jul 2015	Wave Height Low (ft)	1
	07 Jul 2015	High Tide (ft)	4.6
	07 Jul 2015	High Tide Time	113
	07 Jul 2015	Low Tide (ft)	0.2
	07 Jul 2015	Low Tide Time	803
	07 Jul 2015	Comments	Water clear
S8	14 Jul 2015	Arrive Time	804

Station	Date	Parameter	Value
S8	14 Jul 2015	Weather	Cloudy
S8	14 Jul 2015	Wind Speed (kts)	4.4
S8	14 Jul 2015	Wind Dir	NW
S8	14 Jul 2015	Animal Life	None
S8	14 Jul 2015	Floatables	None
S8	14 Jul 2015	Water Color	Green
S8	14 Jul 2015	Current Direction	S
S8	14 Jul 2015	Water Temp (C)	20.5
S8	14 Jul 2015	Wave Height Low (ft)	3
S8	14 Jul 2015	High Tide (ft)	4
S8	14 Jul 2015	High Tide Time	930
S8	14 Jul 2015	Low Tide (ft)	-0.7
S8	14 Jul 2015	Low Tide Time	314
S8	14 Jul 2015	Comments	Seagrass; Water clear
S8	21 Jul 2015	Arrive Time	825
S8	21 Jul 2015	Weather	Overcast
S8	21 Jul 2015	Wind Speed (kts)	3.4
S8	21 Jul 2015	Wind Dir	W
S8	21 Jul 2015	Animal Life	None
S8	21 Jul 2015	Floatables	None
S8	21 Jul 2015	Water Color	Green
S8	21 Jul 2015	Current Direction	N
S8	21 Jul 2015	Water Temp (C)	23
S8	21 Jul 2015	Wave Height Low (ft)	1
S8	21 Jul 2015	High Tide (ft)	4.2
S8	21 Jul 2015	High Tide Time	1343
S8	21 Jul 2015	Low Tide (ft)	0.8
S8	21 Jul 2015	Low Tide Time	706
S8	21 Jul 2015	Comments	Kelp; Seagrass; 4 Joggers; 1 Fisherman; Water clear
S8	23 Jul 2015	Arrive Time	838
S8	23 Jul 2015	Weather	Overcast
S8	23 Jul 2015	Wind Speed (kts)	4.2
S8	23 Jul 2015	Wind Dir	W
S8	23 Jul 2015	Animal Life	None
S8	23 Jul 2015	Floatables	None
S8	23 Jul 2015	Water Color	Green
S8	23 Jul 2015	Current Direction	N
S8	23 Jul 2015	Water Temp (C)	22.6
S8	23 Jul 2015	Wave Height Low (ft)	2
S8	23 Jul 2015	High Tide (ft)	3.3
S8	23 Jul 2015	High Tide Time	211
S8	23 Jul 2015	Low Tide (ft)	1.6
S8	23 Jul 2015	Low Tide Time	823

Station	Date	Parameter	Value
S8	23 Jul 2015	Comments	Kelp; Seagrass; 2 Persons; 1 Fisherman; Water clear
S8	28 Jul 2015	Arrive Time	818
S8	28 Jul 2015	Weather	Cloudy
S8	28 Jul 2015	Wind Speed (kts)	3.1
S8	28 Jul 2015	Wind Dir	W
S8	28 Jul 2015	Animal Life	None
S8	28 Jul 2015	Floatables	None
S8	28 Jul 2015	Water Color	Green
S8	28 Jul 2015	Current Direction	S
S8	28 Jul 2015	Water Temp (C)	21.2
S8	28 Jul 2015	Wave Height Low (ft)	3
S8	28 Jul 2015	High Tide (ft)	3.7
S8	28 Jul 2015	High Tide Time	819
S8	28 Jul 2015	Low Tide (ft)	1.9
S8	28 Jul 2015	Low Tide Time	1320
S8	28 Jul 2015	Comments	Kelp; Seagrass; Water clear; Lots of kelp in water today
S9	07 Jul 2015	Arrive Time	736
S9	07 Jul 2015	Weather	Overcast
S9	07 Jul 2015	Wind Speed (kts)	2.1
S9	07 Jul 2015	Wind Dir	W
S9	07 Jul 2015	Animal Life	None
S9	07 Jul 2015	Floatables	None
S9	07 Jul 2015	Water Color	Green
S9	07 Jul 2015	Current Direction	N
S9	07 Jul 2015	Water Temp (C)	19.7
S9	07 Jul 2015	Wave Height Low (ft)	1
S9	07 Jul 2015	High Tide (ft)	4.6
S9	07 Jul 2015	High Tide Time	113
S9	07 Jul 2015	Low Tide (ft)	0.2
S9	07 Jul 2015	Low Tide Time	803
S9	07 Jul 2015	Comments	Kelp; Seagrass; 2 Joggers; 1 Person; 1 Fisherman; Water clear
S9	14 Jul 2015	Arrive Time	744
S9	14 Jul 2015	Weather	Cloudy
S9	14 Jul 2015	Wind Speed (kts)	5.8
S9	14 Jul 2015	Wind Dir	NW
S9	14 Jul 2015	Animal Life	None
S9	14 Jul 2015	Floatables	None
S9	14 Jul 2015	Water Color	Green
S9	14 Jul 2015	Current Direction	S
S9	14 Jul 2015	Water Temp (C)	20.5
S9	14 Jul 2015	Wave Height Low (ft)	2

Station	Date	Parameter	Value
S9	14 Jul 2015	High Tide (ft)	4
S9	14 Jul 2015	High Tide Time	930
S9	14 Jul 2015	Low Tide (ft)	-0.7
S9	14 Jul 2015	Low Tide Time	314
S9	14 Jul 2015	Comments	Seagrass; Water clear
S9	21 Jul 2015	Arrive Time	800
S9	21 Jul 2015	Weather	Overcast
S9	21 Jul 2015	Wind Speed (kts)	1.8
S9	21 Jul 2015	Wind Dir	W
S9	21 Jul 2015	Animal Life	None
S9	21 Jul 2015	Floatables	None
S9	21 Jul 2015	Water Color	Green
S9	21 Jul 2015	Current Direction	N
S9	21 Jul 2015	Water Temp (C)	23
S9	21 Jul 2015	Wave Height Low (ft)	1
S9	21 Jul 2015	High Tide (ft)	4.2
S9	21 Jul 2015	High Tide Time	1343
S9	21 Jul 2015	Low Tide (ft)	0.8
S9	21 Jul 2015	Low Tide Time	706
S9	21 Jul 2015	Comments	Kelp; Seagrass; 4 Joggers; 1 Person; Water clear
S9	23 Jul 2015	Arrive Time	802
S9	23 Jul 2015	Weather	Overcast
S9	23 Jul 2015	Wind Speed (kts)	1.7
S9	23 Jul 2015	Wind Dir	W
S9	23 Jul 2015	Animal Life	None
S9	23 Jul 2015	Floatables	None
S9	23 Jul 2015	Water Color	Green
S9	23 Jul 2015	Current Direction	N
S9	23 Jul 2015	Water Temp (C)	22.4
S9	23 Jul 2015	Wave Height Low (ft)	1
S9	23 Jul 2015	High Tide (ft)	3.3
S9	23 Jul 2015	High Tide Time	211
S9	23 Jul 2015	Low Tide (ft)	1.6
S9	23 Jul 2015	Low Tide Time	823
S9	23 Jul 2015	Comments	3 Persons; Water clear
S9	28 Jul 2015	Arrive Time	754
S9	28 Jul 2015	Weather	Cloudy
S9	28 Jul 2015	Wind Speed (kts)	2.1
S9	28 Jul 2015	Wind Dir	W
S9	28 Jul 2015	Animal Life	None
S9	28 Jul 2015	Floatables	None
S9	28 Jul 2015	Water Color	Green
S9	28 Jul 2015	Current Direction	S

Station	Date	Parameter	Value
S9	28 Jul 2015	Water Temp (C)	21.2
S9	28 Jul 2015	Wave Height Low (ft)	2
S9	28 Jul 2015	High Tide (ft)	3.7
S9	28 Jul 2015	High Tide Time	819
S9	28 Jul 2015	Low Tide (ft)	1.9
S9	28 Jul 2015	Low Tide Time	1320
S9	28 Jul 2015	Comments	Kelp; Seagrass; 1 Jogger; 3 Persons; Water clear
S10	07 Jul 2015	Arrive Time	1105
S10	07 Jul 2015	Weather	Overcast
S10	07 Jul 2015	Wind Speed (kts)	2.3
S10	07 Jul 2015	Wind Dir	W
S10	07 Jul 2015	Animal Life	None
S10	07 Jul 2015	Floatables	None
S10	07 Jul 2015	Water Color	Green
S10	07 Jul 2015	Current Direction	N
S10	07 Jul 2015	Water Temp (C)	19.6
S10	07 Jul 2015	Wave Height Low (ft)	3
S10	07 Jul 2015	High Tide (ft)	4.7
S10	07 Jul 2015	High Tide Time	1441
S10	07 Jul 2015	Low Tide (ft)	0.2
S10	07 Jul 2015	Low Tide Time	803
S10	07 Jul 2015	Comments	Kelp; Seagrass; Water clear
S10	14 Jul 2015	Arrive Time	1103
S10	14 Jul 2015	Weather	Cloudy
S10	14 Jul 2015	Wind Speed (kts)	3.4
S10	14 Jul 2015	Wind Dir	W
S10	14 Jul 2015	Animal Life	None
S10	14 Jul 2015	Floatables	None
S10	14 Jul 2015	Water Color	Green
S10	14 Jul 2015	Current Direction	S
S10	14 Jul 2015	Water Temp (C)	20
S10	14 Jul 2015	Wave Height Low (ft)	2
S10	14 Jul 2015	High Tide (ft)	4
S10	14 Jul 2015	High Tide Time	930
S10	14 Jul 2015	Low Tide (ft)	1.7
S10	14 Jul 2015	Low Tide Time	1436
S10	14 Jul 2015	Comments	Seagrass; Water clear
S10	21 Jul 2015	Arrive Time	1127
S10	21 Jul 2015	Weather	Sunny
S10	21 Jul 2015	Wind Speed (kts)	3.1
S10	21 Jul 2015	Wind Dir	W
S10	21 Jul 2015	Animal Life	None
S10	21 Jul 2015	Floatables	None

Station	Date	Parameter	Value
S10	21 Jul 2015	Water Color	Green
S10	21 Jul 2015	Current Direction	N
S10	21 Jul 2015	Water Temp (C)	23
S10	21 Jul 2015	Wave Height Low (ft)	3
S10	21 Jul 2015	High Tide (ft)	4.2
S10	21 Jul 2015	High Tide Time	1343
S10	21 Jul 2015	Low Tide (ft)	0.8
S10	21 Jul 2015	Low Tide Time	706
S10	21 Jul 2015	Comments	Kelp; Seagrass; Water clear
S10	28 Jul 2015	Arrive Time	1151
S10	28 Jul 2015	Weather	Sunny
S10	28 Jul 2015	Wind Speed (kts)	2.6
S10	28 Jul 2015	Wind Dir	W
S10	28 Jul 2015	Animal Life	None
S10	28 Jul 2015	Floatables	None
S10	28 Jul 2015	Water Color	Green
S10	28 Jul 2015	Current Direction	S
S10	28 Jul 2015	Water Temp (C)	21.1
S10	28 Jul 2015	Wave Height Low (ft)	2
S10	28 Jul 2015	High Tide (ft)	3.7
S10	28 Jul 2015	High Tide Time	819
S10	28 Jul 2015	Low Tide (ft)	1.9
S10	28 Jul 2015	Low Tide Time	1320
S10	28 Jul 2015	Comments	Kelp; Seagrass; Water clear
S11	07 Jul 2015	Arrive Time	922
S11	07 Jul 2015	Weather	Overcast
S11	07 Jul 2015	Wind Speed (kts)	2.1
S11	07 Jul 2015	Wind Dir	W
S11	07 Jul 2015	Animal Life	None
S11	07 Jul 2015	Floatables	None
S11	07 Jul 2015	Water Color	Green
S11	07 Jul 2015	Current Direction	N
S11	07 Jul 2015	Water Temp (C)	19.6
S11	07 Jul 2015	Wave Height Low (ft)	2
S11	07 Jul 2015	High Tide (ft)	4.7
S11	07 Jul 2015	High Tide Time	1441
S11	07 Jul 2015	Low Tide (ft)	0.2
S11	07 Jul 2015	Low Tide Time	803
S11	07 Jul 2015	Comments	Water clear
S11	14 Jul 2015	Arrive Time	929
S11	14 Jul 2015	Weather	Cloudy
S11	14 Jul 2015	Wind Speed (kts)	5.8
S11	14 Jul 2015	Wind Dir	W
S11	14 Jul 2015	Animal Life	None

Station	Date	Parameter	Value
S11	14 Jul 2015	Floatables	None
S11	14 Jul 2015	Water Color	Green
S11	14 Jul 2015	Current Direction	S
S11	14 Jul 2015	Water Temp (C)	20.5
S11	14 Jul 2015	Wave Height Low (ft)	2
S11	14 Jul 2015	High Tide (ft)	4
S11	14 Jul 2015	High Tide Time	930
S11	14 Jul 2015	Low Tide (ft)	1.7
S11	14 Jul 2015	Low Tide Time	1436
S11	14 Jul 2015	Comments	Seagrass; Water clear
S11	21 Jul 2015	Arrive Time	956
S11	21 Jul 2015	Weather	Overcast
S11	21 Jul 2015	Wind Speed (kts)	3.6
S11	21 Jul 2015	Wind Dir	W
S11	21 Jul 2015	Animal Life	8 Shorebirds
S11	21 Jul 2015	Floatables	None
S11	21 Jul 2015	Water Color	Brown
S11	21 Jul 2015	Current Direction	N
S11	21 Jul 2015	Water Temp (C)	23
S11	21 Jul 2015	Wave Height Low (ft)	2
S11	21 Jul 2015	High Tide (ft)	4.2
S11	21 Jul 2015	High Tide Time	1343
S11	21 Jul 2015	Low Tide (ft)	0.8
S11	21 Jul 2015	Low Tide Time	706
S11	21 Jul 2015	Comments	Kelp; Seagrass; Water clear; Dead fish along shoreline
S11	23 Jul 2015	Arrive Time	957
S11	23 Jul 2015	Weather	Partly Cloudy
S11	23 Jul 2015	Wind Speed (kts)	7.2
S11	23 Jul 2015	Wind Dir	NW
S11	23 Jul 2015	Animal Life	None
S11	23 Jul 2015	Floatables	None
S11	23 Jul 2015	Water Color	Green
S11	23 Jul 2015	Current Direction	N
S11	23 Jul 2015	Water Temp (C)	23
S11	23 Jul 2015	Wave Height Low (ft)	2
S11	23 Jul 2015	High Tide (ft)	4.3
S11	23 Jul 2015	High Tide Time	1524
S11	23 Jul 2015	Low Tide (ft)	1.6
S11	23 Jul 2015	Low Tide Time	823
S11	23 Jul 2015	Comments	Kelp; Seagrass; Water clear
S11	24 Jul 2015	Arrive Time	1013
S11	24 Jul 2015	Weather	Sunny
S11	24 Jul 2015	Wind Speed (kts)	5

Station	Date	Parameter	Value
S11	24 Jul 2015	Wind Dir	W
S11	24 Jul 2015	Animal Life	None
S11	24 Jul 2015	Floatables	None
S11	24 Jul 2015	Water Color	Green
S11	24 Jul 2015	Current Direction	W
S11	24 Jul 2015	Water Temp (C)	23
S11	24 Jul 2015	Wave Height Low (ft)	2
S11	24 Jul 2015	High Tide (ft)	4.5
S11	24 Jul 2015	High Tide Time	1621
S11	24 Jul 2015	Low Tide (ft)	2
S11	24 Jul 2015	Low Tide Time	918
S11	24 Jul 2015	Comments	Kelp; Seagrass; Water turbid; Detergent odor present
S11	26 Jul 2015	Arrive Time	836
S11	26 Jul 2015	Weather	Sunny
S11	26 Jul 2015	Wind Speed (kts)	3.4
S11	26 Jul 2015	Wind Dir	W
S11	26 Jul 2015	Animal Life	None
S11	26 Jul 2015	Floatables	None
S11	26 Jul 2015	Water Color	Green
S11	26 Jul 2015	Current Direction	W
S11	26 Jul 2015	Water Temp (C)	21.3
S11	26 Jul 2015	Wave Height Low (ft)	2
S11	26 Jul 2015	High Tide (ft)	3.1
S11	26 Jul 2015	High Tide Time	646
S11	26 Jul 2015	Low Tide (ft)	2.2
S11	26 Jul 2015	Low Tide Time	1133
S11	26 Jul 2015	Comments	Kelp; Seagrass; Water clear
S11	28 Jul 2015	Arrive Time	1007
S11	28 Jul 2015	Weather	Cloudy
S11	28 Jul 2015	Wind Speed (kts)	3.1
S11	28 Jul 2015	Wind Dir	W
S11	28 Jul 2015	Animal Life	None
S11	28 Jul 2015	Floatables	None
S11	28 Jul 2015	Water Color	Green
S11	28 Jul 2015	Current Direction	S
S11	28 Jul 2015	Water Temp (C)	22.1
S11	28 Jul 2015	Wave Height Low (ft)	2
S11	28 Jul 2015	High Tide (ft)	3.7
S11	28 Jul 2015	High Tide Time	819
S11	28 Jul 2015	Low Tide (ft)	1.9
S11	28 Jul 2015	Low Tide Time	1320
S11	28 Jul 2015	Comments	Kelp; Seagrass; 2 Surfers; Water clear
S12	07 Jul 2015	Arrive Time	936

Station	Date	Parameter	Value
S12	07 Jul 2015	Weather	Overcast
S12	07 Jul 2015	Wind Speed (kts)	2.5
S12	07 Jul 2015	Wind Dir	W
S12	07 Jul 2015	Animal Life	2 Dogs
S12	07 Jul 2015	Floatables	Foam
S12	07 Jul 2015	Water Color	Green
S12	07 Jul 2015	Current Direction	N
S12	07 Jul 2015	Water Temp (C)	19.6
S12	07 Jul 2015	Wave Height Low (ft)	2
S12	07 Jul 2015	High Tide (ft)	4.7
S12	07 Jul 2015	High Tide Time	1441
S12	07 Jul 2015	Low Tide (ft)	0.2
S12	07 Jul 2015	Low Tide Time	803
S12	07 Jul 2015	Comments	Kelp; Seagrass; 3 Persons; Water clear
S12	14 Jul 2015	Arrive Time	952
S12	14 Jul 2015	Weather	Cloudy
S12	14 Jul 2015	Wind Speed (kts)	4.6
S12	14 Jul 2015	Wind Dir	W
S12	14 Jul 2015	Animal Life	None
S12	14 Jul 2015	Floatables	None
S12	14 Jul 2015	Water Color	Green
S12	14 Jul 2015	Current Direction	S
S12	14 Jul 2015	Water Temp (C)	20.4
S12	14 Jul 2015	Wave Height Low (ft)	3
S12	14 Jul 2015	High Tide (ft)	4
S12	14 Jul 2015	High Tide Time	930
S12	14 Jul 2015	Low Tide (ft)	1.7
S12	14 Jul 2015	Low Tide Time	1436
S12	14 Jul 2015	Comments	Kelp; Seagrass; 4 Surfers; Water clear
S12	21 Jul 2015	Arrive Time	1012
S12	21 Jul 2015	Weather	Overcast
S12	21 Jul 2015	Wind Speed (kts)	3.4
S12	21 Jul 2015	Wind Dir	W
S12	21 Jul 2015	Animal Life	9 Shorebirds
S12	21 Jul 2015	Floatables	None
S12	21 Jul 2015	Water Color	Green
S12	21 Jul 2015	Current Direction	N
S12	21 Jul 2015	Water Temp (C)	23
S12	21 Jul 2015	Wave Height Low (ft)	2
S12	21 Jul 2015	High Tide (ft)	4.2
S12	21 Jul 2015	High Tide Time	1343
S12	21 Jul 2015	Low Tide (ft)	0.8
S12	21 Jul 2015	Low Tide Time	706
S12	21 Jul 2015	Comments	Kelp; Seagrass; 1 Person; Water clear

Station	Date	Parameter	Value
S12	23 Jul 2015	Arrive Time	902
S12	23 Jul 2015	Weather	Overcast
S12	23 Jul 2015	Wind Speed (kts)	7.9
S12	23 Jul 2015	Wind Dir	W
S12	23 Jul 2015	Animal Life	None
S12	23 Jul 2015	Floatables	None
S12	23 Jul 2015	Water Color	Green
S12	23 Jul 2015	Current Direction	N
S12	23 Jul 2015	Water Temp (C)	22.6
S12	23 Jul 2015	Wave Height Low (ft)	2
S12	23 Jul 2015	High Tide (ft)	4.3
S12	23 Jul 2015	High Tide Time	1524
S12	23 Jul 2015	Low Tide (ft)	1.6
S12	23 Jul 2015	Low Tide Time	823
S12	23 Jul 2015	Comments	Kelp; Seagrass; 2 Persons; Water clear
S12	28 Jul 2015	Arrive Time	845
S12	28 Jul 2015	Weather	Cloudy
S12	28 Jul 2015	Wind Speed (kts)	1.1
S12	28 Jul 2015	Wind Dir	W
S12	28 Jul 2015	Animal Life	None
S12	28 Jul 2015	Floatables	None
S12	28 Jul 2015	Water Color	Green
S12	28 Jul 2015	Current Direction	W
S12	28 Jul 2015	Water Temp (C)	22.1
S12	28 Jul 2015	Wave Height Low (ft)	2
S12	28 Jul 2015	High Tide (ft)	3.7
S12	28 Jul 2015	High Tide Time	819
S12	28 Jul 2015	Low Tide (ft)	1.9
S12	28 Jul 2015	Low Tide Time	1320
S12	28 Jul 2015	Comments	Kelp; Seagrass; Water clear

KELP BED 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 >1000 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Jul 2015	11*	3*	3*	9*	8*	7*	12*
02 Jul 2015	11*	3*	3*	9*	8*	7*	12*
03 Jul 2015	11*	3*	3*	9*	8*	7*	12*
04 Jul 2015	11*	3*	3*	9*	8*	7*	12*
05 Jul 2015	11*	3*	3*	9*	8*	7*	12*
06 Jul 2015	10*	4*	3*	7*	7*	6*	11*
07 Jul 2015	10*	4*	3*	7*	7*	6*	11*
08 Jul 2015	10*	4*	3*	7*	7*	6*	11*
09 Jul 2015	10*	4*	3*	7*	7*	6*	11*
10 Jul 2015	4*	2*	2*	5*	4*	4*	8*
11 Jul 2015	5*	2*	2*	4*	4*	3*	8*
12 Jul 2015	5*	2*	2*	4*	4*	3*	8*
13 Jul 2015	6*	2*	2*	3*	4*	3*	8*
14 Jul 2015	6*	2*	2*	3*	4*	3*	8*
15 Jul 2015	6*	2*	2*	3*	4*	3*	8*
16 Jul 2015	6*	2*	2*	3*	4*	3*	8*
17 Jul 2015	6	2	2	3	3	3	8
18 Jul 2015	6*	2*	2*	2*	3*	2*	8*
19 Jul 2015	6*	2*	2*	2*	3*	2*	8*
20 Jul 2015	6*	2*	2*	2*	3*	2*	8*
21 Jul 2015	6*	2*	2*	2*	3*	2*	8*
22 Jul 2015	8*	3*	4*	3*	6*	3*	8*
23 Jul 2015	8*	3*	4*	3*	6*	3*	8*
24 Jul 2015	8*	3*	4*	3*	6*	3*	8*
25 Jul 2015	8*	3*	4*	3*	6*	3*	8*
26 Jul 2015	8*	3*	4*	3*	6*	3*	8*
27 Jul 2015	8*	3*	4*	3*	6*	3*	8*
28 Jul 2015	8*	3*	4*	3*	6*	3*	8*
29 Jul 2015	6	4	4	3	8	2	8
30 Jul 2015	6	4	4	3	8	2	8
31 Jul 2015	6	4	4	3	8	2	8

* 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 Jul 2015	3*	2*	2*	2*	2*	2*	2*
02 Jul 2015	3*	2*	2*	2*	2*	2*	2*
03 Jul 2015	3*	2*	2*	2*	2*	2*	2*
04 Jul 2015	3*	2*	2*	2*	2*	2*	2*
05 Jul 2015	3*	2*	2*	2*	2*	2*	2*
06 Jul 2015	3*	2*	2*	2*	2*	2*	2*
07 Jul 2015	3*	2*	2*	2*	2*	2*	2*
08 Jul 2015	3*	2*	2*	2*	2*	2*	2*
09 Jul 2015	3*	2*	2*	2*	2*	2*	2*
10 Jul 2015	2*	2*	2*	2*	2*	2*	2*
11 Jul 2015	2*	2*	2*	2*	2*	2*	2*
12 Jul 2015	2*	2*	2*	2*	2*	2*	2*
13 Jul 2015	2*	2*	2*	2*	2*	2*	2*
14 Jul 2015	2*	2*	2*	2*	2*	2*	2*
15 Jul 2015	2*	2*	2*	2*	2*	2*	2*
16 Jul 2015	2*	2*	2*	2*	2*	2*	2*
17 Jul 2015	2	2	2	2	2	2	2
18 Jul 2015	2*	2*	2*	2*	2*	2*	2*
19 Jul 2015	2*	2*	2*	2*	2*	2*	2*
20 Jul 2015	2*	2*	2*	2*	2*	2*	2*
21 Jul 2015	2*	2*	2*	2*	2*	2*	2*
22 Jul 2015	2*	4*	3*	3*	3*	2*	2*
23 Jul 2015	2*	4*	3*	3*	3*	2*	2*
24 Jul 2015	2*	4*	3*	3*	3*	2*	2*
25 Jul 2015	2*	4*	3*	3*	3*	2*	2*
26 Jul 2015	2*	4*	3*	3*	3*	2*	2*
27 Jul 2015	2*	4*	3*	3*	3*	2*	2*
28 Jul 2015	2*	4*	3*	3*	3*	2*	2*
29 Jul 2015	2	3	3	2	4	2	2
30 Jul 2015	2	3	3	2	4	2	2
31 Jul 2015	2	3	3	2	4	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 Jul 2015	3*	2*	2*	2*	2*	2*	2*
02 Jul 2015	3*	2*	2*	2*	2*	2*	2*
03 Jul 2015	3*	2*	2*	2*	2*	2*	2*
04 Jul 2015	3*	2*	2*	2*	2*	2*	2*
05 Jul 2015	3*	2*	2*	2*	2*	2*	2*
06 Jul 2015	3*	2*	2*	2*	2*	2*	2*
07 Jul 2015	3*	2*	2*	2*	2*	2*	2*
08 Jul 2015	3*	2*	2*	2*	2*	2*	2*
09 Jul 2015	3*	2*	2*	2*	2*	2*	2*
10 Jul 2015	2*	2*	2*	2*	2*	2*	2*
11 Jul 2015	2*	2*	2*	2*	2*	2*	2*
12 Jul 2015	2*	2*	2*	2*	2*	2*	2*
13 Jul 2015	2*	2*	2*	2*	2*	2*	2*
14 Jul 2015	2*	2*	2*	2*	2*	2*	2*
15 Jul 2015	2*	2*	2*	2*	2*	2*	2*
16 Jul 2015	2*	2*	2*	2*	2*	2*	2*
17 Jul 2015	2	2	2	2	2	2	2
18 Jul 2015	2*	2*	2*	2*	2*	2*	2*
19 Jul 2015	2*	2*	2*	2*	2*	2*	2*
20 Jul 2015	2*	2*	2*	2*	2*	2*	2*
21 Jul 2015	2*	2*	2*	2*	2*	2*	2*
22 Jul 2015	2*	2*	2*	2*	2*	2*	2*
23 Jul 2015	2*	2*	2*	2*	2*	2*	2*
24 Jul 2015	2*	2*	2*	2*	2*	2*	2*
25 Jul 2015	2*	2*	2*	2*	2*	2*	2*
26 Jul 2015	2*	2*	2*	2*	2*	2*	2*
27 Jul 2015	2*	2*	2*	2*	2*	2*	2*
28 Jul 2015	2*	2*	2*	2*	2*	2*	2*
29 Jul 2015	2	2	2	2	3	2	2
30 Jul 2015	2	2	2	2	3	2	2
31 Jul 2015	2	2	2	2	3	2	2

* 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
11 Jul 2015	IC						
13 Jul 2015	IC						
17 Jul 2015	IC						
22 Jul 2015	IC						
29 Jul 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
11 Jul 2015	IC						
13 Jul 2015	IC						
17 Jul 2015	IC						
22 Jul 2015	IC						
29 Jul 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
11 Jul 2015	IC						
13 Jul 2015	IC						
17 Jul 2015	IC						
22 Jul 2015	IC						
29 Jul 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
11 Jul 2015	IC						
13 Jul 2015	IC						
17 Jul 2015	IC						
22 Jul 2015	IC						
29 Jul 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) 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. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I19	11 Jul 2015	1116	2	<2	<2	<2	1.0	17.6	79.69	8.1	33.26	8.2	ns	ns
I19	11 Jul 2015	1116	6	4e	<2	<2	0.5	16.4	78.11	8.5	33.28	8.2	ns	ns
I19	11 Jul 2015	1116	11	<20	4e	<2	0.2	15.0	56.51	7.1	33.27	8.1	ns	ns
I19	13 Jul 2015	1134	2	<2	<2	<2	1.0	18.9	77.90	8.1	33.28	8.2	ns	ns
I19	13 Jul 2015	1134	6	<2	<2	<2	1.0	16.7	78.20	8.5	33.28	8.2	ns	ns
I19	13 Jul 2015	1134	11	<20	<2	<2	0.1	16.0	81.82	8.7	33.30	8.2	ns	ns
I19	17 Jul 2015	1103	2	<2	<2	<2	1.0	19.6	80.27	8.1	33.31	8.2	ns	ns
I19	17 Jul 2015	1103	6	20e	<2	2e	0.1	17.3	84.10	8.7	33.29	8.2	ns	ns
I19	17 Jul 2015	1103	11	<2	<2	<2	1.0	16.2	81.45	8.0	33.27	8.2	ns	ns
I19	22 Jul 2015	1048	2	<2	<2	<2	1.0	20.4	77.16	7.5	33.28	8.2	ns	ns
I19	22 Jul 2015	1048	6	<2	<2	<2	1.0	18.4	81.67	8.1	33.28	8.2	ns	ns
I19	22 Jul 2015	1048	11	<20	<2	<2	0.1	18.1	73.76	7.9	33.28	8.2	ns	ns
I19	29 Jul 2015	1048	2	<2	<2	<2	1.0	21.6	80.24	7.7	33.33	8.2	ns	ns
I19	29 Jul 2015	1048	6	<2	<2	<2	1.0	21.0	80.59	7.6	33.33	8.2	ns	ns
I19	29 Jul 2015	1048	11	<2	<2	<2	1.0	20.7	79.37	7.1	33.26	8.2	ns	ns
I24	11 Jul 2015	1141	2	<2	<2	<2	1.0	18.4	75.30	8.6	33.28	8.2	ns	ns
I24	11 Jul 2015	1141	6	<2	<2	<2	1.0	17.1	72.96	8.8	33.27	8.2	ns	ns
I24	11 Jul 2015	1141	11	<2	<2	<2	1.0	15.0	76.63	7.4	33.28	8.1	ns	ns
I24	13 Jul 2015	1200	2	<2	<2	<2	1.0	19.6	79.87	8.2	33.28	8.2	ns	ns
I24	13 Jul 2015	1200	6	<2	<2	<2	1.0	16.7	82.73	8.7	33.27	8.2	ns	ns
I24	13 Jul 2015	1200	11	<2	<2	<2	1.0	15.5	78.93	8.6	33.30	8.2	ns	ns
I24	17 Jul 2015	1125	2	<2	<2	2e	1.0	20.3	83.36	7.6	33.43	8.3	ns	ns
I24	17 Jul 2015	1125	6	<2	<2	<2	1.0	17.7	78.47	8.6	33.57	8.2	ns	ns
I24	17 Jul 2015	1125	11	<2	<2	<2	1.0	15.4	63.64	7.8	33.33	8.1	ns	ns
I24	22 Jul 2015	1117	2	<20	56	<2	2.8	20.7	72.50	8.1	33.19	8.3	ns	ns
I24	22 Jul 2015	1117	6	2e	<2	<2	1.0	18.3	78.83	8.8	33.27	8.3	ns	ns
I24	22 Jul 2015	1117	11	<20	4e	<2	0.2	17.4	77.40	7.9	33.29	8.2	ns	ns
I24	29 Jul 2015	1115	2	<2	<2	<2	1.0	21.5	87.25	7.8	33.34	8.2	ns	ns
I24	29 Jul 2015	1115	6	<2	<2	<2	1.0	19.2	83.41	8.2	33.29	8.2	ns	ns
I24	29 Jul 2015	1115	11	<20	2e	<2	0.1	16.8	63.38	7.7	33.28	8.1	ns	ns
I25	11 Jul 2015	1152	2	<2	<2	<2	1.0	18.4	77.70	8.4	33.26	8.2	ns	ns
I25	11 Jul 2015	1152	6	<2	<2	<2	1.0	16.5	76.51	8.4	33.25	8.2	ns	ns
I25	11 Jul 2015	1152	9	<2	<2	<2	1.0	15.9	79.41	8.3	33.29	8.2	ns	ns
I25	13 Jul 2015	1210	2	<2	<2	<2	1.0	19.3	80.80	8.3	33.27	8.2	ns	ns
I25	13 Jul 2015	1210	6	<2	<2	<2	1.0	16.8	83.96	8.7	33.27	8.2	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I25	13 Jul 2015	1210	9	<2	<2	<2	1.0	15.9	79.96	9.0	33.29	8.2	ns	ns
I25	17 Jul 2015	1134	2	<2	<2	<2	1.0	20.6	85.79	8.8	33.36	8.3	ns	ns
I25	17 Jul 2015	1134	6	2e	<2	<2	1.0	19.2	85.98	9.1	33.23	8.3	ns	ns
I25	17 Jul 2015	1134	9	2e	<2	<2	1.0	16.4	73.28	8.2	33.28	8.2	ns	ns
I25	22 Jul 2015	1128	2	<20	20e	<2	1.0	22.0	73.84	7.8	33.07	8.2	ns	ns
I25	22 Jul 2015	1128	6	<20	<2	<2	0.1	18.3	81.36	8.7	33.27	8.3	ns	ns
I25	22 Jul 2015	1128	9	<20	4e	<2	0.2	17.9	77.57	8.4	33.27	8.2	ns	ns
I25	29 Jul 2015	1125	2	<2	<2	2e	1.0	21.5	81.94	7.7	33.33	8.2	ns	ns
I25	29 Jul 2015	1125	6	<2	<2	<2	1.0	19.5	80.18	8.1	33.27	8.2	ns	ns
I25	29 Jul 2015	1125	9	<20	<2	<2	0.1	17.0	66.72	8.1	33.28	8.1	ns	ns
I26	11 Jul 2015	1204	2	<2	<2	<2	1.0	18.9	84.59	8.6	33.30	8.2	ns	ns
I26	11 Jul 2015	1204	6	<2	<2	<2	1.0	16.7	75.50	8.2	33.27	8.2	ns	ns
I26	11 Jul 2015	1204	9	<2	<2	<2	1.0	15.7	79.52	8.0	33.25	8.1	ns	ns
I26	13 Jul 2015	1222	2	<2	<2	<2	1.0	20.1	86.34	8.2	33.31	8.2	ns	ns
I26	13 Jul 2015	1222	6	<2	<2	<2	1.0	17.3	82.32	8.6	33.27	8.2	ns	ns
I26	13 Jul 2015	1222	9	<2	<2	<2	1.0	16.4	79.81	8.5	33.28	8.2	ns	ns
I26	17 Jul 2015	1143	2	<2	<2	<2	1.0	20.8	84.63	7.9	33.30	8.3	ns	ns
I26	17 Jul 2015	1143	6	2e	<2	<2	1.0	18.0	82.97	8.8	33.52	8.3	ns	ns
I26	17 Jul 2015	1143	9	<2	<2	<2	1.0	16.3	60.18	8.1	33.33	8.2	ns	ns
I26	22 Jul 2015	1140	2	<2	6e	<2	3.0	22.1	88.08	7.4	33.35	8.2	ns	ns
I26	22 Jul 2015	1140	6	<20	<2	<2	0.1	19.6	80.39	8.2	33.30	8.3	ns	ns
I26	22 Jul 2015	1140	9	<20	10e	2e	0.5	18.4	80.15	8.3	33.30	8.2	ns	ns
I26	29 Jul 2015	1139	2	<2	<2	<2	1.0	21.6	87.59	7.9	33.33	8.2	ns	ns
I26	29 Jul 2015	1139	6	<2	<2	<2	1.0	20.5	87.84	8.0	33.29	8.2	ns	ns
I26	29 Jul 2015	1139	9	2e	2e	<2	1.0	18.8	83.84	7.5	33.24	8.1	ns	ns
I32	11 Jul 2015	1219	2	<2	<2	<2	1.0	19.0	78.40	8.7	33.31	8.2	ns	ns
I32	11 Jul 2015	1219	6	6e	2e	<2	0.3	17.3	69.76	8.5	33.27	8.2	ns	ns
I32	11 Jul 2015	1219	9	<2	<2	<2	1.0	14.9	71.65	8.0	33.27	8.1	ns	ns
I32	13 Jul 2015	1238	2	<2	<2	<2	1.0	20.3	84.36	8.1	33.32	8.2	ns	ns
I32	13 Jul 2015	1238	6	2e	<2	<2	1.0	17.3	74.65	8.7	33.26	8.2	ns	ns
I32	13 Jul 2015	1238	9	6e	<2	2e	0.3	16.3	74.09	8.4	33.27	8.2	ns	ns
I32	17 Jul 2015	1154	2	<2	<2	<2	1.0	21.0	80.86	8.3	33.37	8.3	ns	ns
I32	17 Jul 2015	1154	6	<2	<2	<2	1.0	19.4	77.77	8.5	33.25	8.3	ns	ns
I32	17 Jul 2015	1154	9	<2	<2	<2	1.0	16.3	73.81	8.4	33.27	8.2	ns	ns
I32	22 Jul 2015	1155	2	<20	<2	<2	0.1	22.4	85.23	7.5	33.24	8.2	ns	ns
I32	22 Jul 2015	1155	6	4e	<2	<2	0.5	19.4	84.55	8.2	33.27	8.3	ns	ns
I32	22 Jul 2015	1155	9	120e	38e	<2	0.3	18.3	78.69	8.3	33.28	8.2	ns	ns
I32	29 Jul 2015	1153	2	<2	<2	<2	1.0	21.8	85.27	7.7	33.34	8.2	ns	ns
I32	29 Jul 2015	1153	6	60e	10e	26	0.2	21.2	72.87	7.6	33.32	8.2	ns	ns
I32	29 Jul 2015	1153	9	6e	4e	4e	0.7	19.2	80.79	8.4	33.26	8.2	ns	ns
I39	11 Jul 2015	1050	2	<2	<2	<2	1.0	18.2	88.42	8.8	33.30	8.2	ns	ns
I39	11 Jul 2015	1050	12	<2	<2	<2	1.0	15.2	82.99	8.4	33.29	8.2	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I39	11 Jul 2015	1050	18	<2	<2	<2	1.0	14.3	80.94	7.5	33.29	8.1	ns	ns
I39	13 Jul 2015	1114	2	<2	<2	<2	1.0	19.6	88.06	8.7	33.30	8.2	ns	ns
I39	13 Jul 2015	1114	12	<2	<2	<2	1.0	16.0	82.10	8.8	33.29	8.2	ns	ns
I39	13 Jul 2015	1114	18	<2	<2	<2	1.0	14.9	82.99	7.9	33.30	8.1	ns	ns
I39	17 Jul 2015	1137	2	<2	<2	<2	1.0	20.3	86.67	8.6	33.35	8.3	ns	ns
I39	17 Jul 2015	1137	12	<2	<2	<2	1.0	17.1	83.73	8.5	33.27	8.2	ns	ns
I39	17 Jul 2015	1137	18	2e	<2	<2	1.0	15.1	84.57	7.3	33.27	8.1	ns	ns
I39	22 Jul 2015	1024	2	<2	<2	<2	1.0	21.2	88.36	7.9	33.30	8.2	ns	ns
I39	22 Jul 2015	1024	12	8e	<2	<2	0.2	17.9	80.94	8.6	33.29	8.2	ns	ns
I39	22 Jul 2015	1024	18	6e	<2	<2	0.3	16.8	82.41	8.0	33.29	8.2	ns	ns
I39	29 Jul 2015	1024	2	<2	<2	<2	1.0	21.2	89.15	8.0	33.33	8.2	ns	ns
I39	29 Jul 2015	1024	12	<2	<2	<2	1.0	16.5	85.33	8.3	33.26	8.2	ns	ns
I39	29 Jul 2015	1024	18	<2	<2	<2	1.0	15.6	74.25	7.8	33.27	8.1	ns	ns
I40	11 Jul 2015	1131	2	<2	<2	<2	1.0	18.0	78.30	8.3	33.27	8.2	ns	ns
I40	11 Jul 2015	1131	6	<2	<2	<2	1.0	16.4	77.75	8.6	33.28	8.2	ns	ns
I40	11 Jul 2015	1131	9	<20	<2	<2	0.1	15.6	71.55	7.6	33.27	8.1	ns	ns
I40	13 Jul 2015	1149	2	<2	<2	<2	1.0	19.3	77.81	8.2	33.29	8.2	ns	ns
I40	13 Jul 2015	1149	6	<2	<2	<2	1.0	16.8	78.02	8.6	33.28	8.2	ns	ns
I40	13 Jul 2015	1149	9	<20	<2	<2	0.1	16.2	68.71	8.4	33.29	8.2	ns	ns
I40	17 Jul 2015	1115	2	2e	<2	<2	1.0	19.5	77.27	8.1	33.33	8.2	ns	ns
I40	17 Jul 2015	1115	6	<20	<2	<2	0.1	17.3	84.02	8.8	33.27	8.2	ns	ns
I40	17 Jul 2015	1115	9	<2	<2	<2	1.0	16.0	73.60	8.0	33.29	8.2	ns	ns
I40	22 Jul 2015	1107	2	<20	2e	2e	0.1	20.7	80.20	8.3	33.31	8.3	ns	ns
I40	22 Jul 2015	1107	6	<2	<2	<2	1.0	18.5	80.59	8.5	33.28	8.2	ns	ns
I40	22 Jul 2015	1107	9	8e	<2	<2	0.2	18.3	76.07	8.4	33.27	8.2	ns	ns
I40	29 Jul 2015	1104	2	<2	<2	<2	1.0	21.7	79.82	7.5	33.33	8.2	ns	ns
I40	29 Jul 2015	1104	6	<2	<2	2e	1.0	20.5	77.73	7.7	33.31	8.2	ns	ns
I40	29 Jul 2015	1104	9	<20	<2	2e	0.1	18.8	74.40	7.5	33.26	8.2	ns	ns

ns = not sampled

Table 3.9

Summary of visual observations made during the month at the SBOO kelp stations for each sample date.

Station	Date	Parameter	Value
I19	11 Jul 2015	Depth (m)	11
I19	11 Jul 2015	Arrive Time	1116
I19	11 Jul 2015	Depart Time	1124
I19	11 Jul 2015	Air Temp (C)	19
I19	11 Jul 2015	Weather	Overcast
I19	11 Jul 2015	Visibility (mi)	8
I19	11 Jul 2015	Wind Speed (kts)	3
I19	11 Jul 2015	Wind Dir	SE
I19	11 Jul 2015	Water Color	Green
I19	11 Jul 2015	Wave Ht Low (ft)	3
I19	11 Jul 2015	Wave Period (sec)	9
I19	11 Jul 2015	Sea State	Calm
I19	11 Jul 2015	High Tide (ft)	3.46
I19	11 Jul 2015	High Tide Time	657
I19	11 Jul 2015	Low Tide (ft)	1.65
I19	11 Jul 2015	Low Tide Time	1205
I19	11 Jul 2015	Comments	
I19	13 Jul 2015	Depth (m)	11
I19	13 Jul 2015	Arrive Time	1134
I19	13 Jul 2015	Depart Time	1141
I19	13 Jul 2015	Air Temp (C)	19
I19	13 Jul 2015	Weather	Partly Cloudy
I19	13 Jul 2015	Visibility (mi)	13
I19	13 Jul 2015	Wind Speed (kts)	2
I19	13 Jul 2015	Wind Dir	SW
I19	13 Jul 2015	Water Color	Green
I19	13 Jul 2015	Wave Ht Low (ft)	3
I19	13 Jul 2015	Wave Period (sec)	13
I19	13 Jul 2015	Sea State	Wind ripples
I19	13 Jul 2015	High Tide (ft)	3.86
I19	13 Jul 2015	High Tide Time	849
I19	13 Jul 2015	Low Tide (ft)	1.73
I19	13 Jul 2015	Low Tide Time	1351
I19	13 Jul 2015	Comments	Kelp debris
I19	17 Jul 2015	Depth (m)	12
I19	17 Jul 2015	Arrive Time	1103
I19	17 Jul 2015	Depart Time	1108
I19	17 Jul 2015	Air Temp (C)	19
I19	17 Jul 2015	Weather	Partly Cloudy
I19	17 Jul 2015	Visibility (mi)	11

Station	Date	Parameter	Value
I19	17 Jul 2015	Wind Speed (kts)	9
I19	17 Jul 2015	Wind Dir	N
I19	17 Jul 2015	Water Color	Green
I19	17 Jul 2015	Wave Ht Low (ft)	4
I19	17 Jul 2015	Wave Period (sec)	11
I19	17 Jul 2015	Sea State	Light chop
I19	17 Jul 2015	High Tide (ft)	4.19
I19	17 Jul 2015	High Tide Time	1115
I19	17 Jul 2015	Low Tide (ft)	-0.53
I19	17 Jul 2015	Low Tide Time	458
I19	17 Jul 2015	Comments	
I19	22 Jul 2015	Depth (m)	11
I19	22 Jul 2015	Arrive Time	1048
I19	22 Jul 2015	Depart Time	1101
I19	22 Jul 2015	Air Temp (C)	22
I19	22 Jul 2015	Weather	Partly Cloudy
I19	22 Jul 2015	Visibility (mi)	11
I19	22 Jul 2015	Wind Speed (kts)	8
I19	22 Jul 2015	Wind Dir	E
I19	22 Jul 2015	Water Color	Green
I19	22 Jul 2015	Wave Ht Low (ft)	3
I19	22 Jul 2015	Wave Period (sec)	13
I19	22 Jul 2015	Sea State	Calm
I19	22 Jul 2015	High Tide (ft)	4.21
I19	22 Jul 2015	High Tide Time	1430
I19	22 Jul 2015	Low Tide (ft)	1.24
I19	22 Jul 2015	Low Tide Time	742
I19	22 Jul 2015	Comments	
I19	29 Jul 2015	Depth (m)	12
I19	29 Jul 2015	Arrive Time	1048
I19	29 Jul 2015	Depart Time	1054
I19	29 Jul 2015	Air Temp (C)	21
I19	29 Jul 2015	Weather	Cloudy
I19	29 Jul 2015	Visibility (mi)	9
I19	29 Jul 2015	Wind Speed (kts)	3
I19	29 Jul 2015	Wind Dir	NW
I19	29 Jul 2015	Water Color	Bluish-Green
I19	29 Jul 2015	Wave Ht Low (ft)	4
I19	29 Jul 2015	Wave Period (sec)	13
I19	29 Jul 2015	Sea State	Wind ripples
I19	29 Jul 2015	High Tide (ft)	4.02
I19	29 Jul 2015	High Tide Time	856
I19	29 Jul 2015	Low Tide (ft)	1.7
I19	29 Jul 2015	Low Tide Time	1406
I19	29 Jul 2015	Comments	

Station	Date	Parameter	Value
I24	11 Jul 2015	Depth (m)	11
I24	11 Jul 2015	Arrive Time	1141
I24	11 Jul 2015	Depart Time	1148
I24	11 Jul 2015	Air Temp (C)	20
I24	11 Jul 2015	Weather	Partly Cloudy
I24	11 Jul 2015	Visibility (mi)	10
I24	11 Jul 2015	Wind Speed (kts)	7
I24	11 Jul 2015	Wind Dir	N
I24	11 Jul 2015	Water Color	Green
I24	11 Jul 2015	Wave Ht Low (ft)	3
I24	11 Jul 2015	Wave Period (sec)	9
I24	11 Jul 2015	Sea State	Calm
I24	11 Jul 2015	High Tide (ft)	3.46
I24	11 Jul 2015	High Tide Time	657
I24	11 Jul 2015	Low Tide (ft)	1.65
I24	11 Jul 2015	Low Tide Time	1205
I24	11 Jul 2015	Comments	Kelp debris
I24	13 Jul 2015	Depth (m)	11
I24	13 Jul 2015	Arrive Time	1200
I24	13 Jul 2015	Depart Time	1206
I24	13 Jul 2015	Air Temp (C)	20
I24	13 Jul 2015	Weather	Partly Cloudy
I24	13 Jul 2015	Visibility (mi)	13
I24	13 Jul 2015	Wind Speed (kts)	3
I24	13 Jul 2015	Wind Dir	W
I24	13 Jul 2015	Water Color	Green
I24	13 Jul 2015	Wave Ht Low (ft)	3
I24	13 Jul 2015	Wave Period (sec)	13
I24	13 Jul 2015	Sea State	Wind ripples
I24	13 Jul 2015	High Tide (ft)	3.86
I24	13 Jul 2015	High Tide Time	849
I24	13 Jul 2015	Low Tide (ft)	1.73
I24	13 Jul 2015	Low Tide Time	1351
I24	13 Jul 2015	Comments	
I24	17 Jul 2015	Depth (m)	11
I24	17 Jul 2015	Arrive Time	1125
I24	17 Jul 2015	Depart Time	1132
I24	17 Jul 2015	Air Temp (C)	20
I24	17 Jul 2015	Weather	Partly Cloudy
I24	17 Jul 2015	Visibility (mi)	11
I24	17 Jul 2015	Wind Speed (kts)	8
I24	17 Jul 2015	Wind Dir	S
I24	17 Jul 2015	Water Color	Green
I24	17 Jul 2015	Wave Ht Low (ft)	4

Station	Date	Parameter	Value
I24	17 Jul 2015	Wave Period (sec)	11
I24	17 Jul 2015	Sea State	Light chop
I24	17 Jul 2015	High Tide (ft)	4.19
I24	17 Jul 2015	High Tide Time	1115
I24	17 Jul 2015	Low Tide (ft)	-0.53
I24	17 Jul 2015	Low Tide Time	458
I24	17 Jul 2015	Comments	
I24	22 Jul 2015	Depth (m)	11
I24	22 Jul 2015	Arrive Time	1117
I24	22 Jul 2015	Depart Time	1120
I24	22 Jul 2015	Air Temp (C)	22
I24	22 Jul 2015	Weather	Partly Cloudy
I24	22 Jul 2015	Visibility (mi)	11
I24	22 Jul 2015	Wind Speed (kts)	7
I24	22 Jul 2015	Wind Dir	SE
I24	22 Jul 2015	Water Color	Green
I24	22 Jul 2015	Wave Ht Low (ft)	3
I24	22 Jul 2015	Wave Period (sec)	13
I24	22 Jul 2015	Sea State	Calm
I24	22 Jul 2015	High Tide (ft)	4.21
I24	22 Jul 2015	High Tide Time	1430
I24	22 Jul 2015	Low Tide (ft)	1.24
I24	22 Jul 2015	Low Tide Time	742
I24	22 Jul 2015	Comments	
I24	29 Jul 2015	Depth (m)	11
I24	29 Jul 2015	Arrive Time	1115
I24	29 Jul 2015	Depart Time	1121
I24	29 Jul 2015	Air Temp (C)	21
I24	29 Jul 2015	Weather	Cloudy
I24	29 Jul 2015	Visibility (mi)	9
I24	29 Jul 2015	Wind Speed (kts)	4
I24	29 Jul 2015	Wind Dir	W
I24	29 Jul 2015	Water Color	Bluish-Green
I24	29 Jul 2015	Wave Ht Low (ft)	4
I24	29 Jul 2015	Wave Period (sec)	13
I24	29 Jul 2015	Sea State	Wind ripples
I24	29 Jul 2015	High Tide (ft)	4.02
I24	29 Jul 2015	High Tide Time	856
I24	29 Jul 2015	Low Tide (ft)	1.7
I24	29 Jul 2015	Low Tide Time	1406
I24	29 Jul 2015	Comments	
I25	11 Jul 2015	Depth (m)	9
I25	11 Jul 2015	Arrive Time	1152
I25	11 Jul 2015	Depart Time	1158

Station	Date	Parameter	Value
I25	11 Jul 2015	Air Temp (C)	19
I25	11 Jul 2015	Weather	Partly Cloudy
I25	11 Jul 2015	Visibility (mi)	10
I25	11 Jul 2015	Wind Speed (kts)	5
I25	11 Jul 2015	Wind Dir	NW
I25	11 Jul 2015	Water Color	Green
I25	11 Jul 2015	Wave Ht Low (ft)	3
I25	11 Jul 2015	Wave Period (sec)	9
I25	11 Jul 2015	Sea State	Calm
I25	11 Jul 2015	High Tide (ft)	3.46
I25	11 Jul 2015	High Tide Time	657
I25	11 Jul 2015	Low Tide (ft)	1.65
I25	11 Jul 2015	Low Tide Time	1205
I25	11 Jul 2015	Comments	
I25	13 Jul 2015	Depth (m)	10
I25	13 Jul 2015	Arrive Time	1210
I25	13 Jul 2015	Depart Time	1215
I25	13 Jul 2015	Air Temp (C)	20
I25	13 Jul 2015	Weather	Haze
I25	13 Jul 2015	Visibility (mi)	13
I25	13 Jul 2015	Wind Speed (kts)	3
I25	13 Jul 2015	Wind Dir	W
I25	13 Jul 2015	Water Color	Green
I25	13 Jul 2015	Wave Ht Low (ft)	3
I25	13 Jul 2015	Wave Period (sec)	13
I25	13 Jul 2015	Sea State	Wind ripples
I25	13 Jul 2015	High Tide (ft)	3.86
I25	13 Jul 2015	High Tide Time	849
I25	13 Jul 2015	Low Tide (ft)	1.73
I25	13 Jul 2015	Low Tide Time	1351
I25	13 Jul 2015	Comments	
I25	17 Jul 2015	Depth (m)	10
I25	17 Jul 2015	Arrive Time	1134
I25	17 Jul 2015	Depart Time	1139
I25	17 Jul 2015	Air Temp (C)	20
I25	17 Jul 2015	Weather	Partly Cloudy
I25	17 Jul 2015	Visibility (mi)	11
I25	17 Jul 2015	Wind Speed (kts)	8
I25	17 Jul 2015	Wind Dir	W
I25	17 Jul 2015	Water Color	Green
I25	17 Jul 2015	Wave Ht Low (ft)	4
I25	17 Jul 2015	Wave Period (sec)	11
I25	17 Jul 2015	Sea State	Light chop
I25	17 Jul 2015	High Tide (ft)	4.19
I25	17 Jul 2015	High Tide Time	1115

Station	Date	Parameter	Value
I25	17 Jul 2015	Low Tide (ft)	-0.53
I25	17 Jul 2015	Low Tide Time	458
I25	17 Jul 2015	Comments	
I25	22 Jul 2015	Depth (m)	9
I25	22 Jul 2015	Arrive Time	1128
I25	22 Jul 2015	Depart Time	1134
I25	22 Jul 2015	Air Temp (C)	22
I25	22 Jul 2015	Weather	Partly Cloudy
I25	22 Jul 2015	Visibility (mi)	11
I25	22 Jul 2015	Wind Speed (kts)	8
I25	22 Jul 2015	Wind Dir	NE
I25	22 Jul 2015	Water Color	Green
I25	22 Jul 2015	Wave Ht Low (ft)	3
I25	22 Jul 2015	Wave Period (sec)	13
I25	22 Jul 2015	Sea State	Calm
I25	22 Jul 2015	High Tide (ft)	4.21
I25	22 Jul 2015	High Tide Time	1430
I25	22 Jul 2015	Low Tide (ft)	1.24
I25	22 Jul 2015	Low Tide Time	742
I25	22 Jul 2015	Comments	
I25	29 Jul 2015	Depth (m)	9
I25	29 Jul 2015	Arrive Time	1125
I25	29 Jul 2015	Depart Time	1131
I25	29 Jul 2015	Air Temp (C)	21
I25	29 Jul 2015	Weather	Cloudy
I25	29 Jul 2015	Visibility (mi)	9
I25	29 Jul 2015	Wind Speed (kts)	6
I25	29 Jul 2015	Wind Dir	S
I25	29 Jul 2015	Water Color	Bluish-Green
I25	29 Jul 2015	Wave Ht Low (ft)	4
I25	29 Jul 2015	Wave Period (sec)	13
I25	29 Jul 2015	Sea State	Wind ripples
I25	29 Jul 2015	High Tide (ft)	4.02
I25	29 Jul 2015	High Tide Time	856
I25	29 Jul 2015	Low Tide (ft)	1.7
I25	29 Jul 2015	Low Tide Time	1406
I25	29 Jul 2015	Comments	
I26	11 Jul 2015	Depth (m)	10
I26	11 Jul 2015	Arrive Time	1204
I26	11 Jul 2015	Depart Time	1210
I26	11 Jul 2015	Air Temp (C)	19
I26	11 Jul 2015	Weather	Partly Cloudy
I26	11 Jul 2015	Visibility (mi)	10
I26	11 Jul 2015	Wind Speed (kts)	9

Station	Date	Parameter	Value
I26	11 Jul 2015	Wind Dir	NE
I26	11 Jul 2015	Water Color	Green
I26	11 Jul 2015	Wave Ht Low (ft)	3
I26	11 Jul 2015	Wave Period (sec)	9
I26	11 Jul 2015	Sea State	Calm
I26	11 Jul 2015	High Tide (ft)	3.46
I26	11 Jul 2015	High Tide Time	657
I26	11 Jul 2015	Low Tide (ft)	1.65
I26	11 Jul 2015	Low Tide Time	1205
I26	11 Jul 2015	Comments	
I26	13 Jul 2015	Depth (m)	10
I26	13 Jul 2015	Arrive Time	1222
I26	13 Jul 2015	Depart Time	1231
I26	13 Jul 2015	Air Temp (C)	20
I26	13 Jul 2015	Weather	Haze
I26	13 Jul 2015	Visibility (mi)	13
I26	13 Jul 2015	Wind Speed (kts)	8
I26	13 Jul 2015	Wind Dir	S
I26	13 Jul 2015	Water Color	Green
I26	13 Jul 2015	Wave Ht Low (ft)	3
I26	13 Jul 2015	Wave Period (sec)	13
I26	13 Jul 2015	Sea State	Wind ripples
I26	13 Jul 2015	High Tide (ft)	3.86
I26	13 Jul 2015	High Tide Time	849
I26	13 Jul 2015	Low Tide (ft)	1.73
I26	13 Jul 2015	Low Tide Time	1351
I26	13 Jul 2015	Comments	
I26	17 Jul 2015	Depth (m)	11
I26	17 Jul 2015	Arrive Time	1143
I26	17 Jul 2015	Depart Time	1148
I26	17 Jul 2015	Air Temp (C)	20
I26	17 Jul 2015	Weather	Partly Cloudy
I26	17 Jul 2015	Visibility (mi)	11
I26	17 Jul 2015	Wind Speed (kts)	9
I26	17 Jul 2015	Wind Dir	E
I26	17 Jul 2015	Water Color	Green
I26	17 Jul 2015	Wave Ht Low (ft)	4
I26	17 Jul 2015	Wave Period (sec)	11
I26	17 Jul 2015	Sea State	Light chop
I26	17 Jul 2015	High Tide (ft)	4.19
I26	17 Jul 2015	High Tide Time	1115
I26	17 Jul 2015	Low Tide (ft)	-0.53
I26	17 Jul 2015	Low Tide Time	458
I26	17 Jul 2015	Comments	

Station	Date	Parameter	Value
I26	22 Jul 2015	Depth (m)	10
I26	22 Jul 2015	Arrive Time	1140
I26	22 Jul 2015	Depart Time	1146
I26	22 Jul 2015	Air Temp (C)	22
I26	22 Jul 2015	Weather	Partly Cloudy
I26	22 Jul 2015	Visibility (mi)	11
I26	22 Jul 2015	Wind Speed (kts)	8
I26	22 Jul 2015	Wind Dir	E
I26	22 Jul 2015	Water Color	Green
I26	22 Jul 2015	Wave Ht Low (ft)	3
I26	22 Jul 2015	Wave Period (sec)	13
I26	22 Jul 2015	Sea State	Calm
I26	22 Jul 2015	High Tide (ft)	4.21
I26	22 Jul 2015	High Tide Time	1430
I26	22 Jul 2015	Low Tide (ft)	1.24
I26	22 Jul 2015	Low Tide Time	742
I26	22 Jul 2015	Comments	
I26	29 Jul 2015	Depth (m)	15
I26	29 Jul 2015	Arrive Time	1139
I26	29 Jul 2015	Depart Time	1144
I26	29 Jul 2015	Air Temp (C)	21
I26	29 Jul 2015	Weather	Cloudy
I26	29 Jul 2015	Visibility (mi)	9
I26	29 Jul 2015	Wind Speed (kts)	6
I26	29 Jul 2015	Wind Dir	S
I26	29 Jul 2015	Water Color	Bluish-Green
I26	29 Jul 2015	Wave Ht Low (ft)	4
I26	29 Jul 2015	Wave Period (sec)	13
I26	29 Jul 2015	Sea State	Wind ripples
I26	29 Jul 2015	High Tide (ft)	4.02
I26	29 Jul 2015	High Tide Time	856
I26	29 Jul 2015	Low Tide (ft)	1.7
I26	29 Jul 2015	Low Tide Time	1406
I26	29 Jul 2015	Comments	
I32	11 Jul 2015	Depth (m)	10
I32	11 Jul 2015	Arrive Time	1219
I32	11 Jul 2015	Depart Time	1226
I32	11 Jul 2015	Air Temp (C)	19
I32	11 Jul 2015	Weather	Partly Cloudy
I32	11 Jul 2015	Visibility (mi)	10
I32	11 Jul 2015	Wind Speed (kts)	12
I32	11 Jul 2015	Wind Dir	NE
I32	11 Jul 2015	Water Color	Green
I32	11 Jul 2015	Wave Ht Low (ft)	3
I32	11 Jul 2015	Wave Period (sec)	9

Station	Date	Parameter	Value
I32	11 Jul 2015	Sea State	Calm
I32	11 Jul 2015	High Tide (ft)	3.46
I32	11 Jul 2015	High Tide Time	657
I32	11 Jul 2015	Low Tide (ft)	1.65
I32	11 Jul 2015	Low Tide Time	1205
I32	11 Jul 2015	Comments	
I32	13 Jul 2015	Depth (m)	10
I32	13 Jul 2015	Arrive Time	1238
I32	13 Jul 2015	Depart Time	1244
I32	13 Jul 2015	Air Temp (C)	20
I32	13 Jul 2015	Weather	Haze
I32	13 Jul 2015	Visibility (mi)	13
I32	13 Jul 2015	Wind Speed (kts)	9
I32	13 Jul 2015	Wind Dir	SE
I32	13 Jul 2015	Water Color	Green
I32	13 Jul 2015	Wave Ht Low (ft)	3
I32	13 Jul 2015	Wave Period (sec)	13
I32	13 Jul 2015	Sea State	Wind ripples
I32	13 Jul 2015	High Tide (ft)	3.86
I32	13 Jul 2015	High Tide Time	849
I32	13 Jul 2015	Low Tide (ft)	1.73
I32	13 Jul 2015	Low Tide Time	1351
I32	13 Jul 2015	Comments	
I32	17 Jul 2015	Depth (m)	11
I32	17 Jul 2015	Arrive Time	1154
I32	17 Jul 2015	Depart Time	1159
I32	17 Jul 2015	Air Temp (C)	20
I32	17 Jul 2015	Weather	Partly Cloudy
I32	17 Jul 2015	Visibility (mi)	11
I32	17 Jul 2015	Wind Speed (kts)	10
I32	17 Jul 2015	Wind Dir	N
I32	17 Jul 2015	Water Color	Green
I32	17 Jul 2015	Wave Ht Low (ft)	4
I32	17 Jul 2015	Wave Period (sec)	11
I32	17 Jul 2015	Sea State	Light chop
I32	17 Jul 2015	High Tide (ft)	4.19
I32	17 Jul 2015	High Tide Time	1115
I32	17 Jul 2015	Low Tide (ft)	-0.53
I32	17 Jul 2015	Low Tide Time	458
I32	17 Jul 2015	Comments	
I32	22 Jul 2015	Depth (m)	11
I32	22 Jul 2015	Arrive Time	1155
I32	22 Jul 2015	Depart Time	1201
I32	22 Jul 2015	Air Temp (C)	22

Station	Date	Parameter	Value
I32	22 Jul 2015	Weather	Partly Cloudy
I32	22 Jul 2015	Visibility (mi)	11
I32	22 Jul 2015	Wind Speed (kts)	8
I32	22 Jul 2015	Wind Dir	E
I32	22 Jul 2015	Water Color	Green
I32	22 Jul 2015	Wave Ht Low (ft)	3
I32	22 Jul 2015	Wave Period (sec)	13
I32	22 Jul 2015	Sea State	Calm
I32	22 Jul 2015	High Tide (ft)	4.21
I32	22 Jul 2015	High Tide Time	1430
I32	22 Jul 2015	Low Tide (ft)	1.24
I32	22 Jul 2015	Low Tide Time	742
I32	22 Jul 2015	Comments	
I32	29 Jul 2015	Depth (m)	11
I32	29 Jul 2015	Arrive Time	1153
I32	29 Jul 2015	Depart Time	1204
I32	29 Jul 2015	Air Temp (C)	21
I32	29 Jul 2015	Weather	Cloudy
I32	29 Jul 2015	Visibility (mi)	9
I32	29 Jul 2015	Wind Speed (kts)	7
I32	29 Jul 2015	Wind Dir	E
I32	29 Jul 2015	Water Color	Bluish-Green
I32	29 Jul 2015	Wave Ht Low (ft)	4
I32	29 Jul 2015	Wave Period (sec)	13
I32	29 Jul 2015	Sea State	Wind ripples
I32	29 Jul 2015	High Tide (ft)	4.02
I32	29 Jul 2015	High Tide Time	856
I32	29 Jul 2015	Low Tide (ft)	1.7
I32	29 Jul 2015	Low Tide Time	1406
I32	29 Jul 2015	Comments	
I39	11 Jul 2015	Depth (m)	19
I39	11 Jul 2015	Arrive Time	1050
I39	11 Jul 2015	Depart Time	1100
I39	11 Jul 2015	Air Temp (C)	19
I39	11 Jul 2015	Weather	Overcast
I39	11 Jul 2015	Visibility (mi)	8
I39	11 Jul 2015	Wind Speed (kts)	3
I39	11 Jul 2015	Wind Dir	E
I39	11 Jul 2015	Water Color	Green
I39	11 Jul 2015	Wave Ht Low (ft)	3
I39	11 Jul 2015	Wave Period (sec)	9
I39	11 Jul 2015	Sea State	Calm
I39	11 Jul 2015	High Tide (ft)	3.46
I39	11 Jul 2015	High Tide Time	657
I39	11 Jul 2015	Low Tide (ft)	1.65

Station	Date	Parameter	Value
I39	11 Jul 2015	Low Tide Time	1205
I39	11 Jul 2015	Comments	
I39	13 Jul 2015	Depth (m)	15
I39	13 Jul 2015	Arrive Time	1114
I39	13 Jul 2015	Depart Time	1120
I39	13 Jul 2015	Air Temp (C)	19
I39	13 Jul 2015	Weather	Partly Cloudy
I39	13 Jul 2015	Visibility (mi)	13
I39	13 Jul 2015	Wind Speed (kts)	4
I39	13 Jul 2015	Wind Dir	E
I39	13 Jul 2015	Water Color	Green
I39	13 Jul 2015	Wave Ht Low (ft)	3
I39	13 Jul 2015	Wave Period (sec)	13
I39	13 Jul 2015	Sea State	Wind ripples
I39	13 Jul 2015	High Tide (ft)	3.86
I39	13 Jul 2015	High Tide Time	849
I39	13 Jul 2015	Low Tide (ft)	1.73
I39	13 Jul 2015	Low Tide Time	1351
I39	13 Jul 2015	Comments	Kelp debris; Kelp
I39	17 Jul 2015	Depth (m)	19
I39	17 Jul 2015	Arrive Time	1037
I39	17 Jul 2015	Depart Time	1050
I39	17 Jul 2015	Air Temp (C)	20
I39	17 Jul 2015	Weather	Partly Cloudy
I39	17 Jul 2015	Visibility (mi)	11
I39	17 Jul 2015	Wind Speed (kts)	9
I39	17 Jul 2015	Wind Dir	SE
I39	17 Jul 2015	Water Color	Green
I39	17 Jul 2015	Wave Ht Low (ft)	4
I39	17 Jul 2015	Wave Period (sec)	11
I39	17 Jul 2015	Sea State	Light chop
I39	17 Jul 2015	High Tide (ft)	4.19
I39	17 Jul 2015	High Tide Time	1115
I39	17 Jul 2015	Low Tide (ft)	-0.53
I39	17 Jul 2015	Low Tide Time	458
I39	17 Jul 2015	Comments	
I39	22 Jul 2015	Depth (m)	20
I39	22 Jul 2015	Arrive Time	1024
I39	22 Jul 2015	Depart Time	1031
I39	22 Jul 2015	Air Temp (C)	22
I39	22 Jul 2015	Weather	Partly Cloudy
I39	22 Jul 2015	Visibility (mi)	7
I39	22 Jul 2015	Wind Speed (kts)	7
I39	22 Jul 2015	Wind Dir	N

Station	Date	Parameter	Value
I39	22 Jul 2015	Water Color	Green
I39	22 Jul 2015	Wave Ht Low (ft)	3
I39	22 Jul 2015	Wave Period (sec)	13
I39	22 Jul 2015	Sea State	Calm
I39	22 Jul 2015	High Tide (ft)	4.21
I39	22 Jul 2015	High Tide Time	1430
I39	22 Jul 2015	Low Tide (ft)	1.24
I39	22 Jul 2015	Low Tide Time	742
I39	22 Jul 2015	Comments	
I39	29 Jul 2015	Depth (m)	18
I39	29 Jul 2015	Arrive Time	1024
I39	29 Jul 2015	Depart Time	1032
I39	29 Jul 2015	Air Temp (C)	20
I39	29 Jul 2015	Weather	Cloudy
I39	29 Jul 2015	Visibility (mi)	9
I39	29 Jul 2015	Wind Speed (kts)	2
I39	29 Jul 2015	Wind Dir	SE
I39	29 Jul 2015	Water Color	Bluish-Green
I39	29 Jul 2015	Wave Ht Low (ft)	4
I39	29 Jul 2015	Wave Period (sec)	13
I39	29 Jul 2015	Sea State	Wind ripples
I39	29 Jul 2015	High Tide (ft)	4.02
I39	29 Jul 2015	High Tide Time	856
I39	29 Jul 2015	Low Tide (ft)	1.7
I39	29 Jul 2015	Low Tide Time	1406
I39	29 Jul 2015	Comments	
I40	11 Jul 2015	Depth (m)	11
I40	11 Jul 2015	Arrive Time	1131
I40	11 Jul 2015	Depart Time	1137
I40	11 Jul 2015	Air Temp (C)	19
I40	11 Jul 2015	Weather	Overcast
I40	11 Jul 2015	Visibility (mi)	8
I40	11 Jul 2015	Wind Speed (kts)	6
I40	11 Jul 2015	Wind Dir	W
I40	11 Jul 2015	Water Color	Green
I40	11 Jul 2015	Wave Ht Low (ft)	3
I40	11 Jul 2015	Wave Period (sec)	9
I40	11 Jul 2015	Sea State	Calm
I40	11 Jul 2015	High Tide (ft)	3.46
I40	11 Jul 2015	High Tide Time	657
I40	11 Jul 2015	Low Tide (ft)	1.65
I40	11 Jul 2015	Low Tide Time	1205
I40	11 Jul 2015	Comments	
I40	13 Jul 2015	Depth (m)	11

Station	Date	Parameter	Value
I40	13 Jul 2015	Arrive Time	1149
I40	13 Jul 2015	Depart Time	1156
I40	13 Jul 2015	Air Temp (C)	20
I40	13 Jul 2015	Weather	Partly Cloudy
I40	13 Jul 2015	Visibility (mi)	13
I40	13 Jul 2015	Wind Speed (kts)	3
I40	13 Jul 2015	Wind Dir	NE
I40	13 Jul 2015	Water Color	Green
I40	13 Jul 2015	Wave Ht Low (ft)	3
I40	13 Jul 2015	Wave Period (sec)	13
I40	13 Jul 2015	Sea State	Wind ripples
I40	13 Jul 2015	High Tide (ft)	3.86
I40	13 Jul 2015	High Tide Time	849
I40	13 Jul 2015	Low Tide (ft)	1.73
I40	13 Jul 2015	Low Tide Time	1351
I40	13 Jul 2015	Comments	
I40	17 Jul 2015	Depth (m)	11
I40	17 Jul 2015	Arrive Time	1115
I40	17 Jul 2015	Depart Time	1121
I40	17 Jul 2015	Air Temp (C)	20
I40	17 Jul 2015	Weather	Partly Cloudy
I40	17 Jul 2015	Visibility (mi)	11
I40	17 Jul 2015	Wind Speed (kts)	8
I40	17 Jul 2015	Wind Dir	NE
I40	17 Jul 2015	Water Color	Green
I40	17 Jul 2015	Wave Ht Low (ft)	4
I40	17 Jul 2015	Wave Period (sec)	11
I40	17 Jul 2015	Sea State	Light chop
I40	17 Jul 2015	High Tide (ft)	4.19
I40	17 Jul 2015	High Tide Time	1115
I40	17 Jul 2015	Low Tide (ft)	-0.53
I40	17 Jul 2015	Low Tide Time	458
I40	17 Jul 2015	Comments	
I40	22 Jul 2015	Depth (m)	10
I40	22 Jul 2015	Arrive Time	1107
I40	22 Jul 2015	Depart Time	1112
I40	22 Jul 2015	Air Temp (C)	22
I40	22 Jul 2015	Weather	Partly Cloudy
I40	22 Jul 2015	Visibility (mi)	11
I40	22 Jul 2015	Wind Speed (kts)	6
I40	22 Jul 2015	Wind Dir	SE
I40	22 Jul 2015	Water Color	Green
I40	22 Jul 2015	Wave Ht Low (ft)	3
I40	22 Jul 2015	Wave Period (sec)	13
I40	22 Jul 2015	Sea State	Calm

Station	Date	Parameter	Value
I40	22 Jul 2015	High Tide (ft)	4.21
I40	22 Jul 2015	High Tide Time	1430
I40	22 Jul 2015	Low Tide (ft)	1.24
I40	22 Jul 2015	Low Tide Time	742
I40	22 Jul 2015	Comments	
I40	29 Jul 2015	Depth (m)	11
I40	29 Jul 2015	Arrive Time	1104
I40	29 Jul 2015	Depart Time	1110
I40	29 Jul 2015	Air Temp (C)	21
I40	29 Jul 2015	Weather	Cloudy
I40	29 Jul 2015	Visibility (mi)	9
I40	29 Jul 2015	Wind Speed (kts)	2
I40	29 Jul 2015	Wind Dir	S
I40	29 Jul 2015	Water Color	Bluish-Green
I40	29 Jul 2015	Wave Ht Low (ft)	4
I40	29 Jul 2015	Wave Period (sec)	13
I40	29 Jul 2015	Sea State	Wind ripples
I40	29 Jul 2015	High Tide (ft)	4.02
I40	29 Jul 2015	High Tide Time	856
I40	29 Jul 2015	Low Tide (ft)	1.7
I40	29 Jul 2015	Low Tide Time	1406
I40	29 Jul 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 (σ-t)	Chlor (µg/L)
I19	11 Jul 2015	1	17.86	79.45	8.2	33.27	8.2	24.0	0.75
I19	11 Jul 2015	2	17.55	79.69	8.1	33.26	8.2	24.0	0.78
I19	11 Jul 2015	3	16.71	79.02	8.2	33.28	8.2	24.3	0.96
I19	11 Jul 2015	4	16.57	77.49	8.3	33.28	8.2	24.3	1.25
I19	11 Jul 2015	5	16.49	76.86	8.5	33.28	8.2	24.3	1.48
I19	11 Jul 2015	6	16.41	78.11	8.5	33.28	8.2	24.3	1.81
I19	11 Jul 2015	7	16.24	78.96	8.4	33.28	8.2	24.4	2.18
I19	11 Jul 2015	8	15.92	78.89	8.0	33.28	8.2	24.4	3.13
I19	11 Jul 2015	9	15.67	69.35	7.6	33.28	8.1	24.5	4.43
I19	11 Jul 2015	10	15.00	56.51	7.1	33.27	8.1	24.6	5.44
I19	13 Jul 2015	1	19.72	77.90	8.0	33.28	8.2	23.5	0.80
I19	13 Jul 2015	2	18.88	77.90	8.1	33.28	8.2	23.7	0.83
I19	13 Jul 2015	3	17.97	78.86	8.3	33.26	8.2	23.9	1.01
I19	13 Jul 2015	4	17.34	78.92	8.4	33.27	8.2	24.1	1.20
I19	13 Jul 2015	5	17.02	77.42	8.5	33.27	8.2	24.2	1.41
I19	13 Jul 2015	6	16.73	78.20	8.5	33.28	8.2	24.3	1.43
I19	13 Jul 2015	7	16.50	79.62	8.6	33.28	8.2	24.3	1.53
I19	13 Jul 2015	8	16.21	81.21	8.5	33.29	8.2	24.4	1.93
I19	13 Jul 2015	9	16.14	80.72	8.7	33.30	8.2	24.4	1.92
I19	13 Jul 2015	10	16.04	81.82	8.7	33.30	8.2	24.4	1.98
I19	17 Jul 2015	1	19.81	80.04	8.1	33.33	8.2	23.5	0.79
I19	17 Jul 2015	2	19.58	80.27	8.1	33.31	8.2	23.6	0.85
I19	17 Jul 2015	3	18.56	81.88	8.5	33.30	8.2	23.8	1.06
I19	17 Jul 2015	4	18.09	84.82	8.5	33.29	8.2	23.9	1.21
I19	17 Jul 2015	5	17.71	84.45	8.7	33.30	8.2	24.0	1.44
I19	17 Jul 2015	6	17.34	84.10	8.7	33.29	8.2	24.1	1.99
I19	17 Jul 2015	7	17.01	77.61	8.8	33.29	8.2	24.2	2.58
I19	17 Jul 2015	8	16.83	73.85	8.8	33.29	8.2	24.2	2.64
I19	17 Jul 2015	9	16.66	77.72	8.5	33.30	8.2	24.3	2.79
I19	17 Jul 2015	10	16.25	81.45	8.0	33.27	8.2	24.4	5.39
I19	22 Jul 2015	1	21.09	77.08	7.4	33.30	8.2	23.2	1.37
I19	22 Jul 2015	2	20.38	77.16	7.5	33.28	8.2	23.3	1.28
I19	22 Jul 2015	3	19.28	77.28	7.9	33.28	8.2	23.6	1.21
I19	22 Jul 2015	4	18.79	78.73	8.1	33.28	8.2	23.8	1.23
I19	22 Jul 2015	5	18.53	80.74	8.1	33.28	8.2	23.8	1.40
I19	22 Jul 2015	6	18.40	81.67	8.1	33.28	8.2	23.9	1.77
I19	22 Jul 2015	7	18.37	80.93	8.2	33.28	8.2	23.9	2.15
I19	22 Jul 2015	8	18.29	79.87	8.0	33.28	8.2	23.9	2.77
I19	22 Jul 2015	9	18.18	77.42	7.9	33.28	8.2	23.9	3.80
I19	22 Jul 2015	10	18.10	73.76	7.9	33.28	8.2	23.9	4.68
I19	29 Jul 2015	1	21.75	80.26	7.7	33.34	8.2	23.0	0.68
I19	29 Jul 2015	2	21.64	80.24	7.7	33.33	8.2	23.1	0.70
I19	29 Jul 2015	3	21.49	80.31	7.7	33.35	8.2	23.1	0.72
I19	29 Jul 2015	4	21.34	80.58	7.7	33.31	8.2	23.1	0.80
I19	29 Jul 2015	5	21.06	80.53	7.7	33.33	8.2	23.2	0.91
I19	29 Jul 2015	6	20.99	80.59	7.6	33.33	8.2	23.2	1.05
I19	29 Jul 2015	7	20.94	80.16	7.6	33.33	8.2	23.2	1.09

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I19	29 Jul 2015	8	20.90	79.90	7.7	33.33	8.2	23.2	1.16
I19	29 Jul 2015	9	20.84	79.50	7.4	33.33	8.2	23.3	1.20
I19	29 Jul 2015	10	20.66	79.37	7.1	33.26	8.2	23.3	1.81
I24	11 Jul 2015	1	18.48	75.02	8.5	33.28	8.2	23.8	1.43
I24	11 Jul 2015	2	18.42	75.30	8.6	33.28	8.2	23.9	1.77
I24	11 Jul 2015	3	18.30	74.53	8.7	33.28	8.2	23.9	4.09
I24	11 Jul 2015	4	17.97	73.18	8.9	33.25	8.2	23.9	5.59
I24	11 Jul 2015	5	17.29	70.26	8.9	33.27	8.2	24.1	4.32
I24	11 Jul 2015	6	17.07	72.96	8.8	33.27	8.2	24.2	2.97
I24	11 Jul 2015	7	16.58	77.10	8.6	33.26	8.2	24.3	2.61
I24	11 Jul 2015	8	16.21	79.74	8.4	33.27	8.2	24.4	2.76
I24	11 Jul 2015	9	15.87	78.64	8.1	33.28	8.2	24.5	2.95
I24	11 Jul 2015	10	15.25	79.12	7.7	33.26	8.1	24.6	2.54
I24	11 Jul 2015	11	14.96	76.63	7.4	33.28	8.1	24.7	2.14
I24	13 Jul 2015	1	20.05	79.87	8.1	33.32	8.2	23.5	0.79
I24	13 Jul 2015	2	19.57	79.87	8.2	33.28	8.2	23.6	0.78
I24	13 Jul 2015	3	18.46	80.15	8.4	33.27	8.2	23.8	0.77
I24	13 Jul 2015	4	17.64	84.35	8.7	33.28	8.2	24.0	0.85
I24	13 Jul 2015	5	17.46	80.94	8.7	33.27	8.2	24.1	0.87
I24	13 Jul 2015	6	16.71	82.73	8.7	33.27	8.2	24.3	1.16
I24	13 Jul 2015	7	16.44	79.98	8.7	33.28	8.2	24.3	1.44
I24	13 Jul 2015	8	16.17	77.62	8.6	33.28	8.2	24.4	1.79
I24	13 Jul 2015	9	15.91	77.71	8.5	33.28	8.2	24.4	2.20
I24	13 Jul 2015	10	15.55	78.23	8.6	33.28	8.2	24.5	1.91
I24	13 Jul 2015	11	15.46	78.93	8.6	33.30	8.2	24.6	1.58
I24	17 Jul 2015	1	20.49	83.54	6.8	33.27	8.3	23.3	0.49
I24	17 Jul 2015	2	20.27	83.36	7.6	33.43	8.3	23.5	0.53
I24	17 Jul 2015	3	20.23	83.88	8.0	33.37	8.3	23.5	0.74
I24	17 Jul 2015	4	20.04	83.89	8.0	33.47	8.3	23.6	0.72
I24	17 Jul 2015	5	18.43	82.00	8.4	33.87	8.2	24.3	0.68
I24	17 Jul 2015	6	17.70	78.47	8.6	33.57	8.2	24.2	0.73
I24	17 Jul 2015	7	17.17	79.13	8.5	33.41	8.2	24.3	1.15
I24	17 Jul 2015	8	16.78	76.05	8.5	33.36	8.2	24.3	2.03
I24	17 Jul 2015	9	16.11	70.94	8.2	33.35	8.2	24.5	5.52
I24	17 Jul 2015	10	15.60	62.18	8.1	33.34	8.2	24.6	10.35
I24	17 Jul 2015	11	15.38	63.64	7.8	33.33	8.1	24.6	12.66
I24	22 Jul 2015	1	21.15	72.72	8.1	33.13	8.3	23.0	1.74
I24	22 Jul 2015	2	20.66	72.50	8.1	33.19	8.3	23.2	1.75
I24	22 Jul 2015	3	19.86	77.11	8.2	33.23	8.3	23.4	1.58
I24	22 Jul 2015	4	18.54	80.21	8.6	33.29	8.2	23.8	1.60
I24	22 Jul 2015	5	18.35	83.61	8.8	33.28	8.3	23.9	3.64
I24	22 Jul 2015	6	18.29	78.83	8.8	33.27	8.3	23.9	5.53
I24	22 Jul 2015	7	18.13	75.30	8.6	33.28	8.3	23.9	6.18
I24	22 Jul 2015	8	18.05	73.82	8.5	33.28	8.2	23.9	5.95
I24	22 Jul 2015	9	17.87	75.66	8.3	33.28	8.2	24.0	5.07
I24	22 Jul 2015	10	17.62	77.02	8.0	33.28	8.2	24.1	5.30
I24	22 Jul 2015	11	17.44	77.40	7.9	33.29	8.2	24.1	5.28
I24	29 Jul 2015	1	21.47	87.20	7.8	33.35	8.2	23.1	0.45
I24	29 Jul 2015	2	21.50	87.25	7.8	33.34	8.2	23.1	0.44
I24	29 Jul 2015	3	21.26	87.13	7.9	33.32	8.2	23.1	0.51

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I24	29 Jul 2015	4	20.87	87.20	7.9	33.31	8.2	23.2	0.68
I24	29 Jul 2015	5	20.00	87.43	8.0	33.30	8.2	23.4	0.99
I24	29 Jul 2015	6	19.21	83.41	8.2	33.29	8.2	23.7	1.35
I24	29 Jul 2015	7	18.99	78.85	8.2	33.29	8.2	23.7	1.77
I24	29 Jul 2015	8	18.56	75.56	8.0	33.27	8.2	23.8	2.36
I24	29 Jul 2015	9	17.49	70.40	7.9	33.27	8.2	24.1	3.14
I24	29 Jul 2015	10	17.04	67.63	7.8	33.27	8.1	24.2	2.85
I24	29 Jul 2015	11	16.84	63.38	7.7	33.28	8.1	24.2	2.29
I25	11 Jul 2015	1	18.63	77.75	8.3	33.30	8.2	23.8	1.13
I25	11 Jul 2015	2	18.44	77.70	8.4	33.26	8.2	23.8	1.51
I25	11 Jul 2015	3	17.39	77.21	8.8	33.26	8.2	24.1	2.41
I25	11 Jul 2015	4	17.19	75.37	8.9	33.28	8.2	24.1	2.83
I25	11 Jul 2015	5	16.93	74.74	8.8	33.26	8.2	24.2	2.98
I25	11 Jul 2015	6	16.52	76.51	8.4	33.25	8.2	24.3	2.68
I25	11 Jul 2015	7	16.08	77.23	8.2	33.28	8.2	24.4	2.29
I25	11 Jul 2015	8	15.96	78.21	8.3	33.28	8.2	24.4	1.82
I25	11 Jul 2015	9	15.94	79.41	8.3	33.29	8.2	24.4	1.51
I25	13 Jul 2015	1	19.88	80.77	8.2	33.29	8.2	23.5	0.72
I25	13 Jul 2015	2	19.31	80.80	8.3	33.27	8.2	23.6	0.73
I25	13 Jul 2015	3	17.80	81.34	8.6	33.29	8.2	24.0	0.75
I25	13 Jul 2015	4	17.58	82.56	8.7	33.29	8.2	24.1	0.73
I25	13 Jul 2015	5	17.35	83.63	8.7	33.27	8.2	24.1	0.82
I25	13 Jul 2015	6	16.79	83.96	8.7	33.27	8.2	24.2	1.13
I25	13 Jul 2015	7	16.37	80.24	8.7	33.27	8.2	24.3	1.43
I25	13 Jul 2015	8	15.92	77.10	8.7	33.29	8.2	24.5	1.44
I25	13 Jul 2015	9	15.88	79.96	9.0	33.29	8.2	24.5	1.29
I25	17 Jul 2015	1	20.62	86.06	8.7	33.36	8.3	23.3	0.57
I25	17 Jul 2015	2	20.60	85.79	8.8	33.36	8.3	23.4	0.56
I25	17 Jul 2015	3	20.57	86.19	8.8	33.36	8.3	23.4	0.61
I25	17 Jul 2015	4	20.52	86.30	8.8	33.35	8.3	23.4	0.66
I25	17 Jul 2015	5	20.25	86.46	8.9	33.34	8.3	23.4	0.78
I25	17 Jul 2015	6	19.17	85.98	9.1	33.23	8.3	23.6	1.09
I25	17 Jul 2015	7	17.74	84.13	9.0	33.27	8.3	24.0	1.83
I25	17 Jul 2015	8	16.94	80.13	8.6	33.26	8.2	24.2	8.01
I25	17 Jul 2015	9	16.41	73.28	8.2	33.28	8.2	24.3	8.87
I25	22 Jul 2015	1	21.99	73.42	7.8	33.07	8.3	22.8	1.62
I25	22 Jul 2015	2	21.98	73.84	7.8	33.07	8.2	22.8	1.78
I25	22 Jul 2015	3	20.56	74.14	8.4	33.25	8.3	23.2	1.83
I25	22 Jul 2015	4	19.74	74.40	8.5	33.27	8.3	23.5	1.66
I25	22 Jul 2015	5	18.72	77.45	8.6	33.27	8.2	23.8	1.57
I25	22 Jul 2015	6	18.34	81.36	8.7	33.27	8.3	23.9	2.51
I25	22 Jul 2015	7	18.29	82.41	8.8	33.28	8.3	23.9	3.63
I25	22 Jul 2015	8	18.10	80.22	8.5	33.26	8.3	23.9	4.57
I25	22 Jul 2015	9	17.90	77.57	8.4	33.27	8.2	24.0	4.35
I25	29 Jul 2015	1	21.59	81.95	7.7	33.33	8.2	23.1	0.50
I25	29 Jul 2015	2	21.47	81.94	7.7	33.33	8.2	23.1	0.53
I25	29 Jul 2015	3	21.13	81.66	7.9	33.30	8.2	23.2	0.62
I25	29 Jul 2015	4	20.62	82.81	8.0	33.32	8.2	23.3	0.73
I25	29 Jul 2015	5	20.27	85.27	8.0	33.29	8.2	23.4	0.94
I25	29 Jul 2015	6	19.54	80.18	8.1	33.27	8.2	23.6	1.34

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I25	29 Jul 2015	7	19.21	76.48	7.8	33.28	8.2	23.7	1.99
I25	29 Jul 2015	8	17.81	74.16	7.8	33.18	8.2	23.9	2.23
I25	29 Jul 2015	9	16.96	66.72	8.1	33.28	8.1	24.2	1.58
I26	11 Jul 2015	1	18.98	84.54	8.6	33.31	8.2	23.7	0.65
I26	11 Jul 2015	2	18.88	84.59	8.6	33.30	8.2	23.7	0.72
I26	11 Jul 2015	3	17.90	84.71	8.7	33.25	8.2	24.0	1.06
I26	11 Jul 2015	4	17.28	81.85	8.6	33.26	8.2	24.1	1.59
I26	11 Jul 2015	5	17.05	76.95	8.5	33.25	8.2	24.2	2.26
I26	11 Jul 2015	6	16.69	75.50	8.2	33.27	8.2	24.3	2.53
I26	11 Jul 2015	7	16.47	76.10	8.1	33.25	8.2	24.3	2.30
I26	11 Jul 2015	8	16.22	78.22	8.0	33.27	8.1	24.4	2.26
I26	11 Jul 2015	9	15.74	79.52	8.0	33.25	8.1	24.5	2.24
I26	13 Jul 2015	1	20.36	85.76	8.2	33.31	8.2	23.4	0.62
I26	13 Jul 2015	2	20.10	86.34	8.2	33.31	8.2	23.4	0.53
I26	13 Jul 2015	3	19.50	86.34	8.4	33.28	8.2	23.6	0.60
I26	13 Jul 2015	4	18.56	85.48	8.6	33.26	8.2	23.8	0.72
I26	13 Jul 2015	5	17.78	83.06	8.7	33.27	8.2	24.0	0.88
I26	13 Jul 2015	6	17.34	82.32	8.6	33.27	8.2	24.1	0.97
I26	13 Jul 2015	7	16.93	82.67	8.4	33.26	8.2	24.2	1.09
I26	13 Jul 2015	8	16.50	81.80	8.4	33.27	8.2	24.3	1.19
I26	13 Jul 2015	9	16.35	79.81	8.5	33.28	8.2	24.3	1.22
I26	17 Jul 2015	1	20.85	84.94	6.9	33.25	8.3	23.2	0.53
I26	17 Jul 2015	2	20.82	84.63	7.9	33.30	8.3	23.3	0.67
I26	17 Jul 2015	3	20.73	85.19	8.2	33.37	8.3	23.3	0.74
I26	17 Jul 2015	4	20.08	84.89	8.3	33.58	8.3	23.7	0.88
I26	17 Jul 2015	5	18.86	84.60	8.5	33.77	8.3	24.1	0.91
I26	17 Jul 2015	6	18.02	82.97	8.8	33.52	8.3	24.1	1.11
I26	17 Jul 2015	7	17.40	74.99	9.0	33.42	8.2	24.2	2.54
I26	17 Jul 2015	8	16.79	63.05	8.7	33.37	8.2	24.3	6.44
I26	17 Jul 2015	9	16.27	60.18	8.1	33.33	8.2	24.4	11.26
I26	22 Jul 2015	1	22.13	87.56	7.3	33.35	8.2	22.9	0.37
I26	22 Jul 2015	2	22.09	88.08	7.4	33.35	8.2	22.9	0.39
I26	22 Jul 2015	3	21.92	89.04	7.4	33.35	8.2	23.0	0.42
I26	22 Jul 2015	4	20.47	87.97	7.7	33.36	8.3	23.4	0.56
I26	22 Jul 2015	5	19.87	81.53	8.1	33.31	8.3	23.5	0.69
I26	22 Jul 2015	6	19.56	80.39	8.2	33.30	8.3	23.6	0.85
I26	22 Jul 2015	7	19.19	78.61	8.2	33.30	8.2	23.7	1.20
I26	22 Jul 2015	8	18.89	79.56	8.2	33.30	8.2	23.7	1.44
I26	22 Jul 2015	9	18.44	80.15	8.3	33.30	8.2	23.9	1.70
I26	29 Jul 2015	1	21.60	87.49	7.9	33.34	8.2	23.1	0.42
I26	29 Jul 2015	2	21.56	87.59	7.9	33.33	8.2	23.1	0.43
I26	29 Jul 2015	3	21.48	87.80	7.8	33.34	8.2	23.1	0.45
I26	29 Jul 2015	4	21.30	87.98	7.8	33.32	8.2	23.1	0.50
I26	29 Jul 2015	5	21.08	88.02	7.9	33.31	8.2	23.2	0.54
I26	29 Jul 2015	6	20.54	87.84	8.0	33.29	8.2	23.3	0.64
I26	29 Jul 2015	7	20.01	87.61	8.1	33.28	8.2	23.4	0.80
I26	29 Jul 2015	8	19.28	86.71	7.8	33.29	8.2	23.6	1.06
I26	29 Jul 2015	9	18.84	83.84	7.5	33.24	8.1	23.7	1.79
I32	11 Jul 2015	1	19.07	78.28	8.7	33.31	8.2	23.7	0.95

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I32	11 Jul 2015	2	19.02	78.40	8.7	33.31	8.2	23.7	0.98
	11 Jul 2015	3	18.84	78.46	8.6	33.29	8.2	23.8	1.13
	11 Jul 2015	4	18.30	77.50	8.5	33.29	8.2	23.9	1.97
	11 Jul 2015	5	17.86	73.58	8.5	33.29	8.2	24.0	3.59
	11 Jul 2015	6	17.32	69.76	8.5	33.27	8.2	24.1	4.43
	11 Jul 2015	7	16.24	69.77	8.6	33.25	8.2	24.4	3.47
	11 Jul 2015	8	15.38	80.52	8.4	33.26	8.2	24.5	3.99
	11 Jul 2015	9	14.93	71.65	8.0	33.27	8.1	24.7	4.78
	11 Jul 2015	10	14.63	56.89	7.7	33.26	8.1	24.7	4.94
	13 Jul 2015	1	20.46	83.81	8.1	33.33	8.2	23.4	0.56
I32	13 Jul 2015	2	20.28	84.36	8.1	33.32	8.2	23.4	0.56
	13 Jul 2015	3	19.76	84.42	8.0	33.31	8.2	23.5	0.74
	13 Jul 2015	4	19.19	81.43	8.0	33.30	8.2	23.7	1.23
	13 Jul 2015	5	18.25	73.97	8.5	33.26	8.2	23.9	1.60
	13 Jul 2015	6	17.34	74.65	8.7	33.26	8.2	24.1	2.06
	13 Jul 2015	7	16.92	73.04	8.7	33.27	8.2	24.2	2.44
	13 Jul 2015	8	16.70	71.25	8.6	33.27	8.2	24.3	2.99
	13 Jul 2015	9	16.32	74.09	8.4	33.27	8.2	24.3	4.88
	13 Jul 2015	10	16.17	71.56	8.3	33.29	8.2	24.4	4.88
	17 Jul 2015	1	21.03	80.41	8.3	33.37	8.3	23.2	0.65
I32	17 Jul 2015	2	21.01	80.86	8.3	33.37	8.3	23.3	0.64
	17 Jul 2015	3	20.96	82.41	8.3	33.37	8.3	23.3	0.64
	17 Jul 2015	4	20.73	82.58	8.3	33.37	8.3	23.3	0.78
	17 Jul 2015	5	20.38	80.32	8.2	33.36	8.3	23.4	1.02
	17 Jul 2015	6	19.42	77.77	8.5	33.25	8.3	23.6	1.19
	17 Jul 2015	7	17.10	77.78	9.0	33.28	8.3	24.2	1.13
	17 Jul 2015	8	16.53	80.91	8.8	33.28	8.2	24.3	1.83
	17 Jul 2015	9	16.30	73.81	8.4	33.27	8.2	24.4	4.11
	17 Jul 2015	10	16.02	61.04	8.0	33.28	8.2	24.4	7.58
	22 Jul 2015	1	22.39	85.33	7.5	33.23	8.2	22.8	0.67
I32	22 Jul 2015	2	22.35	85.23	7.5	33.24	8.2	22.8	0.69
	22 Jul 2015	3	22.28	85.47	7.4	33.23	8.2	22.8	0.75
	22 Jul 2015	4	21.47	84.60	7.7	33.25	8.2	23.0	0.84
	22 Jul 2015	5	20.28	81.65	8.1	33.28	8.3	23.4	0.65
	22 Jul 2015	6	19.45	84.55	8.2	33.27	8.3	23.6	0.72
	22 Jul 2015	7	18.97	83.23	8.3	33.27	8.2	23.7	0.87
	22 Jul 2015	8	18.62	82.16	8.3	33.28	8.2	23.8	1.10
	22 Jul 2015	9	18.30	78.69	8.3	33.28	8.2	23.9	1.54
	22 Jul 2015	10	17.71	70.57	8.2	33.29	8.2	24.0	3.12
	29 Jul 2015	1	21.82	85.06	7.7	33.34	8.2	23.0	0.44
I32	29 Jul 2015	2	21.79	85.27	7.7	33.34	8.2	23.0	0.46
	29 Jul 2015	3	21.75	85.20	7.7	33.34	8.2	23.0	0.51
	29 Jul 2015	4	21.49	85.38	7.6	33.33	8.2	23.1	0.67
	29 Jul 2015	5	21.37	81.51	7.4	33.33	8.2	23.1	0.98
	29 Jul 2015	6	21.16	72.87	7.6	33.32	8.2	23.2	1.33
	29 Jul 2015	7	20.76	60.20	7.9	33.30	8.2	23.3	1.22
	29 Jul 2015	8	20.22	72.80	8.1	33.28	8.2	23.4	1.34
	29 Jul 2015	9	19.20	80.79	8.4	33.26	8.2	23.6	1.49
	29 Jul 2015	10	18.28	80.13	8.3	33.27	8.2	23.9	2.26
I39	11 Jul 2015	1	18.61	88.44	8.6	33.30	8.2	23.8	0.95

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I39	11 Jul 2015	2	18.20	88.42	8.8	33.30	8.2	23.9	1.88
I39	11 Jul 2015	3	17.59	88.10	8.9	33.30	8.2	24.1	3.12
I39	11 Jul 2015	4	17.27	83.20	8.9	33.29	8.2	24.1	3.01
I39	11 Jul 2015	5	16.76	81.43	8.9	33.28	8.2	24.2	2.87
I39	11 Jul 2015	6	16.33	82.15	9.0	33.29	8.2	24.4	2.89
I39	11 Jul 2015	7	16.22	82.42	8.8	33.28	8.2	24.4	2.90
I39	11 Jul 2015	8	15.97	82.57	8.8	33.28	8.2	24.4	3.02
I39	11 Jul 2015	9	15.64	82.65	8.7	33.28	8.2	24.5	3.04
I39	11 Jul 2015	10	15.41	82.65	8.6	33.28	8.2	24.6	3.11
I39	11 Jul 2015	11	15.30	82.25	8.5	33.29	8.2	24.6	2.95
I39	11 Jul 2015	12	15.20	82.99	8.4	33.29	8.2	24.6	2.69
I39	11 Jul 2015	13	15.06	83.44	8.4	33.29	8.2	24.6	2.63
I39	11 Jul 2015	14	14.91	83.49	8.2	33.29	8.1	24.7	2.52
I39	11 Jul 2015	15	14.72	83.44	8.0	33.28	8.1	24.7	2.36
I39	11 Jul 2015	16	14.44	83.15	7.8	33.29	8.1	24.8	2.08
I39	11 Jul 2015	17	14.36	82.17	7.6	33.30	8.1	24.8	1.79
I39	11 Jul 2015	18	14.30	80.94	7.5	33.29	8.1	24.8	1.49
I39	13 Jul 2015	1	20.08	88.06	8.4	33.32	8.2	23.5	0.54
I39	13 Jul 2015	2	19.60	88.06	8.7	33.30	8.2	23.6	1.12
I39	13 Jul 2015	3	18.77	86.16	8.9	33.28	8.2	23.8	2.10
I39	13 Jul 2015	4	18.16	82.20	9.2	33.29	8.2	23.9	2.49
I39	13 Jul 2015	5	17.94	81.36	9.2	33.27	8.2	24.0	2.68
I39	13 Jul 2015	6	17.55	82.24	9.3	33.28	8.2	24.1	3.38
I39	13 Jul 2015	7	17.45	81.04	9.3	33.29	8.2	24.1	3.97
I39	13 Jul 2015	8	17.29	79.69	9.1	33.28	8.2	24.1	3.84
I39	13 Jul 2015	9	16.87	79.93	9.1	33.28	8.2	24.2	3.32
I39	13 Jul 2015	10	16.29	81.33	9.1	33.28	8.2	24.4	3.09
I39	13 Jul 2015	11	16.08	81.92	8.9	33.29	8.2	24.4	3.03
I39	13 Jul 2015	12	15.97	82.10	8.8	33.29	8.2	24.4	3.27
I39	13 Jul 2015	13	15.68	82.09	8.6	33.29	8.2	24.5	3.07
I39	13 Jul 2015	14	15.43	82.00	8.6	33.28	8.2	24.6	2.75
I39	13 Jul 2015	15	15.24	82.86	8.5	33.30	8.2	24.6	2.32
I39	13 Jul 2015	16	15.18	83.60	8.3	33.30	8.2	24.6	1.97
I39	13 Jul 2015	17	15.01	84.11	8.1	33.29	8.1	24.7	1.68
I39	13 Jul 2015	18	14.91	82.99	7.9	33.30	8.1	24.7	1.46
I39	17 Jul 2015	1	20.38	86.43	8.5	33.35	8.3	23.4	0.87
I39	17 Jul 2015	2	20.30	86.67	8.6	33.35	8.3	23.4	0.98
I39	17 Jul 2015	3	20.07	87.51	8.8	33.34	8.3	23.5	1.57
I39	17 Jul 2015	4	19.68	85.78	9.1	33.33	8.3	23.6	3.89
I39	17 Jul 2015	5	19.03	81.17	9.1	33.30	8.3	23.7	5.26
I39	17 Jul 2015	6	18.29	79.00	9.0	33.30	8.3	23.9	4.17
I39	17 Jul 2015	7	17.94	83.20	9.0	33.30	8.2	24.0	3.77
I39	17 Jul 2015	8	17.90	84.32	8.9	33.31	8.2	24.0	3.55
I39	17 Jul 2015	9	17.82	84.62	8.9	33.30	8.2	24.0	3.56
I39	17 Jul 2015	10	17.67	84.43	8.9	33.30	8.2	24.1	3.72
I39	17 Jul 2015	11	17.61	84.20	8.7	33.30	8.2	24.1	3.85
I39	17 Jul 2015	12	17.09	83.73	8.5	33.27	8.2	24.2	3.58
I39	17 Jul 2015	13	16.66	83.48	8.3	33.29	8.2	24.3	3.23
I39	17 Jul 2015	14	16.38	83.77	8.1	33.29	8.2	24.3	2.84
I39	17 Jul 2015	15	16.05	84.48	7.8	33.28	8.2	24.4	2.58
I39	17 Jul 2015	16	15.77	85.20	7.6	33.29	8.1	24.5	2.47
I39	17 Jul 2015	17	15.54	84.70	7.4	33.28	8.1	24.5	2.28
I39	17 Jul 2015	18	15.09	84.57	7.3	33.27	8.1	24.6	1.48

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I39	22 Jul 2015	1	21.45	88.25	7.8	33.33	8.2	23.1	0.53
I39	22 Jul 2015	2	21.19	88.36	7.9	33.30	8.2	23.1	0.57
I39	22 Jul 2015	3	19.97	88.05	8.3	33.28	8.3	23.5	0.90
I39	22 Jul 2015	4	19.12	85.53	8.6	33.26	8.3	23.7	1.50
I39	22 Jul 2015	5	18.67	83.05	8.7	33.28	8.3	23.8	2.03
I39	22 Jul 2015	6	18.64	82.70	8.7	33.28	8.3	23.8	2.47
I39	22 Jul 2015	7	18.53	82.71	8.7	33.28	8.3	23.8	2.91
I39	22 Jul 2015	8	18.19	82.76	8.6	33.28	8.2	23.9	3.65
I39	22 Jul 2015	9	18.01	82.51	8.6	33.29	8.2	24.0	4.08
I39	22 Jul 2015	10	17.92	81.59	8.7	33.29	8.2	24.0	4.56
I39	22 Jul 2015	11	17.90	80.99	8.7	33.29	8.2	24.0	4.95
I39	22 Jul 2015	12	17.87	80.94	8.6	33.29	8.2	24.0	4.85
I39	22 Jul 2015	13	17.78	80.96	8.5	33.28	8.2	24.0	4.68
I39	22 Jul 2015	14	17.67	80.81	8.5	33.29	8.2	24.0	4.45
I39	22 Jul 2015	15	17.55	80.56	8.5	33.29	8.2	24.1	4.14
I39	22 Jul 2015	16	17.32	81.78	8.4	33.29	8.2	24.1	3.76
I39	22 Jul 2015	17	17.13	81.35	8.3	33.29	8.2	24.2	3.23
I39	22 Jul 2015	18	16.82	82.41	8.0	33.29	8.2	24.2	2.97
I39	29 Jul 2015	1	21.28	89.11	8.0	33.34	8.2	23.2	0.47
I39	29 Jul 2015	2	21.18	89.15	8.0	33.33	8.2	23.2	0.49
I39	29 Jul 2015	3	21.08	89.21	8.0	33.33	8.2	23.2	0.53
I39	29 Jul 2015	4	20.90	89.18	8.1	33.32	8.2	23.2	0.60
I39	29 Jul 2015	5	20.38	89.13	8.1	33.30	8.2	23.4	0.66
I39	29 Jul 2015	6	19.32	88.79	8.2	33.24	8.2	23.6	0.70
I39	29 Jul 2015	7	18.07	88.07	8.4	33.27	8.2	23.9	0.73
I39	29 Jul 2015	8	17.42	88.19	8.6	33.26	8.2	24.1	0.83
I39	29 Jul 2015	9	17.04	88.00	8.6	33.27	8.2	24.2	0.94
I39	29 Jul 2015	10	16.90	87.25	8.5	33.27	8.2	24.2	1.12
I39	29 Jul 2015	11	16.73	87.42	8.3	33.27	8.2	24.2	1.37
I39	29 Jul 2015	12	16.51	85.33	8.3	33.26	8.2	24.3	1.61
I39	29 Jul 2015	13	16.30	83.68	8.2	33.27	8.2	24.3	1.91
I39	29 Jul 2015	14	16.23	82.70	8.1	33.27	8.2	24.4	2.16
I39	29 Jul 2015	15	16.03	81.92	8.0	33.27	8.2	24.4	2.65
I39	29 Jul 2015	16	15.84	82.12	7.9	33.27	8.1	24.5	4.48
I39	29 Jul 2015	17	15.72	78.95	7.8	33.27	8.1	24.5	5.22
I39	29 Jul 2015	18	15.56	74.25	7.8	33.27	8.1	24.5	4.28
I40	11 Jul 2015	1	18.07	78.19	8.4	33.28	8.2	23.9	0.97
I40	11 Jul 2015	2	18.03	78.30	8.3	33.27	8.2	23.9	1.01
I40	11 Jul 2015	3	17.11	78.61	8.4	33.27	8.2	24.2	1.18
I40	11 Jul 2015	4	16.59	77.67	8.6	33.27	8.2	24.3	1.38
I40	11 Jul 2015	5	16.47	78.18	8.6	33.28	8.2	24.3	1.64
I40	11 Jul 2015	6	16.39	77.75	8.6	33.28	8.2	24.3	1.91
I40	11 Jul 2015	7	16.29	77.06	8.4	33.28	8.2	24.4	2.09
I40	11 Jul 2015	8	16.13	77.71	8.0	33.27	8.2	24.4	2.37
I40	11 Jul 2015	9	15.60	71.55	7.6	33.27	8.1	24.5	2.54
I40	11 Jul 2015	10	14.99	70.09	7.2	33.27	8.1	24.6	2.73
I40	13 Jul 2015	1	19.40	77.78	8.3	33.30	8.2	23.6	0.94
I40	13 Jul 2015	2	19.32	77.81	8.2	33.29	8.2	23.6	0.97
I40	13 Jul 2015	3	18.60	78.14	8.4	33.25	8.2	23.8	1.06
I40	13 Jul 2015	4	17.52	78.50	8.6	33.28	8.2	24.1	1.23
I40	13 Jul 2015	5	17.03	78.95	8.8	33.28	8.2	24.2	1.40

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I40	13 Jul 2015	6	16.81	78.02	8.6	33.28	8.2	24.2	1.80
I40	13 Jul 2015	7	16.51	76.45	8.5	33.27	8.2	24.3	2.65
I40	13 Jul 2015	8	16.28	71.25	8.5	33.29	8.2	24.4	3.28
I40	13 Jul 2015	9	16.20	68.71	8.4	33.29	8.2	24.4	4.04
I40	13 Jul 2015	10	16.06	68.94	8.2	33.29	8.2	24.4	5.00
I40	17 Jul 2015	1	19.54	77.24	8.0	33.33	8.2	23.6	0.76
I40	17 Jul 2015	2	19.46	77.27	8.1	33.33	8.2	23.6	0.78
I40	17 Jul 2015	3	19.10	77.54	8.2	33.31	8.2	23.7	1.14
I40	17 Jul 2015	4	18.18	78.26	8.6	33.30	8.2	23.9	1.75
I40	17 Jul 2015	5	17.75	80.51	8.8	33.30	8.2	24.0	1.25
I40	17 Jul 2015	6	17.32	84.02	8.8	33.27	8.2	24.1	1.82
I40	17 Jul 2015	7	16.79	81.34	8.5	33.27	8.2	24.2	2.99
I40	17 Jul 2015	8	16.21	78.61	8.2	33.28	8.2	24.4	4.09
I40	17 Jul 2015	9	15.99	73.60	8.0	33.29	8.2	24.4	4.27
I40	17 Jul 2015	10	15.87	73.25	7.9	33.29	8.2	24.5	3.82
I40	22 Jul 2015	1	20.81	79.30	8.2	33.31	8.3	23.3	1.31
I40	22 Jul 2015	2	20.73	80.20	8.3	33.31	8.3	23.3	1.25
I40	22 Jul 2015	3	20.50	80.85	8.3	33.31	8.3	23.3	1.34
I40	22 Jul 2015	4	19.88	81.57	8.4	33.30	8.3	23.5	1.59
I40	22 Jul 2015	5	19.03	81.41	8.5	33.27	8.3	23.7	2.01
I40	22 Jul 2015	6	18.48	80.59	8.5	33.28	8.2	23.8	2.45
I40	22 Jul 2015	7	18.44	79.33	8.5	33.27	8.2	23.8	3.11
I40	22 Jul 2015	8	18.40	76.25	8.5	33.27	8.2	23.9	3.43
I40	22 Jul 2015	9	18.34	76.07	8.4	33.27	8.2	23.9	3.79
I40	22 Jul 2015	10	18.13	76.44	8.2	33.27	8.2	23.9	4.31
I40	29 Jul 2015	1	21.85	79.79	7.6	33.33	8.2	23.0	0.60
I40	29 Jul 2015	2	21.66	79.82	7.5	33.33	8.2	23.0	0.58
I40	29 Jul 2015	3	21.25	80.01	7.6	33.31	8.2	23.1	0.63
I40	29 Jul 2015	4	21.00	80.71	7.6	33.32	8.2	23.2	0.73
I40	29 Jul 2015	5	20.72	80.01	7.7	33.31	8.2	23.3	0.89
I40	29 Jul 2015	6	20.48	77.73	7.7	33.31	8.2	23.3	1.04
I40	29 Jul 2015	7	20.22	77.41	7.8	33.30	8.2	23.4	1.25
I40	29 Jul 2015	8	19.82	76.67	7.6	33.29	8.2	23.5	1.65
I40	29 Jul 2015	9	18.81	74.40	7.5	33.26	8.2	23.7	2.86
I40	29 Jul 2015	10	18.27	62.09	7.5	33.29	8.1	23.9	3.72

APPENDIX A
QUALITY ASSURANCE

Table A.1

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

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Enter
I19	11 Jul 2015	6	JT	LAB DUPLICATE	2e	<2	<2
I19	13 Jul 2015	6	LMA	LAB DUPLICATE	<2	<2	<2
I19	17 Jul 2015	6	LMA	LAB DUPLICATE	<20	ns	ns
I19	17 Jul 2015	6	ZV	LAB DUPLICATE	ns	<2	<2
I19	22 Jul 2015	6	LMA	LAB DUPLICATE	<2	<2	<2
I19	29 Jul 2015	6	AR	LAB DUPLICATE	<2	<2	4e
I40	11 Jul 2015	6	JT	LAB DUPLICATE	2e	<2	<2
I40	13 Jul 2015	6	AR	LAB DUPLICATE	<2	<2	<2
I40	17 Jul 2015	6	SR	LAB DUPLICATE	<2	ns	ns
I40	17 Jul 2015	6	ZV	LAB DUPLICATE	ns	<2	<2
I40	22 Jul 2015	6	LMA	LAB DUPLICATE	<2	<2	<2
I40	29 Jul 2015	6	AR	LAB DUPLICATE	<2	<2	2e
S12	07 Jul 2015		AR	FIELD DUPLICATE	40e	40e	16e
S12	07 Jul 2015		AR	LAB DUPLICATE	20e	36e	4e
S12	14 Jul 2015		SR	FIELD DUPLICATE	<20	2e	6e
S12	14 Jul 2015		SR	LAB DUPLICATE	<20	2e	4e
S12	21 Jul 2015		ZV	FIELD DUPLICATE	>16000	5600	58
S12	21 Jul 2015		ZV	LAB DUPLICATE	>16000	3600e	64
S12	28 Jul 2015		LMA	FIELD DUPLICATE	1400e	80e	82
S12	28 Jul 2015		LMA	LAB DUPLICATE	600e	60e	80e

ns = not sampled

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