



MONTHLY RECEIVING WATERS MONITORING REPORT FOR THE SOUTH BAY OCEAN OUTFALL

SOUTH BAY WATER RECLAMATION PLANT

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

JANUARY 2017

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





Public Utilities Department

Environmental Monitoring & Technical Services Division

February 28, 2017

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

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

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

Sincerely,

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

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

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–S12).

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

Kelp Bed Stations

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

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

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

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

Offshore Stations

Quarterly offshore water quality sampling is typically conducted over three days during February, May, August, and November for a total of 40 stations during each month (see station locations map). These offshore stations (I1–I40) are arranged in a grid surrounding the discharge site, and are generally located along the 9, 19, 28, 38, and 55-m depth contours. The seven offshore sites designated as kelp bed stations (described above) are included as part of the monthly offshore water quality sampling, however the data from these seven stations are reported within the kelp bed station section of the report with the other four days of kelp bed water quality sampling. Monitoring at all sites included measurements of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, and 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;
- (3) *Enterococcus* density shall not exceed 35 CFU/100 mL.

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

Single Sample Maximums:

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

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

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

SUMMARY OF RESULTS

➤ Shoreline Water Quality Sampling

- Because of site access restrictions in Mexico, the South Bay shoreline sampling is carried out on the same day each week (i.e., Tuesday) in order to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the IBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
- During January, each of the eight shore stations located north of the border was 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 standards for total coliform and fecal coliform bacteria were exceeded at stations S4, S5, S10, and S11 on multiple days during the month.
 - The 30-day geometric mean standard for *Enterococcus* was exceeded at stations S4, S5, S6, S9, S10, S11, and S12 on multiple days during the month.

- The single sample maximum (SSM) standards for total coliform and fecal coliform bacteria were exceeded at stations S4, S5, S10, and S11 on one or more days during the month.
 - The SSM standard for *Enterococcus* was exceeded at all eight stations on one or more days during the month.
 - The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at stations S4, S5, S8, S10, and S11 on one or more days during the month.
 - Per permit requirements, resamples were collected in response to these SSM exceedances (see Table 2.8 for details).
- Although the Ocean Plan standards do not apply to these stations, bacteria densities exceeded one or more benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1) in the seawater samples collected at stations S0, S2, and S3 on multiple days during the month.
- Historical analyses of Ocean Plan compliance rates for the South Bay outfall shoreline monitoring stations, combined with the results of satellite imagery data, suggest that outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego's most recent *South Bay Ocean Outfall Annual Receiving Waters Monitoring and Assessment Report* for details (<http://www.sandiego.gov/mwwd/environment/oceanmonitor/reports/index.shtml>).
- Notable visual observations for January included: a sewage-like odor at stations S4, S5, and S10, a detergent odor and foam at station S5, a dead seal carcass at station S5, and water flowing from a storm drain at station S0. 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 January (i.e. January 6, 13, 17, 25, 29).
- During January, each of the seven stations was out of compliance with various Ocean Plan water contact standards (see below).
 - The 30-day geometric mean standard for total coliform bacteria was exceeded at stations I19, I24, I25, I39, and I40 on multiple days during the month.
 - The 30-day geometric mean standard for fecal coliform bacteria was exceeded at stations I24 and I40 on multiple days during the month.
 - The 30-day geometric mean standard for *Enterococcus* was exceeded at all seven stations on multiple days during the month.
 - The SSM standard for total coliform bacteria was exceeded at stations I19, I24, I25, I39, and I40 on one or more days during the month.
 - The SSM standard for fecal coliform bacteria was exceeded at stations I19, I24, I39, and I40 on multiple days during the month.
 - The SSM standard for *Enterococcus* was exceeded at all seven stations on multiple days during the month.

- The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at stations I19, I24, I25, I26, I39, and I40 on one or more days during the month.
 - Water column temperatures ranged from 12.98 to 15.48°C. The difference between surface and bottom waters ranged from approximately 0.03 to 1.22°C, indicating the water column was stratified at some of these sites during the month.
 - Chlorophyll *a* concentrations ranged from 0.29 to 8.83 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 January at the offshore stations. The next quarterly sampling is scheduled for February 2017.



TABLES AND FIGURES

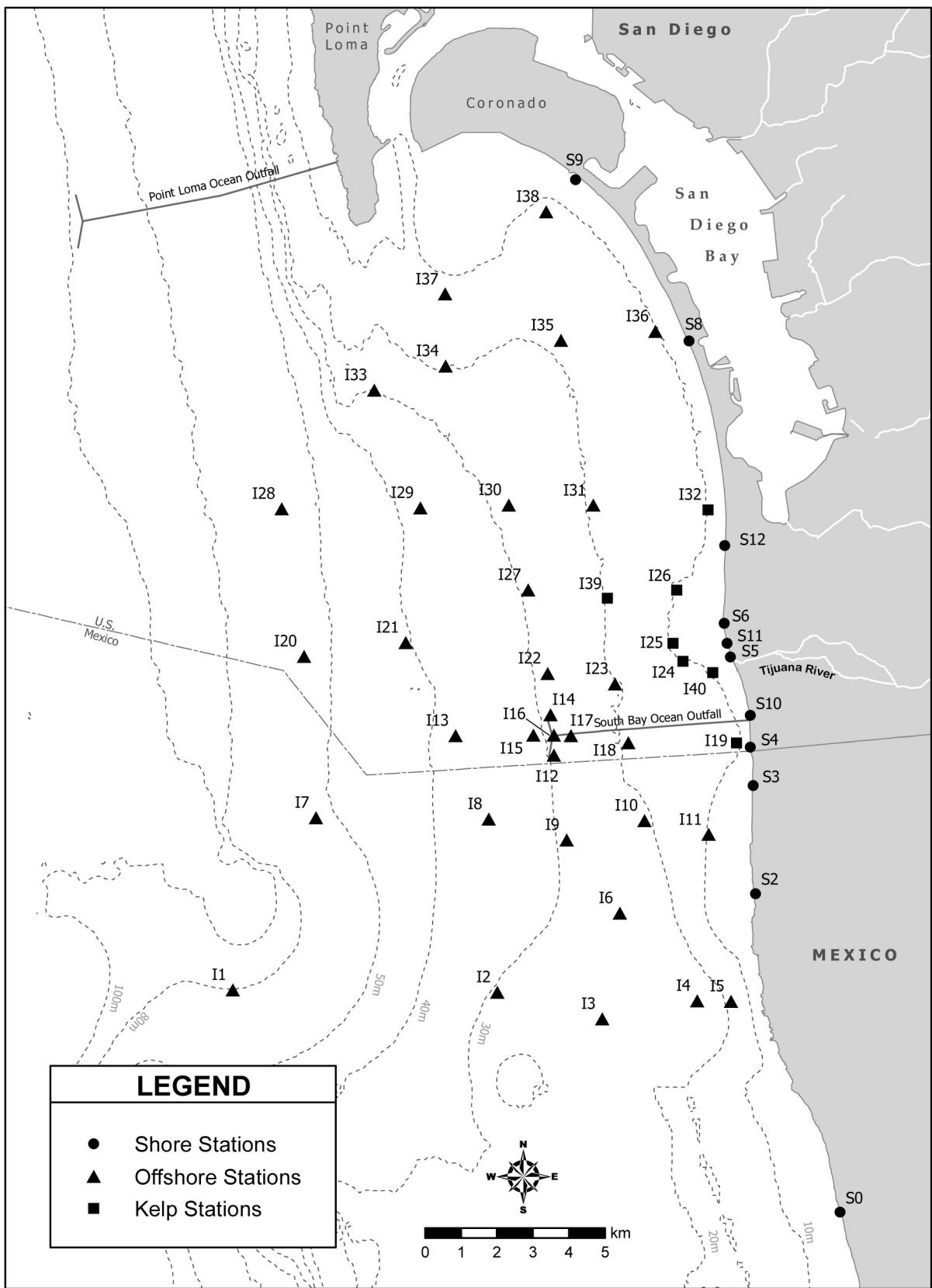


Figure 1.1 Station Map

Shore Stations

Table 2.1

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Jan 2017	185*	3425	49*	8*	13*	214*	23*	19*
02 Jan 2017	185*	3425	49*	8*	13*	214*	23*	19*
03 Jan 2017	285	3739	95	19	27	335	60	34
04 Jan 2017	285	3739	95	19	27	335	60	34
05 Jan 2017	215*	3233	90*	32*	53*	214*	51*	22*
06 Jan 2017	215*	3233	90*	32*	53*	214*	51*	22*
07 Jan 2017	215*	3313	90*	32*	53*	214*	51*	22*
08 Jan 2017	215*	4119	90*	32*	53*	214*	51*	22*
09 Jan 2017	215*	4119	90*	32*	53*	214*	51*	22*
10 Jan 2017	261	4789	139	21	50	256	108	34
11 Jan 2017	261	4789	139	21	50	256	108	34
12 Jan 2017	495*	10065	248*	22*	63*	654*	626	57*
13 Jan 2017	495*	10243	248*	22*	63*	654*	927	57*
14 Jan 2017	495*	10243	248*	22*	63*	654*	927	57*
15 Jan 2017	495*	10667	248*	22*	63*	654*	1392	57*
16 Jan 2017	495*	10667	248*	22*	63*	654*	1392	57*
17 Jan 2017	864	8501	273	32	62	940	1045	74
18 Jan 2017	864	8501	273	32	62	940	1045	74
19 Jan 2017	870*	8239	595*	65*	82*	978*	2314	153*
20 Jan 2017	870*	8239	595*	65*	82*	978*	2314	153*
21 Jan 2017	870*	7710	595*	65*	82*	978*	2314	153*
22 Jan 2017	870*	7710	595*	65*	82*	978*	2314	153*
23 Jan 2017	870*	8055	595*	65*	82*	978*	2314	153*
24 Jan 2017	1558	8627	469	114	123	1711	1682	244
25 Jan 2017	1558	8055	469	114	123	1711	1682	244
26 Jan 2017	2170	8055	533*	114	163*	3356	2172	384*
27 Jan 2017	2170	8627	533*	114	163*	3330	2172	384*
28 Jan 2017	2170	10268	533*	114	163*	3330	2172	384*
29 Jan 2017	2170	10733	533*	114	163*	3330	2172	384*
30 Jan 2017	2170	10733	533*	114	163*	3330	2172	384*
31 Jan 2017	977	10297	627	58	116	3178	2330	217

* Geometric mean calculated using n<5

Table 2.2

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Jan 2017	20*	482	8*	2*	3*	14*	7*	4*
02 Jan 2017	20*	482	8*	2*	3*	14*	7*	4*
03 Jan 2017	24	464	11	3	3	18	11	5
04 Jan 2017	24	464	11	3	3	18	11	5
05 Jan 2017	16*	394	10*	3*	4*	10*	12*	4*
06 Jan 2017	16*	394	10*	3*	4*	10*	12*	4*
07 Jan 2017	16*	406	10*	3*	4*	10*	12*	4*
08 Jan 2017	16*	578	10*	3*	4*	10*	12*	4*
09 Jan 2017	16*	578	10*	3*	4*	10*	12*	4*
10 Jan 2017	28	810	15	4	7	17	22	7
11 Jan 2017	28	810	15	4	7	17	22	7
12 Jan 2017	45*	1615	24*	5*	9*	30*	84	9*
13 Jan 2017	45*	1568	24*	5*	9*	30*	121	9*
14 Jan 2017	45*	1568	24*	5*	9*	30*	121	9*
15 Jan 2017	45*	1617	24*	5*	9*	30*	181	9*
16 Jan 2017	45*	1617	24*	5*	9*	30*	181	9*
17 Jan 2017	71	1197	22	5	8	48	142	11
18 Jan 2017	113	1197	22	5	8	48	142	11
19 Jan 2017	164	1287	34*	7*	9*	54*	261	17*
20 Jan 2017	164	1287	34*	7*	9*	54*	261	17*
21 Jan 2017	256	1030	34*	7*	9*	54*	261	17*
22 Jan 2017	256	1030	34*	7*	9*	54*	261	17*
23 Jan 2017	256	1097	34*	7*	9*	54*	261	17*
24 Jan 2017	402	1394	27	13	14	139	163	23
25 Jan 2017	402	1142	27	13	14	139	163	23
26 Jan 2017	436	1264	25*	19	22*	391	188	36*
27 Jan 2017	436	1491	25*	19	22*	317	188	36*
28 Jan 2017	436	1940	25*	19	22*	317	188	36*
29 Jan 2017	436	2327	25*	19	22*	317	188	36*
30 Jan 2017	436	2327	25*	19	22*	317	188	36*
31 Jan 2017	222	2107	33	13	14	347	207	23

* Geometric mean calculated using n<5

Table 2.3

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Jan 2017	18*	528	7	3*	3*	20*	7*	6*
02 Jan 2017	18*	528	7	3*	3*	20*	7*	6*
03 Jan 2017	25	497	11	6	5	29	12	8
04 Jan 2017	25	497	11	6	5	29	12	8
05 Jan 2017	22*	639	12	6	7*	40	19	10*
06 Jan 2017	22*	800	12	6	7*	80	19	10*
07 Jan 2017	22*	1052	12	6	7*	80	19	10*
08 Jan 2017	22*	1269	12	6	7*	72	19	10*
09 Jan 2017	22*	1269	12	6	7*	72	19	10*
10 Jan 2017	27	1489	15	7	12	63	26	16
11 Jan 2017	27	1489	15	7	12	63	26	16
12 Jan 2017	51*	2308	22	9	23	103	69	20*
13 Jan 2017	51*	2209	22	9	23	103	92	20*
14 Jan 2017	51*	2209	22	9	23	103	92	20*
15 Jan 2017	51*	2045	22	9	23	103	129	20*
16 Jan 2017	51*	2045	22	9	23	103	129	20*
17 Jan 2017	70	1708	24	8	17	117	105	18
18 Jan 2017	97	1708	24	8	17	166	105	18
19 Jan 2017	136	2017	39	10	27	226	172	31*
20 Jan 2017	136	2017	39	10	27	226	172	31*
21 Jan 2017	286	1790	39	10	27	352	172	31*
22 Jan 2017	286	1790	39	10	27	352	172	31*
23 Jan 2017	286	1832	39	10	27	352	172	31*
24 Jan 2017	417	2076	47	18	34	501	157	45
25 Jan 2017	417	1832	47	18	34	501	157	45
26 Jan 2017	414	1938	38	23	42	588	166	51
27 Jan 2017	414	2188	38	23	42	585	166	51
28 Jan 2017	414	2677	55	23	42	585	166	51
29 Jan 2017	414	2971	55	23	42	671	166	51
30 Jan 2017	414	2971	55	23	42	671	166	51
31 Jan 2017	266	3081	67	16	42	637	179	30

* Geometric mean calculated using n<5

Table 2.4

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
03 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC
10 Jan 2017	IC	E	IC	IC	IC	IC	IC	IC
12 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
13 Jan 2017	ns	E	ns	ns	ns	ns	IC	ns
15 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
17 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC
24 Jan 2017	E	E	IC	IC	IC	E	IC	IC
26 Jan 2017	IC	E	ns	IC	ns	IC	ns	ns
27 Jan 2017	ns	E	ns	ns	ns	IC	ns	ns
29 Jan 2017	ns	E	ns	ns	ns	ns	ns	ns
31 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.5

Summary of compliance at the SBOO shore stations with the 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
03 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC
10 Jan 2017	IC	E	IC	IC	IC	IC	IC	IC
12 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
13 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
15 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
17 Jan 2017	E	IC	IC	IC	IC	IC	IC	IC
18 Jan 2017	E	ns	ns	ns	ns	ns	ns	ns
21 Jan 2017	E	ns	ns	ns	ns	ns	ns	ns
24 Jan 2017	E	E	IC	IC	IC	E	IC	IC
26 Jan 2017	IC	E	ns	IC	ns	E	ns	ns
27 Jan 2017	ns	E	ns	ns	ns	IC	ns	ns
29 Jan 2017	ns	E	ns	ns	ns	ns	ns	ns
31 Jan 2017	IC	E	IC	IC	IC	E	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.6

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Jan 2017	ns	E	ns	ns	ns	ns	ns	ns
03 Jan 2017	IC	E	IC	E	IC	E	E	IC
05 Jan 2017	ns	E	ns	IC	ns	E	IC	ns
06 Jan 2017	ns	E	ns	ns	ns	E	ns	ns
08 Jan 2017	ns	E	ns	ns	ns	IC	ns	ns
10 Jan 2017	IC	E	IC	IC	E	IC	E	IC
12 Jan 2017	ns	E	ns	ns	IC	ns	E	ns
13 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
15 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
17 Jan 2017	E	IC	IC	IC	IC	E	IC	IC
18 Jan 2017	E	ns	ns	ns	ns	E	ns	ns
21 Jan 2017	E	ns	ns	ns	ns	E	ns	ns
24 Jan 2017	E	E	E	E	E	E	IC	E
26 Jan 2017	IC	E	IC	IC	IC	E	ns	IC
27 Jan 2017	ns	E	ns	ns	ns	E	ns	ns
29 Jan 2017	ns	E	ns	ns	ns	E	ns	ns
31 Jan 2017	IC	E	E	IC	IC	E	E	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.7

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

Date	S4	S5	S6	S8	S9	S10	S11	S12
03 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC
10 Jan 2017	IC	E	IC	IC	IC	IC	E	IC
12 Jan 2017	ns	IC	ns	ns	ns	ns	E	ns
13 Jan 2017	ns	IC	ns	ns	ns	ns	E	ns
15 Jan 2017	ns	E	ns	ns	ns	ns	E	ns
17 Jan 2017	IC	IC	IC	IC	IC	IC	IC	IC
24 Jan 2017	E	E	IC	E	IC	E	IC	IC
26 Jan 2017	IC	E	ns	IC	ns	E	ns	ns
27 Jan 2017	ns	E	ns	ns	ns	IC	ns	ns
29 Jan 2017	ns	E	ns	ns	ns	ns	ns	ns
31 Jan 2017	IC	E	IC	IC	IC	E	E	IC

IC = In Compliance

E = Exceedance

ns = not sampled

Table 2.8

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

Station	Date	Time	Total	Fecal	Enter	F:T
S0	03 Jan 2017	1125	1100	50	160e	0.045
	10 Jan 2017	1055	20e	8e	10e	0.400
	17 Jan 2017	1125	200e	8e	52	0.040
	24 Jan 2017	955	>16000	3000e	8800	0.188
	31 Jan 2017	1045	340e	42	76	0.124
S2	03 Jan 2017	1235	260e	2e	110	0.008
	10 Jan 2017	1255	120e	2e	24e	0.017
	17 Jan 2017	1030	1600e	78	92	0.049
	24 Jan 2017	1030	14000	560	2000e	0.040
	31 Jan 2017	1245	6e	<2	<2	0.333
S3	03 Jan 2017	1205	260e	6e	56	0.023
	10 Jan 2017	1150	160e	28e	76	0.175
	17 Jan 2017	945	13000	540	640	0.042
	24 Jan 2017	1125	>16000	2000e	4600	0.125
	31 Jan 2017	1205	18e	4e	2e	0.222
S4	03 Jan 2017	1212	1600e	56	94	0.035
	10 Jan 2017	1241	560	220e	58	0.393
	17 Jan 2017	1211	8000	440	240e	0.055
	18 Jan 2017	1108	ns	1200e	500	ns
	21 Jan 2017	1141	ns	2400e	>12000	ns
	24 Jan 2017	1213	>16000	6000	4000	0.375
	26 Jan 2017	1127	420	32e	66	0.076
	31 Jan 2017	909	18e	<2	12e	0.111
S5	01 Jan 2017	924	ns	ns	600	ns
	03 Jan 2017	951	9000	320e	260e	0.036
	05 Jan 2017	906	ns	ns	>12000	ns
	06 Jan 2017	1017	ns	ns	>12000	ns
	08 Jan 2017	1010	ns	ns	>12000	ns
	10 Jan 2017	1013	>16000	>12000	>12000	0.750
	12 Jan 2017	913	>16000	1000e	920	0.062
	13 Jan 2017	938	12000	1200e	1200	0.100
	15 Jan 2017	903	>16000	2200e	640	0.138
	17 Jan 2017	1003	700	44	96	0.063
	24 Jan 2017	947	>16000	>12000	>12000	0.750
	26 Jan 2017	925	>16000	11000	11000	0.688
	27 Jan 2017	1159	>16000	6600	>12000	0.412
	29 Jan 2017	1239	>16000	>12000	>12000	0.750
S6	31 Jan 2017	1040	6800	780	1000	0.115
	03 Jan 2017	935	1400e	32e	86	0.023
	10 Jan 2017	956	800e	80e	42	0.100
	17 Jan 2017	945	400	16e	40	0.040
	24 Jan 2017	931	180e	10e	120	0.056
S6	26 Jan 2017	916	ns	ns	30e	ns
	31 Jan 2017	1028	1200e	100e	180e	0.083

Station	Date	Time	Total	Fecal	Enteric	F:T
S8	03 Jan 2017	838	460	6e	120e	0.013
	05 Jan 2017	815	ns	ns	2e	ns
	10 Jan 2017	903	4e	10e	10e	2.500
	17 Jan 2017	845	160e	10e	4e	0.062
	24 Jan 2017	836	1100	160e	320e	0.145
	26 Jan 2017	819	60e	26e	50	0.433
	31 Jan 2017	1200	<2	<2	<2	1.000
S9	03 Jan 2017	810	480	8e	50	0.017
	10 Jan 2017	831	40e	74	110	1.850
	12 Jan 2017	1024	ns	ns	62	ns
	17 Jan 2017	821	60e	6e	4e	0.100
	24 Jan 2017	806	620	72	120e	0.116
	26 Jan 2017	743	ns	ns	32e	ns
	31 Jan 2017	1237	30e	<2	44	0.067
S10	03 Jan 2017	1203	2000e	46	120e	0.023
	05 Jan 2017	1014	ns	ns	360e	ns
	06 Jan 2017	1113	ns	ns	2400e	ns
	08 Jan 2017	924	ns	ns	40	ns
	10 Jan 2017	1237	520e	140e	24e	0.269
	17 Jan 2017	1205	4000	340e	280e	0.085
	18 Jan 2017	1105	ns	ns	2800e	ns
	21 Jan 2017	1104	ns	ns	>12000	ns
	24 Jan 2017	1223	>16000	6000	>12000	0.375
	26 Jan 2017	1119	6400	700	440	0.109
	27 Jan 2017	1116	3200e	110	560	0.034
	29 Jan 2017	1203	ns	ns	3000e	ns
S11	31 Jan 2017	858	2400e	600	340e	0.250
	03 Jan 2017	940	3000e	80	120	0.027
	05 Jan 2017	900	ns	ns	56	ns
	10 Jan 2017	1005	2200e	280e	110	0.127
	12 Jan 2017	903	13000	1600e	740	0.123
	13 Jan 2017	930	6600	740	500	0.112
	15 Jan 2017	850	>16000	2000e	1400e	0.125
	17 Jan 2017	956	140e	26e	20e	0.186
S12	24 Jan 2017	937	180e	6e	74	0.033
	31 Jan 2017	1033	3800e	400	340e	0.105
	03 Jan 2017	915	340e	14e	40	0.041
	10 Jan 2017	940	200e	70	92	0.350
	17 Jan 2017	923	200e	20e	12e	0.100
S12	24 Jan 2017	913	1600e	84	180e	0.052
	26 Jan 2017	854	ns	ns	44	ns
	31 Jan 2017	1015	22e	4e	2e	0.182

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
S5	01 Jan 2017			Resample
S10	05 Jan 2017			Resample
S11	05 Jan 2017			Resample
S5	05 Jan 2017			Resample
S8	05 Jan 2017			Resample
S5	06 Jan 2017			Resample
S10	06 Jan 2017			Resample
S10	08 Jan 2017			Resample
S5	08 Jan 2017			Resample
S11	12 Jan 2017			Resample
S5	12 Jan 2017			Resample
S5	13 Jan 2017			Resample
S11	15 Jan 2017			Resample
S5	18 Jan 2017			Resample
S10	18 Jan 2017			Resample
S4	18 Jan 2017			Resample
S4	20 Jan 2017			Resample
S10	20 Jan 2017			Resample
S10	21 Jan 2017			Resample
S4	21 Jan 2017			Resample
S4	23 Jan 2017			Resample
S9	26 Jan 2017			Resample
S8	26 Jan 2017			Resample
S12	26 Jan 2017			Resample
S6	26 Jan 2017			Resample
S5	26 Jan 2017			Resample
S10	26 Jan 2017			Resample
S4	26 Jan 2017			Resample
S10	27 Jan 2017			Resample
S5	27 Jan 2017			Resample
S10	29 Jan 2017			Resample
S5	29 Jan 2017			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	03 Jan 2017	Arrive Time	1125
S0	03 Jan 2017	Weather	Drizzle
S0	03 Jan 2017	Wind Speed (kts)	1.2
S0	03 Jan 2017	Wind Dir	NE
S0	03 Jan 2017	Animal Life	15 Shorebirds
S0	03 Jan 2017	Floatables	None
S0	03 Jan 2017	Water Color	Green
S0	03 Jan 2017	Current Direction	N
S0	03 Jan 2017	Water Temp (C)	15
S0	03 Jan 2017	Wave Height Low (ft)	3
S0	03 Jan 2017	High Tide (ft)	4.5
S0	03 Jan 2017	High Tide Time	1132
S0	03 Jan 2017	Low Tide (ft)	2.3
S0	03 Jan 2017	Low Tide Time	553
S0	03 Jan 2017	Comments	Kelp; Seagrass; Algae; Water turbid; Flow from storm drain approx 0.5L/sec
S0	10 Jan 2017	Arrive Time	1055
S0	10 Jan 2017	Weather	Sunny
S0	10 Jan 2017	Wind Speed (kts)	0.6
S0	10 Jan 2017	Wind Dir	NW
S0	10 Jan 2017	Animal Life	7 Shorebirds
S0	10 Jan 2017	Floatables	None
S0	10 Jan 2017	Water Color	Green
S0	10 Jan 2017	Current Direction	N
S0	10 Jan 2017	Water Temp (C)	16.1
S0	10 Jan 2017	Wave Height Low (ft)	2
S0	10 Jan 2017	High Tide (ft)	6.5
S0	10 Jan 2017	High Tide Time	649
S0	10 Jan 2017	Low Tide (ft)	-1.4
S0	10 Jan 2017	Low Tide Time	1401
S0	10 Jan 2017	Comments	Algae; 2 Persons; 3 Surfers; Water clear
S0	17 Jan 2017	Arrive Time	1125
S0	17 Jan 2017	Weather	Sunny
S0	17 Jan 2017	Wind Speed (kts)	1.5
S0	17 Jan 2017	Wind Dir	NE
S0	17 Jan 2017	Animal Life	5 Shorebirds; 5 Dogs
S0	17 Jan 2017	Floatables	None
S0	17 Jan 2017	Water Color	Green
S0	17 Jan 2017	Current Direction	N
S0	17 Jan 2017	Water Temp (C)	11
S0	17 Jan 2017	Wave Height Low (ft)	2
S0	17 Jan 2017	High Tide (ft)	4.1
S0	17 Jan 2017	High Tide Time	1203
S0	17 Jan 2017	Low Tide (ft)	1.9
S0	17 Jan 2017	Low Tide Time	630
S0	17 Jan 2017	Comments	Seagrass; 2 Persons; Water clear; Flow from stormdrain 0.5 L/sec
S0	24 Jan 2017	Arrive Time	955
S0	24 Jan 2017	Weather	Cloudy

Station	Date	Parameter	Value
S0	24 Jan 2017	Wind Speed (kts)	11.5
S0	24 Jan 2017	Wind Dir	SE
S0	24 Jan 2017	Animal Life	5 Shorebirds
S0	24 Jan 2017	Floatables	None
S0	24 Jan 2017	Water Color	Green
S0	24 Jan 2017	Current Direction	SE
S0	24 Jan 2017	Water Temp (C)	15
S0	24 Jan 2017	Wave Height Low (ft)	8
S0	24 Jan 2017	High Tide (ft)	5.3
S0	24 Jan 2017	High Tide Time	628
S0	24 Jan 2017	Low Tide (ft)	-0.3
S0	24 Jan 2017	Low Tide Time	1343
S0	24 Jan 2017	Comments	Kelp; Seagrass; Water turbid
S0	31 Jan 2017	Arrive Time	1045
S0	31 Jan 2017	Weather	Sunny
S0	31 Jan 2017	Wind Speed (kts)	3.2
S0	31 Jan 2017	Wind Dir	NE
S0	31 Jan 2017	Animal Life	5 Shorebirds; 5 Dogs
S0	31 Jan 2017	Floatables	None
S0	31 Jan 2017	Water Color	Green
S0	31 Jan 2017	Current Direction	NE
S0	31 Jan 2017	Water Temp (C)	15
S0	31 Jan 2017	Wave Height Low (ft)	2
S0	31 Jan 2017	High Tide (ft)	5
S0	31 Jan 2017	High Tide Time	1037
S0	31 Jan 2017	Low Tide (ft)	1.4
S0	31 Jan 2017	Low Tide Time	446
S0	31 Jan 2017	Comments	Kelp; Seagrass; Algae; 2 Persons; Water clear
S2	03 Jan 2017	Arrive Time	1235
S2	03 Jan 2017	Weather	Cloudy
S2	03 Jan 2017	Wind Speed (kts)	1.8
S2	03 Jan 2017	Wind Dir	NE
S2	03 Jan 2017	Animal Life	5 Dogs; 15 Seagulls
S2	03 Jan 2017	Floatables	None
S2	03 Jan 2017	Water Color	Green
S2	03 Jan 2017	Current Direction	N
S2	03 Jan 2017	Water Temp (C)	15
S2	03 Jan 2017	Wave Height Low (ft)	3
S2	03 Jan 2017	High Tide (ft)	4.5
S2	03 Jan 2017	High Tide Time	1132
S2	03 Jan 2017	Low Tide (ft)	0.2
S2	03 Jan 2017	Low Tide Time	1848
S2	03 Jan 2017	Comments	Kelp; Seagrass; Algae; 1 Fisherman; Water turbid; No flow from storm drain
S2	10 Jan 2017	Arrive Time	1255
S2	10 Jan 2017	Weather	Sunny
S2	10 Jan 2017	Wind Speed (kts)	0.7
S2	10 Jan 2017	Wind Dir	NW
S2	10 Jan 2017	Animal Life	10 Shorebirds
S2	10 Jan 2017	Floatables	None
S2	10 Jan 2017	Water Color	Green
S2	10 Jan 2017	Current Direction	N

Station	Date	Parameter	Value
S2	10 Jan 2017	Water Temp (C)	16.2
S2	10 Jan 2017	Wave Height Low (ft)	2
S2	10 Jan 2017	High Tide (ft)	6.5
S2	10 Jan 2017	High Tide Time	649
S2	10 Jan 2017	Low Tide (ft)	-1.4
S2	10 Jan 2017	Low Tide Time	1401
S2	10 Jan 2017	Comments	Seagrass; Algae; 4 Persons; Water clear
S2	17 Jan 2017	Arrive Time	1030
S2	17 Jan 2017	Weather	Sunny
S2	17 Jan 2017	Wind Speed (kts)	1.3
S2	17 Jan 2017	Wind Dir	NE
S2	17 Jan 2017	Animal Life	5 Shorebirds
S2	17 Jan 2017	Floatables	None
S2	17 Jan 2017	Water Color	Green
S2	17 Jan 2017	Current Direction	N
S2	17 Jan 2017	Water Temp (C)	12
S2	17 Jan 2017	Wave Height Low (ft)	2
S2	17 Jan 2017	High Tide (ft)	4.1
S2	17 Jan 2017	High Tide Time	1203
S2	17 Jan 2017	Low Tide (ft)	1.9
S2	17 Jan 2017	Low Tide Time	630
S2	17 Jan 2017	Comments	Seagrass; 3 Persons; Water clear; No flow from stormdrain
S2	24 Jan 2017	Arrive Time	1030
S2	24 Jan 2017	Weather	Cloudy
S2	24 Jan 2017	Wind Speed (kts)	8.5
S2	24 Jan 2017	Wind Dir	SE
S2	24 Jan 2017	Animal Life	5 Shorebirds
S2	24 Jan 2017	Floatables	None
S2	24 Jan 2017	Water Color	Green
S2	24 Jan 2017	Current Direction	N
S2	24 Jan 2017	Water Temp (C)	15
S2	24 Jan 2017	Wave Height Low (ft)	8
S2	24 Jan 2017	High Tide (ft)	5.3
S2	24 Jan 2017	High Tide Time	628
S2	24 Jan 2017	Low Tide (ft)	-0.3
S2	24 Jan 2017	Low Tide Time	1343
S2	24 Jan 2017	Comments	Kelp; Seagrass; Water turbid
S2	31 Jan 2017	Arrive Time	1245
S2	31 Jan 2017	Weather	Sunny
S2	31 Jan 2017	Wind Speed (kts)	3.6
S2	31 Jan 2017	Wind Dir	NE
S2	31 Jan 2017	Animal Life	None
S2	31 Jan 2017	Floatables	None
S2	31 Jan 2017	Water Color	Green
S2	31 Jan 2017	Current Direction	N
S2	31 Jan 2017	Water Temp (C)	15
S2	31 Jan 2017	Wave Height Low (ft)	3
S2	31 Jan 2017	High Tide (ft)	5
S2	31 Jan 2017	High Tide Time	1037
S2	31 Jan 2017	Low Tide (ft)	-0.2
S2	31 Jan 2017	Low Tide Time	1728
S2	31 Jan 2017	Comments	Kelp; Seagrass; Algae; 2 Persons; Water clear

Station	Date	Parameter	Value
S3	03 Jan 2017	Arrive Time	1205
S3	03 Jan 2017	Weather	Cloudy
S3	03 Jan 2017	Wind Speed (kts)	1.7
S3	03 Jan 2017	Wind Dir	NE
S3	03 Jan 2017	Animal Life	5 Shorebirds
S3	03 Jan 2017	Floatables	None
S3	03 Jan 2017	Water Color	Green
S3	03 Jan 2017	Current Direction	N
S3	03 Jan 2017	Water Temp (C)	15
S3	03 Jan 2017	Wave Height Low (ft)	3
S3	03 Jan 2017	High Tide (ft)	4.5
S3	03 Jan 2017	High Tide Time	1132
S3	03 Jan 2017	Low Tide (ft)	2.3
S3	03 Jan 2017	Low Tide Time	553
S3	03 Jan 2017	Comments	Kelp; Algae; 5 Persons; 2 Surfers; Water turbid; No flow from storm drain
S3	10 Jan 2017	Arrive Time	1150
S3	10 Jan 2017	Weather	Sunny
S3	10 Jan 2017	Wind Speed (kts)	0.6
S3	10 Jan 2017	Wind Dir	NW
S3	10 Jan 2017	Animal Life	7 Shorebirds
S3	10 Jan 2017	Floatables	None
S3	10 Jan 2017	Water Color	Green
S3	10 Jan 2017	Current Direction	N
S3	10 Jan 2017	Water Temp (C)	16.3
S3	10 Jan 2017	Wave Height Low (ft)	2
S3	10 Jan 2017	High Tide (ft)	6.5
S3	10 Jan 2017	High Tide Time	649
S3	10 Jan 2017	Low Tide (ft)	-1.4
S3	10 Jan 2017	Low Tide Time	1401
S3	10 Jan 2017	Comments	Algae; 8 Persons; 5 Surfers; Water clear
S3	17 Jan 2017	Arrive Time	945
S3	17 Jan 2017	Weather	Sunny
S3	17 Jan 2017	Wind Speed (kts)	1.2
S3	17 Jan 2017	Wind Dir	NE
S3	17 Jan 2017	Animal Life	15 Shorebirds; 5 Dogs
S3	17 Jan 2017	Floatables	None
S3	17 Jan 2017	Water Color	Green
S3	17 Jan 2017	Current Direction	N
S3	17 Jan 2017	Water Temp (C)	12
S3	17 Jan 2017	Wave Height Low (ft)	2
S3	17 Jan 2017	High Tide (ft)	4.1
S3	17 Jan 2017	High Tide Time	1203
S3	17 Jan 2017	Low Tide (ft)	1.9
S3	17 Jan 2017	Low Tide Time	630
S3	17 Jan 2017	Comments	5 Persons; Water clear; No flow from stormdrain
S3	24 Jan 2017	Arrive Time	1125
S3	24 Jan 2017	Weather	Cloudy
S3	24 Jan 2017	Wind Speed (kts)	2.6
S3	24 Jan 2017	Wind Dir	SE
S3	24 Jan 2017	Animal Life	5 Shorebirds

Station	Date	Parameter	Value
S3	24 Jan 2017	Floatables	None
S3	24 Jan 2017	Water Color	Green
S3	24 Jan 2017	Current Direction	SE
S3	24 Jan 2017	Water Temp (C)	15
S3	24 Jan 2017	Wave Height Low (ft)	6
S3	24 Jan 2017	High Tide (ft)	5.3
S3	24 Jan 2017	High Tide Time	628
S3	24 Jan 2017	Low Tide (ft)	-0.3
S3	24 Jan 2017	Low Tide Time	1343
S3	24 Jan 2017	Comments	Kelp; Seagrass; Water turbid
S3	31 Jan 2017	Arrive Time	1205
S3	31 Jan 2017	Weather	Sunny
S3	31 Jan 2017	Wind Speed (kts)	3.9
S3	31 Jan 2017	Wind Dir	NE
S3	31 Jan 2017	Animal Life	5 Shorebirds; 5 Dogs
S3	31 Jan 2017	Floatables	None
S3	31 Jan 2017	Water Color	Green
S3	31 Jan 2017	Current Direction	NE
S3	31 Jan 2017	Water Temp (C)	15
S3	31 Jan 2017	Wave Height Low (ft)	3
S3	31 Jan 2017	High Tide (ft)	5
S3	31 Jan 2017	High Tide Time	1037
S3	31 Jan 2017	Low Tide (ft)	-0.2
S3	31 Jan 2017	Low Tide Time	1728
S3	31 Jan 2017	Comments	Kelp; Seagrass; Algae; 3 Surfers; Water clear
S4	03 Jan 2017	Arrive Time	1212
S4	03 Jan 2017	Weather	Cloudy
S4	03 Jan 2017	Wind Speed (kts)	2.9
S4	03 Jan 2017	Wind Dir	W
S4	03 Jan 2017	Animal Life	None
S4	03 Jan 2017	Floatables	None
S4	03 Jan 2017	Water Color	Green
S4	03 Jan 2017	Current Direction	N
S4	03 Jan 2017	Water Temp (C)	15.6
S4	03 Jan 2017	Wave Height Low (ft)	4
S4	03 Jan 2017	High Tide (ft)	4.5
S4	03 Jan 2017	High Tide Time	1132
S4	03 Jan 2017	Low Tide (ft)	2.3
S4	03 Jan 2017	Low Tide Time	553
S4	03 Jan 2017	Comments	Sewage-like odor; Water clear
S4	10 Jan 2017	Arrive Time	1241
S4	10 Jan 2017	Weather	Sunny
S4	10 Jan 2017	Wind Speed (kts)	4.4
S4	10 Jan 2017	Wind Dir	N
S4	10 Jan 2017	Animal Life	None
S4	10 Jan 2017	Floatables	None
S4	10 Jan 2017	Water Color	Green
S4	10 Jan 2017	Current Direction	N
S4	10 Jan 2017	Water Temp (C)	14.4
S4	10 Jan 2017	Wave Height Low (ft)	1
S4	10 Jan 2017	High Tide (ft)	6.5
S4	10 Jan 2017	High Tide Time	649

Station	Date	Parameter	Value
S4	10 Jan 2017	Low Tide (ft)	-1.4
S4	10 Jan 2017	Low Tide Time	1401
S4	10 Jan 2017	Comments	Water clear
S4	17 Jan 2017	Arrive Time	1211
S4	17 Jan 2017	Weather	Sunny
S4	17 Jan 2017	Wind Speed (kts)	5.4
S4	17 Jan 2017	Wind Dir	W
S4	17 Jan 2017	Animal Life	None
S4	17 Jan 2017	Floatables	None
S4	17 Jan 2017	Water Color	Green
S4	17 Jan 2017	Current Direction	N
S4	17 Jan 2017	Water Temp (C)	15.2
S4	17 Jan 2017	Wave Height Low (ft)	4
S4	17 Jan 2017	High Tide (ft)	4.1
S4	17 Jan 2017	High Tide Time	1203
S4	17 Jan 2017	Low Tide (ft)	1.9
S4	17 Jan 2017	Low Tide Time	630
S4	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S4	18 Jan 2017	Arrive Time	1108
S4	18 Jan 2017	Weather	Partly Cloudy
S4	18 Jan 2017	Wind Speed (kts)	1.9
S4	18 Jan 2017	Wind Dir	N
S4	18 Jan 2017	Animal Life	None
S4	18 Jan 2017	Floatables	None
S4	18 Jan 2017	Water Color	Colorless
S4	18 Jan 2017	Current Direction	N
S4	18 Jan 2017	Water Temp (C)	17
S4	18 Jan 2017	Wave Height Low (ft)	2
S4	18 Jan 2017	High Tide (ft)	3.4
S4	18 Jan 2017	High Tide Time	1306
S4	18 Jan 2017	Low Tide (ft)	2
S4	18 Jan 2017	Low Tide Time	747
S4	18 Jan 2017	Comments	Water clear
S4	21 Jan 2017	Arrive Time	1141
S4	21 Jan 2017	Weather	Partly Cloudy
S4	21 Jan 2017	Wind Speed (kts)	8.4
S4	21 Jan 2017	Wind Dir	NW
S4	21 Jan 2017	Animal Life	None
S4	21 Jan 2017	Floatables	None
S4	21 Jan 2017	Water Color	Brown
S4	21 Jan 2017	Current Direction	N
S4	21 Jan 2017	Water Temp (C)	14.4
S4	21 Jan 2017	Wave Height Low (ft)	4
S4	21 Jan 2017	High Tide (ft)	2.8
S4	21 Jan 2017	High Tide Time	1755
S4	21 Jan 2017	Low Tide (ft)	1
S4	21 Jan 2017	Low Tide Time	1156
S4	21 Jan 2017	Comments	Sewage-like odor; Water turbid
S4	24 Jan 2017	Arrive Time	1213
S4	24 Jan 2017	Weather	Partly Cloudy
S4	24 Jan 2017	Wind Speed (kts)	4

Station	Date	Parameter	Value
S4	24 Jan 2017	Wind Dir	W
S4	24 Jan 2017	Animal Life	None
S4	24 Jan 2017	Floatables	Foam; Dead Animals
S4	24 Jan 2017	Water Color	Brown
S4	24 Jan 2017	Current Direction	N
S4	24 Jan 2017	Water Temp (C)	15.2
S4	24 Jan 2017	Wave Height Low (ft)	6
S4	24 Jan 2017	High Tide (ft)	5.3
S4	24 Jan 2017	High Tide Time	628
S4	24 Jan 2017	Low Tide (ft)	-0.3
S4	24 Jan 2017	Low Tide Time	1343
S4	24 Jan 2017	Comments	Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S4	26 Jan 2017	Arrive Time	1127
S4	26 Jan 2017	Weather	Sunny
S4	26 Jan 2017	Wind Speed (kts)	5.6
S4	26 Jan 2017	Wind Dir	N
S4	26 Jan 2017	Animal Life	None
S4	26 Jan 2017	Floatables	None
S4	26 Jan 2017	Water Color	Brown
S4	26 Jan 2017	Current Direction	N
S4	26 Jan 2017	Water Temp (C)	14
S4	26 Jan 2017	Wave Height Low (ft)	3
S4	26 Jan 2017	High Tide (ft)	5.8
S4	26 Jan 2017	High Tide Time	736
S4	26 Jan 2017	Low Tide (ft)	-0.8
S4	26 Jan 2017	Low Tide Time	1444
S4	26 Jan 2017	Comments	Water turbid
S4	31 Jan 2017	Arrive Time	909
S4	31 Jan 2017	Weather	Sunny
S4	31 Jan 2017	Wind Speed (kts)	2.1
S4	31 Jan 2017	Wind Dir	W
S4	31 Jan 2017	Animal Life	None
S4	31 Jan 2017	Floatables	None
S4	31 Jan 2017	Water Color	Green
S4	31 Jan 2017	Current Direction	N
S4	31 Jan 2017	Water Temp (C)	14.6
S4	31 Jan 2017	Wave Height Low (ft)	2
S4	31 Jan 2017	High Tide (ft)	5
S4	31 Jan 2017	High Tide Time	1037
S4	31 Jan 2017	Low Tide (ft)	1.4
S4	31 Jan 2017	Low Tide Time	446
S4	31 Jan 2017	Comments	Water clear
S5	01 Jan 2017	Arrive Time	924
S5	01 Jan 2017	Weather	Partly Cloudy
S5	01 Jan 2017	Wind Speed (kts)	5.6
S5	01 Jan 2017	Wind Dir	S
S5	01 Jan 2017	Animal Life	None
S5	01 Jan 2017	Floatables	None
S5	01 Jan 2017	Water Color	Green
S5	01 Jan 2017	Current Direction	N
S5	01 Jan 2017	Water Temp (C)	13.6
S5	01 Jan 2017	Wave Height Low (ft)	5

Station	Date	Parameter	Value
S5	01 Jan 2017	High Tide (ft)	3.9
S5	01 Jan 2017	High Tide Time	2304
S5	01 Jan 2017	Low Tide (ft)	-0.6
S5	01 Jan 2017	Low Tide Time	1642
S5	01 Jan 2017	Comments	Kelp; Seagrass; Water clear
S5	03 Jan 2017	Arrive Time	951
S5	03 Jan 2017	Weather	Cloudy
S5	03 Jan 2017	Wind Speed (kts)	2.1
S5	03 Jan 2017	Wind Dir	E
S5	03 Jan 2017	Animal Life	None
S5	03 Jan 2017	Floatables	None
S5	03 Jan 2017	Water Color	Green
S5	03 Jan 2017	Current Direction	N
S5	03 Jan 2017	Water Temp (C)	15.8
S5	03 Jan 2017	Wave Height Low (ft)	3
S5	03 Jan 2017	High Tide (ft)	4.5
S5	03 Jan 2017	High Tide Time	1132
S5	03 Jan 2017	Low Tide (ft)	2.3
S5	03 Jan 2017	Low Tide Time	553
S5	03 Jan 2017	Comments	Water turbid
S5	05 Jan 2017	Arrive Time	906
S5	05 Jan 2017	Weather	Cloudy
S5	05 Jan 2017	Wind Speed (kts)	1.7
S5	05 Jan 2017	Wind Dir	SE
S5	05 Jan 2017	Animal Life	None
S5	05 Jan 2017	Floatables	None
S5	05 Jan 2017	Water Color	Brown
S5	05 Jan 2017	Current Direction	SE
S5	05 Jan 2017	Water Temp (C)	15
S5	05 Jan 2017	Wave Height Low (ft)	1
S5	05 Jan 2017	High Tide (ft)	3.4
S5	05 Jan 2017	High Tide Time	1414
S5	05 Jan 2017	Low Tide (ft)	1.9
S5	05 Jan 2017	Low Tide Time	853
S5	05 Jan 2017	Comments	Kelp; Water clear
S5	06 Jan 2017	Arrive Time	1017
S5	06 Jan 2017	Weather	Sunny
S5	06 Jan 2017	Wind Speed (kts)	3.3
S5	06 Jan 2017	Wind Dir	W
S5	06 Jan 2017	Animal Life	None
S5	06 Jan 2017	Floatables	None
S5	06 Jan 2017	Water Color	Brown
S5	06 Jan 2017	Current Direction	N
S5	06 Jan 2017	Water Temp (C)	16.8
S5	06 Jan 2017	Wave Height Low (ft)	2
S5	06 Jan 2017	High Tide (ft)	3.2
S5	06 Jan 2017	High Tide Time	1556
S5	06 Jan 2017	Low Tide (ft)	1.3
S5	06 Jan 2017	Low Tide Time	1022
S5	06 Jan 2017	Comments	Kelp; Seagrass; 1 Person; Water clear; Detergent odor, large amounts of foam

Station	Date	Parameter	Value
S5	08 Jan 2017	Arrive Time	1010
S5	08 Jan 2017	Weather	Sunny
S5	08 Jan 2017	Wind Speed (kts)	2.9
S5	08 Jan 2017	Wind Dir	W
S5	08 Jan 2017	Animal Life	None
S5	08 Jan 2017	Floatables	None
S5	08 Jan 2017	Water Color	Brown
S5	08 Jan 2017	Current Direction	N
S5	08 Jan 2017	Water Temp (C)	15.6
S5	08 Jan 2017	Wave Height Low (ft)	3
S5	08 Jan 2017	High Tide (ft)	5.7
S5	08 Jan 2017	High Tide Time	514
S5	08 Jan 2017	Low Tide (ft)	-0.2
S5	08 Jan 2017	Low Tide Time	1227
S5	08 Jan 2017	Comments	Kelp; Seagrass; 1 Person; Water clear; Odor
S5	10 Jan 2017	Arrive Time	1013
S5	10 Jan 2017	Weather	Partly Cloudy
S5	10 Jan 2017	Wind Speed (kts)	3.6
S5	10 Jan 2017	Wind Dir	N
S5	10 Jan 2017	Animal Life	None
S5	10 Jan 2017	Floatables	None
S5	10 Jan 2017	Water Color	Brown
S5	10 Jan 2017	Current Direction	N
S5	10 Jan 2017	Water Temp (C)	14.3
S5	10 Jan 2017	Wave Height Low (ft)	1
S5	10 Jan 2017	High Tide (ft)	6.5
S5	10 Jan 2017	High Tide Time	649
S5	10 Jan 2017	Low Tide (ft)	-1.4
S5	10 Jan 2017	Low Tide Time	1401
S5	10 Jan 2017	Comments	Sewage-like odor; Water turbid
S5	12 Jan 2017	Arrive Time	913
S5	12 Jan 2017	Weather	Cloudy
S5	12 Jan 2017	Wind Speed (kts)	3.8
S5	12 Jan 2017	Wind Dir	SW
S5	12 Jan 2017	Animal Life	20 Shorebirds; 20 Birds; 4 Pelicans; 20 Plovers; 20 Sand Pipers; 20 Seagulls
S5	12 Jan 2017	Floatables	None
S5	12 Jan 2017	Water Color	Green
S5	12 Jan 2017	Current Direction	N
S5	12 Jan 2017	Water Temp (C)	15.6
S5	12 Jan 2017	Wave Height Low (ft)	5
S5	12 Jan 2017	High Tide (ft)	6.7
S5	12 Jan 2017	High Tide Time	818
S5	12 Jan 2017	Low Tide (ft)	-1.6
S5	12 Jan 2017	Low Tide Time	1527
S5	12 Jan 2017	Comments	Kelp; Seagrass; Water clear
S5	13 Jan 2017	Arrive Time	938
S5	13 Jan 2017	Weather	Cloudy
S5	13 Jan 2017	Wind Speed (kts)	0.7
S5	13 Jan 2017	Wind Dir	W
S5	13 Jan 2017	Animal Life	None
S5	13 Jan 2017	Floatables	None

Station	Date	Parameter	Value
S5	13 Jan 2017	Water Color	Green
S5	13 Jan 2017	Current Direction	N
S5	13 Jan 2017	Water Temp (C)	15.3
S5	13 Jan 2017	Wave Height Low (ft)	3
S5	13 Jan 2017	High Tide (ft)	6.5
S5	13 Jan 2017	High Tide Time	902
S5	13 Jan 2017	Low Tide (ft)	1.3
S5	13 Jan 2017	Low Tide Time	300
S5	13 Jan 2017	Comments	Sewage-like odor; Water clear
S5	15 Jan 2017	Arrive Time	903
S5	15 Jan 2017	Weather	Cloudy
S5	15 Jan 2017	Wind Speed (kts)	4.7
S5	15 Jan 2017	Wind Dir	S
S5	15 Jan 2017	Animal Life	1 Dog
S5	15 Jan 2017	Floatables	None
S5	15 Jan 2017	Water Color	Green
S5	15 Jan 2017	Current Direction	S
S5	15 Jan 2017	Water Temp (C)	15
S5	15 Jan 2017	Wave Height Low (ft)	2
S5	15 Jan 2017	High Tide (ft)	5.5
S5	15 Jan 2017	High Tide Time	1028
S5	15 Jan 2017	Low Tide (ft)	1.5
S5	15 Jan 2017	Low Tide Time	435
S5	15 Jan 2017	Comments	Sewage-like odor; 1 Person; Water clear; Seal carcass 50 feet east of sample point
S5	17 Jan 2017	Arrive Time	1003
S5	17 Jan 2017	Weather	Sunny
S5	17 Jan 2017	Wind Speed (kts)	3.1
S5	17 Jan 2017	Wind Dir	W
S5	17 Jan 2017	Animal Life	None
S5	17 Jan 2017	Floatables	None
S5	17 Jan 2017	Water Color	Green
S5	17 Jan 2017	Current Direction	N
S5	17 Jan 2017	Water Temp (C)	15.8
S5	17 Jan 2017	Wave Height Low (ft)	4
S5	17 Jan 2017	High Tide (ft)	4.1
S5	17 Jan 2017	High Tide Time	1203
S5	17 Jan 2017	Low Tide (ft)	1.9
S5	17 Jan 2017	Low Tide Time	630
S5	17 Jan 2017	Comments	Kelp; Seagrass; Water clear; Dead seal
S5	24 Jan 2017	Arrive Time	947
S5	24 Jan 2017	Weather	Drizzle
S5	24 Jan 2017	Wind Speed (kts)	3.6
S5	24 Jan 2017	Wind Dir	W
S5	24 Jan 2017	Animal Life	20 Shorebirds; 20 Birds; 10 Pelicans; 10 Plovers; 10 Seagulls
S5	24 Jan 2017	Floatables	Foam; Dead Animals
S5	24 Jan 2017	Water Color	Brown
S5	24 Jan 2017	Current Direction	N
S5	24 Jan 2017	Water Temp (C)	13.6
S5	24 Jan 2017	Wave Height Low (ft)	6
S5	24 Jan 2017	High Tide (ft)	5.3
S5	24 Jan 2017	High Tide Time	628

Station	Date	Parameter	Value
S5	24 Jan 2017	Low Tide (ft)	-0.3
S5	24 Jan 2017	Low Tide Time	1343
S5	24 Jan 2017	Comments	Kelp; Seagrass; Debris; Sewage-like odor; Water turbid; Very strong sweet/putrid odor
S5	26 Jan 2017	Arrive Time	925
S5	26 Jan 2017	Weather	Sunny
S5	26 Jan 2017	Wind Speed (kts)	3.6
S5	26 Jan 2017	Wind Dir	SE
S5	26 Jan 2017	Animal Life	None
S5	26 Jan 2017	Floatables	None
S5	26 Jan 2017	Water Color	Brown
S5	26 Jan 2017	Current Direction	N
S5	26 Jan 2017	Water Temp (C)	13.6
S5	26 Jan 2017	Wave Height Low (ft)	3
S5	26 Jan 2017	High Tide (ft)	5.8
S5	26 Jan 2017	High Tide Time	736
S5	26 Jan 2017	Low Tide (ft)	-0.8
S5	26 Jan 2017	Low Tide Time	1444
S5	26 Jan 2017	Comments	Water turbid
S5	27 Jan 2017	Arrive Time	1159
S5	27 Jan 2017	Weather	Sunny
S5	27 Jan 2017	Wind Speed (kts)	7.5
S5	27 Jan 2017	Wind Dir	E
S5	27 Jan 2017	Animal Life	2 Birds; 2 Plovers; 1 Sand Piper
S5	27 Jan 2017	Floatables	None
S5	27 Jan 2017	Water Color	Brown
S5	27 Jan 2017	Current Direction	N
S5	27 Jan 2017	Water Temp (C)	14.6
S5	27 Jan 2017	Wave Height Low (ft)	4
S5	27 Jan 2017	High Tide (ft)	5.9
S5	27 Jan 2017	High Tide Time	810
S5	27 Jan 2017	Low Tide (ft)	-0.9
S5	27 Jan 2017	Low Tide Time	1514
S5	27 Jan 2017	Comments	Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S5	29 Jan 2017	Arrive Time	1239
S5	29 Jan 2017	Weather	Sunny
S5	29 Jan 2017	Wind Speed (kts)	5.7
S5	29 Jan 2017	Wind Dir	NE
S5	29 Jan 2017	Animal Life	None
S5	29 Jan 2017	Floatables	None
S5	29 Jan 2017	Water Color	Brown
S5	29 Jan 2017	Current Direction	N
S5	29 Jan 2017	Water Temp (C)	15.6
S5	29 Jan 2017	Wave Height Low (ft)	2
S5	29 Jan 2017	High Tide (ft)	5.7
S5	29 Jan 2017	High Tide Time	919
S5	29 Jan 2017	Low Tide (ft)	-0.8
S5	29 Jan 2017	Low Tide Time	1618
S5	29 Jan 2017	Comments	Kelp; Seagrass; Sewage-like odor; Water clear
S5	31 Jan 2017	Arrive Time	1040
S5	31 Jan 2017	Weather	Sunny

Station	Date	Parameter	Value
S5	31 Jan 2017	Wind Speed (kts)	2.9
S5	31 Jan 2017	Wind Dir	W
S5	31 Jan 2017	Animal Life	None
S5	31 Jan 2017	Floatables	None
S5	31 Jan 2017	Water Color	Green
S5	31 Jan 2017	Current Direction	N
S5	31 Jan 2017	Water Temp (C)	15.2
S5	31 Jan 2017	Wave Height Low (ft)	2
S5	31 Jan 2017	High Tide (ft)	5
S5	31 Jan 2017	High Tide Time	1037
S5	31 Jan 2017	Low Tide (ft)	1.4
S5	31 Jan 2017	Low Tide Time	446
S5	31 Jan 2017	Comments	Water clear
S6	03 Jan 2017	Arrive Time	935
S6	03 Jan 2017	Weather	Cloudy
S6	03 Jan 2017	Wind Speed (kts)	1.9
S6	03 Jan 2017	Wind Dir	E
S6	03 Jan 2017	Animal Life	None
S6	03 Jan 2017	Floatables	None
S6	03 Jan 2017	Water Color	Green
S6	03 Jan 2017	Current Direction	N
S6	03 Jan 2017	Water Temp (C)	15.2
S6	03 Jan 2017	Wave Height Low (ft)	3
S6	03 Jan 2017	High Tide (ft)	4.5
S6	03 Jan 2017	High Tide Time	1132
S6	03 Jan 2017	Low Tide (ft)	2.3
S6	03 Jan 2017	Low Tide Time	553
S6	03 Jan 2017	Comments	2 Persons; Water clear
S6	10 Jan 2017	Arrive Time	956
S6	10 Jan 2017	Weather	Partly Cloudy
S6	10 Jan 2017	Wind Speed (kts)	2.5
S6	10 Jan 2017	Wind Dir	N
S6	10 Jan 2017	Animal Life	None
S6	10 Jan 2017	Floatables	None
S6	10 Jan 2017	Water Color	Green
S6	10 Jan 2017	Current Direction	N
S6	10 Jan 2017	Water Temp (C)	14.6
S6	10 Jan 2017	Wave Height Low (ft)	2
S6	10 Jan 2017	High Tide (ft)	6.5
S6	10 Jan 2017	High Tide Time	649
S6	10 Jan 2017	Low Tide (ft)	-1.4
S6	10 Jan 2017	Low Tide Time	1401
S6	10 Jan 2017	Comments	Water clear
S6	17 Jan 2017	Arrive Time	945
S6	17 Jan 2017	Weather	Sunny
S6	17 Jan 2017	Wind Speed (kts)	2.7
S6	17 Jan 2017	Wind Dir	E
S6	17 Jan 2017	Animal Life	None
S6	17 Jan 2017	Floatables	None
S6	17 Jan 2017	Water Color	Green
S6	17 Jan 2017	Current Direction	N
S6	17 Jan 2017	Water Temp (C)	13.7

Station	Date	Parameter	Value
S6	17 Jan 2017	Wave Height Low (ft)	4
S6	17 Jan 2017	High Tide (ft)	4.1
S6	17 Jan 2017	High Tide Time	1203
S6	17 Jan 2017	Low Tide (ft)	1.9
S6	17 Jan 2017	Low Tide Time	630
S6	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S6	24 Jan 2017	Arrive Time	931
S6	24 Jan 2017	Weather	Partly Cloudy
S6	24 Jan 2017	Wind Speed (kts)	4.6
S6	24 Jan 2017	Wind Dir	E
S6	24 Jan 2017	Animal Life	None
S6	24 Jan 2017	Floatables	None
S6	24 Jan 2017	Water Color	Green
S6	24 Jan 2017	Current Direction	N
S6	24 Jan 2017	Water Temp (C)	14.6
S6	24 Jan 2017	Wave Height Low (ft)	6
S6	24 Jan 2017	High Tide (ft)	5.3
S6	24 Jan 2017	High Tide Time	628
S6	24 Jan 2017	Low Tide (ft)	-0.3
S6	24 Jan 2017	Low Tide Time	1343
S6	24 Jan 2017	Comments	Kelp; Seagrass; 1 Person; Water clear
S6	26 Jan 2017	Arrive Time	916
S6	26 Jan 2017	Weather	Sunny
S6	26 Jan 2017	Wind Speed (kts)	0.5
S6	26 Jan 2017	Wind Dir	N
S6	26 Jan 2017	Animal Life	None
S6	26 Jan 2017	Floatables	None
S6	26 Jan 2017	Water Color	Green
S6	26 Jan 2017	Current Direction	N
S6	26 Jan 2017	Water Temp (C)	14.4
S6	26 Jan 2017	Wave Height Low (ft)	3
S6	26 Jan 2017	High Tide (ft)	5.8
S6	26 Jan 2017	High Tide Time	736
S6	26 Jan 2017	Low Tide (ft)	-0.8
S6	26 Jan 2017	Low Tide Time	1444
S6	26 Jan 2017	Comments	Water clear
S6	31 Jan 2017	Arrive Time	1028
S6	31 Jan 2017	Weather	Sunny
S6	31 Jan 2017	Wind Speed (kts)	4.2
S6	31 Jan 2017	Wind Dir	W
S6	31 Jan 2017	Animal Life	None
S6	31 Jan 2017	Floatables	None
S6	31 Jan 2017	Water Color	Green
S6	31 Jan 2017	Current Direction	N
S6	31 Jan 2017	Water Temp (C)	15.3
S6	31 Jan 2017	Wave Height Low (ft)	3
S6	31 Jan 2017	High Tide (ft)	5
S6	31 Jan 2017	High Tide Time	1037
S6	31 Jan 2017	Low Tide (ft)	1.4
S6	31 Jan 2017	Low Tide Time	446
S6	31 Jan 2017	Comments	2 Persons; Water clear

Station	Date	Parameter	Value
S8	03 Jan 2017	Arrive Time	838
S8	03 Jan 2017	Weather	Cloudy
S8	03 Jan 2017	Wind Speed (kts)	0
S8	03 Jan 2017	Wind Dir	
S8	03 Jan 2017	Animal Life	None
S8	03 Jan 2017	Floatables	None
S8	03 Jan 2017	Water Color	Green
S8	03 Jan 2017	Current Direction	N
S8	03 Jan 2017	Water Temp (C)	14.6
S8	03 Jan 2017	Wave Height Low (ft)	3
S8	03 Jan 2017	High Tide (ft)	4.5
S8	03 Jan 2017	High Tide Time	1132
S8	03 Jan 2017	Low Tide (ft)	2.3
S8	03 Jan 2017	Low Tide Time	553
S8	03 Jan 2017	Comments	2 Persons; Water clear
S8	05 Jan 2017	Arrive Time	815
S8	05 Jan 2017	Weather	Cloudy
S8	05 Jan 2017	Wind Speed (kts)	3.1
S8	05 Jan 2017	Wind Dir	SE
S8	05 Jan 2017	Animal Life	None
S8	05 Jan 2017	Floatables	None
S8	05 Jan 2017	Water Color	Green
S8	05 Jan 2017	Current Direction	N
S8	05 Jan 2017	Water Temp (C)	14.2
S8	05 Jan 2017	Wave Height Low (ft)	1
S8	05 Jan 2017	High Tide (ft)	4.3
S8	05 Jan 2017	High Tide Time	232
S8	05 Jan 2017	Low Tide (ft)	1.9
S8	05 Jan 2017	Low Tide Time	853
S8	05 Jan 2017	Comments	Water clear
S8	10 Jan 2017	Arrive Time	903
S8	10 Jan 2017	Weather	Cloudy
S8	10 Jan 2017	Wind Speed (kts)	1.1
S8	10 Jan 2017	Wind Dir	S
S8	10 Jan 2017	Animal Life	None
S8	10 Jan 2017	Floatables	None
S8	10 Jan 2017	Water Color	Green
S8	10 Jan 2017	Current Direction	N
S8	10 Jan 2017	Water Temp (C)	15
S8	10 Jan 2017	Wave Height Low (ft)	2
S8	10 Jan 2017	High Tide (ft)	6.5
S8	10 Jan 2017	High Tide Time	649
S8	10 Jan 2017	Low Tide (ft)	-1.4
S8	10 Jan 2017	Low Tide Time	1401
S8	10 Jan 2017	Comments	1 Person; Water clear
S8	17 Jan 2017	Arrive Time	845
S8	17 Jan 2017	Weather	Sunny
S8	17 Jan 2017	Wind Speed (kts)	3.1
S8	17 Jan 2017	Wind Dir	W
S8	17 Jan 2017	Animal Life	None
S8	17 Jan 2017	Floatables	None
S8	17 Jan 2017	Water Color	Green

Station	Date	Parameter	Value
S8	17 Jan 2017	Current Direction	N
S8	17 Jan 2017	Water Temp (C)	14.4
S8	17 Jan 2017	Wave Height Low (ft)	2
S8	17 Jan 2017	High Tide (ft)	4.1
S8	17 Jan 2017	High Tide Time	1203
S8	17 Jan 2017	Low Tide (ft)	1.9
S8	17 Jan 2017	Low Tide Time	630
S8	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S8	24 Jan 2017	Arrive Time	836
S8	24 Jan 2017	Weather	Partly Cloudy
S8	24 Jan 2017	Wind Speed (kts)	3.6
S8	24 Jan 2017	Wind Dir	E
S8	24 Jan 2017	Animal Life	20 Plovers; 2 Seagulls
S8	24 Jan 2017	Floatables	None
S8	24 Jan 2017	Water Color	Green
S8	24 Jan 2017	Current Direction	N
S8	24 Jan 2017	Water Temp (C)	13.4
S8	24 Jan 2017	Wave Height Low (ft)	3
S8	24 Jan 2017	High Tide (ft)	5.3
S8	24 Jan 2017	High Tide Time	628
S8	24 Jan 2017	Low Tide (ft)	-0.3
S8	24 Jan 2017	Low Tide Time	1343
S8	24 Jan 2017	Comments	Kelp; Seagrass; Water clear
S8	26 Jan 2017	Arrive Time	819
S8	26 Jan 2017	Weather	Partly Cloudy
S8	26 Jan 2017	Wind Speed (kts)	0.9
S8	26 Jan 2017	Wind Dir	N
S8	26 Jan 2017	Animal Life	None
S8	26 Jan 2017	Floatables	None
S8	26 Jan 2017	Water Color	Green
S8	26 Jan 2017	Current Direction	N
S8	26 Jan 2017	Water Temp (C)	13.2
S8	26 Jan 2017	Wave Height Low (ft)	2
S8	26 Jan 2017	High Tide (ft)	5.8
S8	26 Jan 2017	High Tide Time	736
S8	26 Jan 2017	Low Tide (ft)	-0.8
S8	26 Jan 2017	Low Tide Time	1444
S8	26 Jan 2017	Comments	Water clear
S8	31 Jan 2017	Arrive Time	1200
S8	31 Jan 2017	Weather	Sunny
S8	31 Jan 2017	Wind Speed (kts)	3.3
S8	31 Jan 2017	Wind Dir	W
S8	31 Jan 2017	Animal Life	None
S8	31 Jan 2017	Floatables	None
S8	31 Jan 2017	Water Color	Green
S8	31 Jan 2017	Current Direction	N
S8	31 Jan 2017	Water Temp (C)	17
S8	31 Jan 2017	Wave Height Low (ft)	2
S8	31 Jan 2017	High Tide (ft)	5
S8	31 Jan 2017	High Tide Time	1037
S8	31 Jan 2017	Low Tide (ft)	-0.2
S8	31 Jan 2017	Low Tide Time	1728

Station	Date	Parameter	Value
S8	31 Jan 2017	Comments	1 Person; Water clear
S9	03 Jan 2017	Arrive Time	810
S9	03 Jan 2017	Weather	Cloudy
S9	03 Jan 2017	Wind Speed (kts)	0.7
S9	03 Jan 2017	Wind Dir	W
S9	03 Jan 2017	Animal Life	None
S9	03 Jan 2017	Floatables	None
S9	03 Jan 2017	Water Color	Green
S9	03 Jan 2017	Current Direction	N
S9	03 Jan 2017	Water Temp (C)	13
S9	03 Jan 2017	Wave Height Low (ft)	2
S9	03 Jan 2017	High Tide (ft)	4.5
S9	03 Jan 2017	High Tide Time	1132
S9	03 Jan 2017	Low Tide (ft)	2.3
S9	03 Jan 2017	Low Tide Time	553
S9	03 Jan 2017	Comments	2 Persons; Water clear
S9	10 Jan 2017	Arrive Time	831
S9	10 Jan 2017	Weather	Cloudy
S9	10 Jan 2017	Wind Speed (kts)	0.1
S9	10 Jan 2017	Wind Dir	W
S9	10 Jan 2017	Animal Life	None
S9	10 Jan 2017	Floatables	None
S9	10 Jan 2017	Water Color	Green
S9	10 Jan 2017	Current Direction	N
S9	10 Jan 2017	Water Temp (C)	15.1
S9	10 Jan 2017	Wave Height Low (ft)	2
S9	10 Jan 2017	High Tide (ft)	6.5
S9	10 Jan 2017	High Tide Time	649
S9	10 Jan 2017	Low Tide (ft)	-1.4
S9	10 Jan 2017	Low Tide Time	1401
S9	10 Jan 2017	Comments	4 Surfers; Water clear
S9	12 Jan 2017	Arrive Time	1024
S9	12 Jan 2017	Weather	Cloudy
S9	12 Jan 2017	Wind Speed (kts)	5.8
S9	12 Jan 2017	Wind Dir	SW
S9	12 Jan 2017	Animal Life	None
S9	12 Jan 2017	Floatables	None
S9	12 Jan 2017	Water Color	Green
S9	12 Jan 2017	Current Direction	N
S9	12 Jan 2017	Water Temp (C)	15.5
S9	12 Jan 2017	Wave Height Low (ft)	4
S9	12 Jan 2017	High Tide (ft)	6.7
S9	12 Jan 2017	High Tide Time	818
S9	12 Jan 2017	Low Tide (ft)	-1.6
S9	12 Jan 2017	Low Tide Time	1527
S9	12 Jan 2017	Comments	Kelp; Seagrass; Water clear
S9	17 Jan 2017	Arrive Time	821
S9	17 Jan 2017	Weather	Sunny
S9	17 Jan 2017	Wind Speed (kts)	1.7
S9	17 Jan 2017	Wind Dir	W
S9	17 Jan 2017	Animal Life	None

Station	Date	Parameter	Value
S9	17 Jan 2017	Floatables	None
S9	17 Jan 2017	Water Color	Green
S9	17 Jan 2017	Current Direction	N
S9	17 Jan 2017	Water Temp (C)	14.2
S9	17 Jan 2017	Wave Height Low (ft)	3
S9	17 Jan 2017	High Tide (ft)	4.1
S9	17 Jan 2017	High Tide Time	1203
S9	17 Jan 2017	Low Tide (ft)	1.9
S9	17 Jan 2017	Low Tide Time	630
S9	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S9	24 Jan 2017	Arrive Time	806
S9	24 Jan 2017	Weather	Cloudy
S9	24 Jan 2017	Wind Speed (kts)	1.3
S9	24 Jan 2017	Wind Dir	W
S9	24 Jan 2017	Animal Life	None
S9	24 Jan 2017	Floatables	None
S9	24 Jan 2017	Water Color	Green
S9	24 Jan 2017	Current Direction	N
S9	24 Jan 2017	Water Temp (C)	13.2
S9	24 Jan 2017	Wave Height Low (ft)	5
S9	24 Jan 2017	High Tide (ft)	5.3
S9	24 Jan 2017	High Tide Time	628
S9	24 Jan 2017	Low Tide (ft)	-0.3
S9	24 Jan 2017	Low Tide Time	1343
S9	24 Jan 2017	Comments	Kelp; Seagrass; 2 Joggers; 4 Persons; Water clear
S9	26 Jan 2017	Arrive Time	743
S9	26 Jan 2017	Weather	Partly Cloudy
S9	26 Jan 2017	Wind Speed (kts)	0.7
S9	26 Jan 2017	Wind Dir	N
S9	26 Jan 2017	Animal Life	None
S9	26 Jan 2017	Floatables	None
S9	26 Jan 2017	Water Color	Brown
S9	26 Jan 2017	Current Direction	N
S9	26 Jan 2017	Water Temp (C)	12
S9	26 Jan 2017	Wave Height Low (ft)	2
S9	26 Jan 2017	High Tide (ft)	5.8
S9	26 Jan 2017	High Tide Time	736
S9	26 Jan 2017	Low Tide (ft)	1.7
S9	26 Jan 2017	Low Tide Time	131
S9	26 Jan 2017	Comments	Water clear
S9	31 Jan 2017	Arrive Time	1237
S9	31 Jan 2017	Weather	Sunny
S9	31 Jan 2017	Wind Speed (kts)	2.1
S9	31 Jan 2017	Wind Dir	SW
S9	31 Jan 2017	Animal Life	None
S9	31 Jan 2017	Floatables	None
S9	31 Jan 2017	Water Color	Green
S9	31 Jan 2017	Current Direction	N
S9	31 Jan 2017	Water Temp (C)	16
S9	31 Jan 2017	Wave Height Low (ft)	1
S9	31 Jan 2017	High Tide (ft)	5
S9	31 Jan 2017	High Tide Time	1037

Station	Date	Parameter	Value
S9	31 Jan 2017	Low Tide (ft)	-0.2
S9	31 Jan 2017	Low Tide Time	1728
S9	31 Jan 2017	Comments	9 Persons; Water clear
S10	03 Jan 2017	Arrive Time	1203
S10	03 Jan 2017	Weather	Cloudy
S10	03 Jan 2017	Wind Speed (kts)	3.1
S10	03 Jan 2017	Wind Dir	W
S10	03 Jan 2017	Animal Life	None
S10	03 Jan 2017	Floatables	None
S10	03 Jan 2017	Water Color	Green
S10	03 Jan 2017	Current Direction	N
S10	03 Jan 2017	Water Temp (C)	15.4
S10	03 Jan 2017	Wave Height Low (ft)	3
S10	03 Jan 2017	High Tide (ft)	4.5
S10	03 Jan 2017	High Tide Time	1132
S10	03 Jan 2017	Low Tide (ft)	2.3
S10	03 Jan 2017	Low Tide Time	553
S10	03 Jan 2017	Comments	Sewage-like odor; Water clear
S10	05 Jan 2017	Arrive Time	1014
S10	05 Jan 2017	Weather	Moderate Rain
S10	05 Jan 2017	Wind Speed (kts)	6.6
S10	05 Jan 2017	Wind Dir	S
S10	05 Jan 2017	Animal Life	None
S10	05 Jan 2017	Floatables	None
S10	05 Jan 2017	Water Color	Green
S10	05 Jan 2017	Current Direction	N
S10	05 Jan 2017	Water Temp (C)	13.8
S10	05 Jan 2017	Wave Height Low (ft)	1
S10	05 Jan 2017	High Tide (ft)	3.4
S10	05 Jan 2017	High Tide Time	1414
S10	05 Jan 2017	Low Tide (ft)	1.9
S10	05 Jan 2017	Low Tide Time	853
S10	05 Jan 2017	Comments	Water clear
S10	06 Jan 2017	Arrive Time	1113
S10	06 Jan 2017	Weather	Sunny
S10	06 Jan 2017	Wind Speed (kts)	5.6
S10	06 Jan 2017	Wind Dir	W
S10	06 Jan 2017	Animal Life	2 Horses
S10	06 Jan 2017	Floatables	None
S10	06 Jan 2017	Water Color	Green
S10	06 Jan 2017	Current Direction	W
S10	06 Jan 2017	Water Temp (C)	16
S10	06 Jan 2017	Wave Height Low (ft)	3
S10	06 Jan 2017	High Tide (ft)	3.2
S10	06 Jan 2017	High Tide Time	1556
S10	06 Jan 2017	Low Tide (ft)	1.3
S10	06 Jan 2017	Low Tide Time	1022
S10	06 Jan 2017	Comments	Kelp; Seagrass; Water clear
S10	08 Jan 2017	Arrive Time	924
S10	08 Jan 2017	Weather	Sunny
S10	08 Jan 2017	Wind Speed (kts)	2.3

Station	Date	Parameter	Value
S10	08 Jan 2017	Wind Dir	W
S10	08 Jan 2017	Animal Life	None
S10	08 Jan 2017	Floatables	None
S10	08 Jan 2017	Water Color	Green
S10	08 Jan 2017	Current Direction	N
S10	08 Jan 2017	Water Temp (C)	15.8
S10	08 Jan 2017	Wave Height Low (ft)	3
S10	08 Jan 2017	High Tide (ft)	5.7
S10	08 Jan 2017	High Tide Time	514
S10	08 Jan 2017	Low Tide (ft)	-0.2
S10	08 Jan 2017	Low Tide Time	1227
S10	08 Jan 2017	Comments	Kelp; Seagrass; Water clear
S10	10 Jan 2017	Arrive Time	1237
S10	10 Jan 2017	Weather	Sunny
S10	10 Jan 2017	Wind Speed (kts)	3.3
S10	10 Jan 2017	Wind Dir	N
S10	10 Jan 2017	Animal Life	None
S10	10 Jan 2017	Floatables	None
S10	10 Jan 2017	Water Color	Green
S10	10 Jan 2017	Current Direction	N
S10	10 Jan 2017	Water Temp (C)	14.9
S10	10 Jan 2017	Wave Height Low (ft)	2
S10	10 Jan 2017	High Tide (ft)	6.5
S10	10 Jan 2017	High Tide Time	649
S10	10 Jan 2017	Low Tide (ft)	-1.4
S10	10 Jan 2017	Low Tide Time	1401
S10	10 Jan 2017	Comments	Water clear
S10	17 Jan 2017	Arrive Time	1205
S10	17 Jan 2017	Weather	Sunny
S10	17 Jan 2017	Wind Speed (kts)	5
S10	17 Jan 2017	Wind Dir	W
S10	17 Jan 2017	Animal Life	None
S10	17 Jan 2017	Floatables	None
S10	17 Jan 2017	Water Color	Green
S10	17 Jan 2017	Current Direction	N
S10	17 Jan 2017	Water Temp (C)	15.6
S10	17 Jan 2017	Wave Height Low (ft)	3
S10	17 Jan 2017	High Tide (ft)	4.1
S10	17 Jan 2017	High Tide Time	1203
S10	17 Jan 2017	Low Tide (ft)	1.9
S10	17 Jan 2017	Low Tide Time	630
S10	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S10	18 Jan 2017	Arrive Time	1105
S10	18 Jan 2017	Weather	Partly Cloudy
S10	18 Jan 2017	Wind Speed (kts)	1.3
S10	18 Jan 2017	Wind Dir	N
S10	18 Jan 2017	Animal Life	None
S10	18 Jan 2017	Floatables	None
S10	18 Jan 2017	Water Color	Green
S10	18 Jan 2017	Current Direction	N
S10	18 Jan 2017	Water Temp (C)	18
S10	18 Jan 2017	Wave Height Low (ft)	2

Station	Date	Parameter	Value
S10	18 Jan 2017	High Tide (ft)	3.4
S10	18 Jan 2017	High Tide Time	1306
S10	18 Jan 2017	Low Tide (ft)	2
S10	18 Jan 2017	Low Tide Time	747
S10	18 Jan 2017	Comments	Water clear
S10	21 Jan 2017	Arrive Time	1104
S10	21 Jan 2017	Weather	Partly Cloudy
S10	21 Jan 2017	Wind Speed (kts)	14.6
S10	21 Jan 2017	Wind Dir	W
S10	21 Jan 2017	Animal Life	None
S10	21 Jan 2017	Floatables	None
S10	21 Jan 2017	Water Color	Brown
S10	21 Jan 2017	Current Direction	N
S10	21 Jan 2017	Water Temp (C)	14.8
S10	21 Jan 2017	Wave Height Low (ft)	4
S10	21 Jan 2017	High Tide (ft)	4.5
S10	21 Jan 2017	High Tide Time	426
S10	21 Jan 2017	Low Tide (ft)	1
S10	21 Jan 2017	Low Tide Time	1156
S10	21 Jan 2017	Comments	Sewage-like odor; Water turbid
S10	24 Jan 2017	Arrive Time	1223
S10	24 Jan 2017	Weather	Partly Cloudy
S10	24 Jan 2017	Wind Speed (kts)	2.6
S10	24 Jan 2017	Wind Dir	W
S10	24 Jan 2017	Animal Life	None
S10	24 Jan 2017	Floatables	Foam
S10	24 Jan 2017	Water Color	Brown
S10	24 Jan 2017	Current Direction	N
S10	24 Jan 2017	Water Temp (C)	15.2
S10	24 Jan 2017	Wave Height Low (ft)	6
S10	24 Jan 2017	High Tide (ft)	5.3
S10	24 Jan 2017	High Tide Time	628
S10	24 Jan 2017	Low Tide (ft)	-0.3
S10	24 Jan 2017	Low Tide Time	1343
S10	24 Jan 2017	Comments	Kelp; Seagrass; Sewage-like odor; Water clear
S10	26 Jan 2017	Arrive Time	1119
S10	26 Jan 2017	Weather	Sunny
S10	26 Jan 2017	Wind Speed (kts)	5.2
S10	26 Jan 2017	Wind Dir	N
S10	26 Jan 2017	Animal Life	None
S10	26 Jan 2017	Floatables	None
S10	26 Jan 2017	Water Color	Brown
S10	26 Jan 2017	Current Direction	N
S10	26 Jan 2017	Water Temp (C)	13.1
S10	26 Jan 2017	Wave Height Low (ft)	2
S10	26 Jan 2017	High Tide (ft)	5.8
S10	26 Jan 2017	High Tide Time	736
S10	26 Jan 2017	Low Tide (ft)	-0.8
S10	26 Jan 2017	Low Tide Time	1444
S10	26 Jan 2017	Comments	Water turbid
S10	27 Jan 2017	Arrive Time	1116

Station	Date	Parameter	Value
S10	27 Jan 2017	Weather	Sunny
S10	27 Jan 2017	Wind Speed (kts)	10.6
S10	27 Jan 2017	Wind Dir	NE
S10	27 Jan 2017	Animal Life	None
S10	27 Jan 2017	Floatables	None
S10	27 Jan 2017	Water Color	Green
S10	27 Jan 2017	Current Direction	N
S10	27 Jan 2017	Water Temp (C)	14.6
S10	27 Jan 2017	Wave Height Low (ft)	4
S10	27 Jan 2017	High Tide (ft)	5.9
S10	27 Jan 2017	High Tide Time	810
S10	27 Jan 2017	Low Tide (ft)	-0.9
S10	27 Jan 2017	Low Tide Time	1514
S10	27 Jan 2017	Comments	Kelp; Seagrass; Water clear
S10	29 Jan 2017	Arrive Time	1203
S10	29 Jan 2017	Weather	Sunny
S10	29 Jan 2017	Wind Speed (kts)	7.5
S10	29 Jan 2017	Wind Dir	NE
S10	29 Jan 2017	Animal Life	None
S10	29 Jan 2017	Floatables	None
S10	29 Jan 2017	Water Color	Green
S10	29 Jan 2017	Current Direction	N
S10	29 Jan 2017	Water Temp (C)	16
S10	29 Jan 2017	Wave Height Low (ft)	3
S10	29 Jan 2017	High Tide (ft)	5.7
S10	29 Jan 2017	High Tide Time	919
S10	29 Jan 2017	Low Tide (ft)	-0.8
S10	29 Jan 2017	Low Tide Time	1618
S10	29 Jan 2017	Comments	Kelp; Seagrass; Water clear
S10	31 Jan 2017	Arrive Time	858
S10	31 Jan 2017	Weather	Sunny
S10	31 Jan 2017	Wind Speed (kts)	1.1
S10	31 Jan 2017	Wind Dir	W
S10	31 Jan 2017	Animal Life	None
S10	31 Jan 2017	Floatables	None
S10	31 Jan 2017	Water Color	Green
S10	31 Jan 2017	Current Direction	N
S10	31 Jan 2017	Water Temp (C)	13.8
S10	31 Jan 2017	Wave Height Low (ft)	2
S10	31 Jan 2017	High Tide (ft)	5
S10	31 Jan 2017	High Tide Time	1037
S10	31 Jan 2017	Low Tide (ft)	1.4
S10	31 Jan 2017	Low Tide Time	446
S10	31 Jan 2017	Comments	Water clear
S11	03 Jan 2017	Arrive Time	940
S11	03 Jan 2017	Weather	Cloudy
S11	03 Jan 2017	Wind Speed (kts)	2.5
S11	03 Jan 2017	Wind Dir	E
S11	03 Jan 2017	Animal Life	None
S11	03 Jan 2017	Floatables	None
S11	03 Jan 2017	Water Color	Green
S11	03 Jan 2017	Current Direction	N

Station	Date	Parameter	Value
S11	03 Jan 2017	Water Temp (C)	15.2
S11	03 Jan 2017	Wave Height Low (ft)	4
S11	03 Jan 2017	High Tide (ft)	4.5
S11	03 Jan 2017	High Tide Time	1132
S11	03 Jan 2017	Low Tide (ft)	2.3
S11	03 Jan 2017	Low Tide Time	553
S11	03 Jan 2017	Comments	Water clear
S11	05 Jan 2017	Arrive Time	900
S11	05 Jan 2017	Weather	Cloudy
S11	05 Jan 2017	Wind Speed (kts)	2.5
S11	05 Jan 2017	Wind Dir	SE
S11	05 Jan 2017	Animal Life	None
S11	05 Jan 2017	Floatables	None
S11	05 Jan 2017	Water Color	Green
S11	05 Jan 2017	Current Direction	N
S11	05 Jan 2017	Water Temp (C)	15
S11	05 Jan 2017	Wave Height Low (ft)	2
S11	05 Jan 2017	High Tide (ft)	3.4
S11	05 Jan 2017	High Tide Time	1414
S11	05 Jan 2017	Low Tide (ft)	1.9
S11	05 Jan 2017	Low Tide Time	853
S11	05 Jan 2017	Comments	Water clear
S11	10 Jan 2017	Arrive Time	1005
S11	10 Jan 2017	Weather	Partly Cloudy
S11	10 Jan 2017	Wind Speed (kts)	3.1
S11	10 Jan 2017	Wind Dir	N
S11	10 Jan 2017	Animal Life	None
S11	10 Jan 2017	Floatables	None
S11	10 Jan 2017	Water Color	Green
S11	10 Jan 2017	Current Direction	N
S11	10 Jan 2017	Water Temp (C)	14.5
S11	10 Jan 2017	Wave Height Low (ft)	2
S11	10 Jan 2017	High Tide (ft)	6.5
S11	10 Jan 2017	High Tide Time	649
S11	10 Jan 2017	Low Tide (ft)	-1.4
S11	10 Jan 2017	Low Tide Time	1401
S11	10 Jan 2017	Comments	Water clear
S11	12 Jan 2017	Arrive Time	903
S11	12 Jan 2017	Weather	Cloudy
S11	12 Jan 2017	Wind Speed (kts)	5
S11	12 Jan 2017	Wind Dir	SW
S11	12 Jan 2017	Animal Life	None
S11	12 Jan 2017	Floatables	None
S11	12 Jan 2017	Water Color	Green
S11	12 Jan 2017	Current Direction	N
S11	12 Jan 2017	Water Temp (C)	15
S11	12 Jan 2017	Wave Height Low (ft)	5
S11	12 Jan 2017	High Tide (ft)	6.7
S11	12 Jan 2017	High Tide Time	818
S11	12 Jan 2017	Low Tide (ft)	-1.6
S11	12 Jan 2017	Low Tide Time	1527
S11	12 Jan 2017	Comments	Kelp; Seagrass; Water clear

Station	Date	Parameter	Value
S11	13 Jan 2017	Arrive Time	930
S11	13 Jan 2017	Weather	Cloudy
S11	13 Jan 2017	Wind Speed (kts)	1.8
S11	13 Jan 2017	Wind Dir	W
S11	13 Jan 2017	Animal Life	None
S11	13 Jan 2017	Floatables	None
S11	13 Jan 2017	Water Color	Green
S11	13 Jan 2017	Current Direction	N
S11	13 Jan 2017	Water Temp (C)	14.6
S11	13 Jan 2017	Wave Height Low (ft)	3
S11	13 Jan 2017	High Tide (ft)	6.5
S11	13 Jan 2017	High Tide Time	902
S11	13 Jan 2017	Low Tide (ft)	1.3
S11	13 Jan 2017	Low Tide Time	300
S11	13 Jan 2017	Comments	Water clear
S11	15 Jan 2017	Arrive Time	850
S11	15 Jan 2017	Weather	Cloudy
S11	15 Jan 2017	Wind Speed (kts)	7.1
S11	15 Jan 2017	Wind Dir	SE
S11	15 Jan 2017	Animal Life	None
S11	15 Jan 2017	Floatables	None
S11	15 Jan 2017	Water Color	Green
S11	15 Jan 2017	Current Direction	S
S11	15 Jan 2017	Water Temp (C)	14.4
S11	15 Jan 2017	Wave Height Low (ft)	2
S11	15 Jan 2017	High Tide (ft)	5.5
S11	15 Jan 2017	High Tide Time	1028
S11	15 Jan 2017	Low Tide (ft)	1.5
S11	15 Jan 2017	Low Tide Time	435
S11	15 Jan 2017	Comments	Water clear
S11	17 Jan 2017	Arrive Time	1330
S11	17 Jan 2017	Weather	Sunny
S11	17 Jan 2017	Wind Speed (kts)	2.9
S11	17 Jan 2017	Wind Dir	W
S11	17 Jan 2017	Animal Life	None
S11	17 Jan 2017	Floatables	None
S11	17 Jan 2017	Water Color	Green
S11	17 Jan 2017	Current Direction	N
S11	17 Jan 2017	Water Temp (C)	15.6
S11	17 Jan 2017	Wave Height Low (ft)	5
S11	17 Jan 2017	High Tide (ft)	4.1
S11	17 Jan 2017	High Tide Time	1203
S11	17 Jan 2017	Low Tide (ft)	0.6
S11	17 Jan 2017	Low Tide Time	1851
S11	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S11	24 Jan 2017	Arrive Time	937
S11	24 Jan 2017	Weather	Drizzle
S11	24 Jan 2017	Wind Speed (kts)	3.8
S11	24 Jan 2017	Wind Dir	W
S11	24 Jan 2017	Animal Life	None
S11	24 Jan 2017	Floatables	None

Station	Date	Parameter	Value
S11	24 Jan 2017	Water Color	Green
S11	24 Jan 2017	Current Direction	N
S11	24 Jan 2017	Water Temp (C)	13.6
S11	24 Jan 2017	Wave Height Low (ft)	5
S11	24 Jan 2017	High Tide (ft)	5.3
S11	24 Jan 2017	High Tide Time	628
S11	24 Jan 2017	Low Tide (ft)	-0.3
S11	24 Jan 2017	Low Tide Time	1343
S11	24 Jan 2017	Comments	Kelp; Seagrass; Water clear
S11	31 Jan 2017	Arrive Time	1033
S11	31 Jan 2017	Weather	Sunny
S11	31 Jan 2017	Wind Speed (kts)	4.4
S11	31 Jan 2017	Wind Dir	W
S11	31 Jan 2017	Animal Life	None
S11	31 Jan 2017	Floatables	None
S11	31 Jan 2017	Water Color	Green
S11	31 Jan 2017	Current Direction	N
S11	31 Jan 2017	Water Temp (C)	15
S11	31 Jan 2017	Wave Height Low (ft)	3
S11	31 Jan 2017	High Tide (ft)	5
S11	31 Jan 2017	High Tide Time	1037
S11	31 Jan 2017	Low Tide (ft)	1.4
S11	31 Jan 2017	Low Tide Time	446
S11	31 Jan 2017	Comments	Water clear
S12	03 Jan 2017	Arrive Time	915
S12	03 Jan 2017	Weather	Cloudy
S12	03 Jan 2017	Wind Speed (kts)	1.7
S12	03 Jan 2017	Wind Dir	W
S12	03 Jan 2017	Animal Life	2 Dolphins
S12	03 Jan 2017	Floatables	None
S12	03 Jan 2017	Water Color	Green
S12	03 Jan 2017	Current Direction	N
S12	03 Jan 2017	Water Temp (C)	14.4
S12	03 Jan 2017	Wave Height Low (ft)	2
S12	03 Jan 2017	High Tide (ft)	4.5
S12	03 Jan 2017	High Tide Time	1132
S12	03 Jan 2017	Low Tide (ft)	2.3
S12	03 Jan 2017	Low Tide Time	553
S12	03 Jan 2017	Comments	Water clear
S12	10 Jan 2017	Arrive Time	940
S12	10 Jan 2017	Weather	Partly Cloudy
S12	10 Jan 2017	Wind Speed (kts)	0.7
S12	10 Jan 2017	Wind Dir	N
S12	10 Jan 2017	Animal Life	None
S12	10 Jan 2017	Floatables	None
S12	10 Jan 2017	Water Color	Green
S12	10 Jan 2017	Current Direction	N
S12	10 Jan 2017	Water Temp (C)	14.6
S12	10 Jan 2017	Wave Height Low (ft)	2
S12	10 Jan 2017	High Tide (ft)	6.5
S12	10 Jan 2017	High Tide Time	649
S12	10 Jan 2017	Low Tide (ft)	-1.4

Station	Date	Parameter	Value
S12	10 Jan 2017	Low Tide Time	1401
S12	10 Jan 2017	Comments	4 Persons; Water clear
S12	17 Jan 2017	Arrive Time	923
S12	17 Jan 2017	Weather	Sunny
S12	17 Jan 2017	Wind Speed (kts)	0.1
S12	17 Jan 2017	Wind Dir	W
S12	17 Jan 2017	Animal Life	None
S12	17 Jan 2017	Floatables	None
S12	17 Jan 2017	Water Color	Green
S12	17 Jan 2017	Current Direction	N
S12	17 Jan 2017	Water Temp (C)	15
S12	17 Jan 2017	Wave Height Low (ft)	3
S12	17 Jan 2017	High Tide (ft)	4.1
S12	17 Jan 2017	High Tide Time	1203
S12	17 Jan 2017	Low Tide (ft)	1.9
S12	17 Jan 2017	Low Tide Time	630
S12	17 Jan 2017	Comments	Kelp; Seagrass; Water clear
S12	24 Jan 2017	Arrive Time	913
S12	24 Jan 2017	Weather	Partly Cloudy
S12	24 Jan 2017	Wind Speed (kts)	1.9
S12	24 Jan 2017	Wind Dir	SW
S12	24 Jan 2017	Animal Life	None
S12	24 Jan 2017	Floatables	None
S12	24 Jan 2017	Water Color	Green
S12	24 Jan 2017	Current Direction	N
S12	24 Jan 2017	Water Temp (C)	14.6
S12	24 Jan 2017	Wave Height Low (ft)	4
S12	24 Jan 2017	High Tide (ft)	5.3
S12	24 Jan 2017	High Tide Time	628
S12	24 Jan 2017	Low Tide (ft)	-0.3
S12	24 Jan 2017	Low Tide Time	1343
S12	24 Jan 2017	Comments	Kelp; Seagrass; Water clear
S12	26 Jan 2017	Arrive Time	854
S12	26 Jan 2017	Weather	Sunny
S12	26 Jan 2017	Wind Speed (kts)	0.3
S12	26 Jan 2017	Wind Dir	N
S12	26 Jan 2017	Animal Life	None
S12	26 Jan 2017	Floatables	None
S12	26 Jan 2017	Water Color	Green
S12	26 Jan 2017	Current Direction	N
S12	26 Jan 2017	Water Temp (C)	14.6
S12	26 Jan 2017	Wave Height Low (ft)	2
S12	26 Jan 2017	High Tide (ft)	5.8
S12	26 Jan 2017	High Tide Time	736
S12	26 Jan 2017	Low Tide (ft)	-0.8
S12	26 Jan 2017	Low Tide Time	1444
S12	26 Jan 2017	Comments	Water clear
S12	31 Jan 2017	Arrive Time	1015
S12	31 Jan 2017	Weather	Sunny
S12	31 Jan 2017	Wind Speed (kts)	3.4
S12	31 Jan 2017	Wind Dir	W

Station	Date	Parameter	Value
S12	31 Jan 2017	Animal Life	1 Dog
S12	31 Jan 2017	Floatables	None
S12	31 Jan 2017	Water Color	Green
S12	31 Jan 2017	Current Direction	N
S12	31 Jan 2017	Water Temp (C)	15.6
S12	31 Jan 2017	Wave Height Low (ft)	2
S12	31 Jan 2017	High Tide (ft)	5
S12	31 Jan 2017	High Tide Time	1037
S12	31 Jan 2017	Low Tide (ft)	1.4
S12	31 Jan 2017	Low Tide Time	446
S12	31 Jan 2017	Comments	5 Persons; Water clear

Kelp Stations

Table 3.1

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

Date	I19	I24	I25	I26	I32	I39	I40
01 Jan 2017	222*	27*	2*	5*	3*	2*	63*
02 Jan 2017	222*	27*	2*	5*	3*	2*	63*
03 Jan 2017	222*	27*	2*	5*	3*	2*	63*
04 Jan 2017	216*	17*	2*	2*	4*	2*	41*
05 Jan 2017	216*	17*	2*	2*	4*	2*	41*
06 Jan 2017	320*	79*	15*	4*	15*	9*	163*
07 Jan 2017	320*	79*	15*	4*	15*	9*	163*
08 Jan 2017	320*	79*	15*	4*	15*	9*	163*
09 Jan 2017	320*	79*	15*	4*	15*	9*	163*
10 Jan 2017	320*	79*	15*	4*	15*	9*	163*
11 Jan 2017	320*	79*	15*	4*	15*	9*	163*
12 Jan 2017	1734*	269*	29*	5*	28*	15*	706*
13 Jan 2017	2011*	522*	94*	20*	66*	50*	1462*
14 Jan 2017	2011*	522*	94*	20*	66*	50*	1462*
15 Jan 2017	2011*	522*	94*	20*	66*	50*	1462*
16 Jan 2017	1468*	3334*	339*	43*	111*	148*	6586*
17 Jan 2017	2110*	2884*	549*	60*	131*	152*	3959*
18 Jan 2017	2110*	2884*	549*	60*	131*	152*	3959*
19 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
20 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
21 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
22 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
23 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
24 Jan 2017	2725*	3755*	3567*	186*	530*	644*	4796*
25 Jan 2017	3083*	4302*	2658*	258*	506*	1101*	5550*
26 Jan 2017	3083*	4302*	2658*	258*	506*	1101*	5550*
27 Jan 2017	3083*	4302*	2658*	258*	506*	1101*	5550*
28 Jan 2017	3083*	4302*	2658*	258*	506*	1101*	5550*
29 Jan 2017	1470	3437	1789	158	267	312	4732
30 Jan 2017	1470	3437	1789	158	267	312	4732
31 Jan 2017	1470	3437	1789	158	267	312	4732

* Geometric mean calculated using n<5

Table 3.2

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

Date	I19	I24	I25	I26	I32	I39	I40
01 Jan 2017	24*	7*	2*	2*	2*	2*	8*
02 Jan 2017	24*	7*	2*	2*	2*	2*	8*
03 Jan 2017	24*	7*	2*	2*	2*	2*	8*
04 Jan 2017	25*	7*	2*	2*	2*	2*	6*
05 Jan 2017	25*	7*	2*	2*	2*	2*	6*
06 Jan 2017	22*	18*	6*	2*	4*	4*	25*
07 Jan 2017	22*	18*	6*	2*	4*	4*	25*
08 Jan 2017	22*	18*	6*	2*	4*	4*	25*
09 Jan 2017	22*	18*	6*	2*	4*	4*	25*
10 Jan 2017	22*	18*	6*	2*	4*	4*	25*
11 Jan 2017	22*	18*	6*	2*	4*	4*	25*
12 Jan 2017	50*	36*	9*	2*	5*	6*	57*
13 Jan 2017	68*	54*	19*	7*	11*	14*	113*
14 Jan 2017	68*	54*	19*	7*	11*	14*	113*
15 Jan 2017	68*	54*	19*	7*	11*	14*	113*
16 Jan 2017	45*	161*	41*	10*	18*	27*	436*
17 Jan 2017	72*	160*	51*	10*	18*	21*	294*
18 Jan 2017	72*	160*	51*	10*	18*	21*	294*
19 Jan 2017	91*	196*	151*	18*	36*	45*	480*
20 Jan 2017	91*	196*	151*	18*	36*	45*	480*
21 Jan 2017	91*	196*	151*	18*	36*	45*	480*
22 Jan 2017	91*	196*	151*	18*	36*	45*	480*
23 Jan 2017	91*	196*	151*	18*	36*	45*	480*
24 Jan 2017	91*	196*	151*	18*	36*	45*	480*
25 Jan 2017	131*	313*	156*	24*	37*	78*	686*
26 Jan 2017	131*	313*	156*	24*	37*	78*	686*
27 Jan 2017	131*	313*	156*	24*	37*	78*	686*
28 Jan 2017	131*	313*	156*	24*	37*	78*	686*
29 Jan 2017	65	326	125	15	24	38	584
30 Jan 2017	65	326	125	15	24	38	584
31 Jan 2017	65	326	125	15	24	38	584

* Geometric mean calculated using n<5

Table 3.3

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

Date	I19	I24	I25	I26	I32	I39	I40
01 Jan 2017	15*	4*	2*	2*	2*	2*	6*
02 Jan 2017	15*	4*	2*	2*	2*	2*	6*
03 Jan 2017	15*	4*	2*	2*	2*	2*	6*
04 Jan 2017	20*	5*	2*	2*	2*	2*	6*
05 Jan 2017	20*	5*	2*	2*	2*	2*	6*
06 Jan 2017	27*	12*	5*	3*	3*	3*	18*
07 Jan 2017	27*	12*	5*	3*	3*	3*	18*
08 Jan 2017	27*	12*	5*	3*	3*	3*	18*
09 Jan 2017	27*	12*	5*	3*	3*	3*	18*
10 Jan 2017	27*	12*	5*	3*	3*	3*	18*
11 Jan 2017	27*	12*	5*	3*	3*	3*	18*
12 Jan 2017	64*	23*	6*	3*	3*	4*	37*
13 Jan 2017	96*	44*	17*	8*	8*	11*	129*
14 Jan 2017	96*	44*	17*	8*	8*	11*	129*
15 Jan 2017	96*	44*	17*	8*	8*	11*	129*
16 Jan 2017	83*	125*	33*	12*	12*	20*	470*
17 Jan 2017	102*	126*	41*	16*	15*	24*	355*
18 Jan 2017	102*	126*	41*	16*	15*	24*	355*
19 Jan 2017	155*	212*	113*	32*	30*	54*	747*
20 Jan 2017	155*	212*	113*	32*	30*	54*	747*
21 Jan 2017	155*	212*	113*	32*	30*	54*	747*
22 Jan 2017	155*	212*	113*	32*	30*	54*	747*
23 Jan 2017	155*	212*	113*	32*	30*	54*	747*
24 Jan 2017	155*	212*	113*	32*	30*	54*	747*
25 Jan 2017	221*	256*	144*	48*	43*	99*	1005*
26 Jan 2017	221*	256*	144*	48*	43*	99*	1005*
27 Jan 2017	221*	256*	144*	48*	43*	99*	1005*
28 Jan 2017	221*	256*	144*	48*	43*	99*	1005*
29 Jan 2017	170	239	123	29	40	45	809
30 Jan 2017	170	239	123	29	40	45	809
31 Jan 2017	170	239	123	29	40	45	809

* Geometric mean calculated using n<5

Table 3.4

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

Date	I19	I24	I25	I26	I32	I39	I40
06 Jan 2017	IC	E	E	IC	IC	IC	E
13 Jan 2017	IC	IC	IC	IC	IC	IC	E
17 Jan 2017	E	IC	IC	IC	IC	IC	IC
25 Jan 2017	IC	E	IC	IC	IC	E	E
29 Jan 2017	IC						

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.5

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

Date	I19	I24	I25	I26	I32	I39	I40
06 Jan 2017	IC	E	IC	IC	IC	IC	E
13 Jan 2017	IC	IC	IC	IC	IC	E	E
17 Jan 2017	E	IC	IC	IC	IC	IC	IC
25 Jan 2017	E	E	IC	IC	IC	E	E
29 Jan 2017	IC	E	IC	IC	IC	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.6

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

Date	I19	I24	I25	I26	I32	I39	I40
06 Jan 2017	E	E	E	IC	IC	IC	E
13 Jan 2017	E	E	E	E	E	E	E
17 Jan 2017	E	E	IC	IC	IC	IC	E
25 Jan 2017	E	E	E	E	E	E	E
29 Jan 2017	E	E	IC	IC	IC	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.7

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

Date	I19	I24	I25	I26	I32	I39	I40
06 Jan 2017	IC	IC	IC	IC	IC	IC	E
13 Jan 2017	IC	IC	E	E	IC	E	E
17 Jan 2017	IC						
25 Jan 2017	E	E	E	IC	IC	IC	E
29 Jan 2017	IC	E	IC	IC	IC	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

Table 3.8

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

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I19	06 Jan 2017	1138	2	40e	16e	4e	0.400	15.1	70.73	8.5	33.04	8.1	ns	ns
I19	06 Jan 2017	1138	6	50	6e	2e	0.120	14.8	71.82	8.3	33.16	8.2	ns	ns
I19	06 Jan 2017	1138	11	3000e	24e	180e	0.008	14.8	33.70	6.9	33.18	8.1	ns	ns
I19	13 Jan 2017	1107	2	6600	300e	520	0.045	15.2	48.54	7.9	33.08	8.1	ns	ns
I19	13 Jan 2017	1107	6	600	110	180e	0.183	15.2	48.31	7.8	33.21	8.1	ns	ns
I19	13 Jan 2017	1107	11	2200e	100e	240e	0.045	15.1	40.39	7.8	33.21	8.1	ns	ns
I19	17 Jan 2017	1140	2	12000	540	160e	0.045	15.0	36.00	7.6	33.17	8.1	ns	ns
I19	17 Jan 2017	1140	6	5400	260e	320e	0.048	14.9	43.62	7.6	33.21	8.1	ns	ns
I19	17 Jan 2017	1140	11	1400e	70	100e	0.050	14.9	60.65	6.8	33.24	8.1	ns	ns
I19	25 Jan 2017	1113	2	4000	440	580	0.110	14.7	17.86	8.3	33.09	8.1	ns	ns
I19	25 Jan 2017	1113	6	3800e	300e	540	0.079	14.6	14.83	8.3	33.12	8.1	ns	ns
I19	25 Jan 2017	1113	11	5600	440	800	0.079	14.6	9.64	8.4	33.15	8.1	ns	ns
I19	29 Jan 2017	1031	2	34e	<2	10e	0.059	13.8	40.39	6.2	33.30	8.1	ns	ns
I19	29 Jan 2017	1031	6	14e	<2	6e	0.143	13.3	24.44	5.7	33.34	8.0	ns	ns
I19	29 Jan 2017	1031	11	180e	8e	160e	0.044	13.0	26.41	5.5	33.36	8.0	ns	ns
I24	06 Jan 2017	1202	2	>16000	640	620	0.040	15.0	62.24	7.9	32.66	8.1	ns	ns
I24	06 Jan 2017	1202	6	5600	120e	50	0.021	14.8	76.85	7.9	33.11	8.1	ns	ns
I24	06 Jan 2017	1202	11	800e	46	12e	0.058	14.8	72.97	6.6	33.16	8.1	ns	ns
I24	13 Jan 2017	1128	2	5000	180e	440	0.036	15.2	55.76	8.3	33.11	8.1	ns	ns
I24	13 Jan 2017	1128	6	5200	240e	360e	0.046	15.2	57.71	8.2	33.11	8.2	ns	ns
I24	13 Jan 2017	1128	11	1200e	110	160e	0.092	15.1	35.99	7.7	33.23	8.1	ns	ns
I24	17 Jan 2017	1202	2	1000e	200e	54	0.200	15.4	50.99	7.8	33.07	8.1	ns	ns
I24	17 Jan 2017	1202	6	3400e	220e	220e	0.065	15.0	65.80	7.5	33.17	8.1	ns	ns
I24	17 Jan 2017	1202	11	1200	56	120e	0.047	14.9	52.08	6.8	33.22	8.1	ns	ns
I24	25 Jan 2017	1134	2	>16000	3400e	820	0.212	14.4	10.97	8.1	32.09	8.1	ns	ns
I24	25 Jan 2017	1134	6	1400e	220e	480	0.157	14.3	18.43	7.7	33.07	8.1	ns	ns
I24	25 Jan 2017	1134	11	2000e	200e	50	0.100	14.3	14.58	7.8	33.07	8.1	ns	ns
I24	29 Jan 2017	1052	2	1100	400	140e	0.364	14.2	36.50	7.7	33.22	8.1	ns	ns
I24	29 Jan 2017	1052	6	3000e	700	280e	0.233	13.9	33.00	6.1	33.29	8.1	ns	ns
I24	29 Jan 2017	1052	11	100e	52	120	0.520	13.3	12.87	6.0	33.35	8.0	ns	ns
I25	06 Jan 2017	1211	2	14000	280e	140e	0.020	15.0	65.60	8.4	32.66	8.1	ns	ns
I25	06 Jan 2017	1211	6	2800e	220e	20e	0.079	14.8	77.16	7.8	33.12	8.1	ns	ns
I25	06 Jan 2017	1211	9	660	20e	8e	0.030	14.8	70.47	6.8	33.19	8.1	ns	ns
I25	13 Jan 2017	1136	2	7200	260e	360e	0.036	15.2	54.48	8.3	33.09	8.2	ns	ns
I25	13 Jan 2017	1136	6	1400e	80	120e	0.057	15.1	71.60	7.7	33.22	8.1	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I25	13 Jan 2017	1136	9	1400e	240e	520	0.171	15.1	52.03	7.7	33.22	8.1	ns	ns
I25	17 Jan 2017	1209	2	4800	140e	54	0.029	15.1	50.53	8.2	33.13	8.2	ns	ns
I25	17 Jan 2017	1209	6	920	100	80	0.109	15.0	55.52	7.3	33.17	8.1	ns	ns
I25	17 Jan 2017	1209	9	1300	70	100e	0.054	15.0	47.56	7.4	33.18	8.1	ns	ns
I25	25 Jan 2017	1142	2	1200e	220e	260e	0.183	14.2	40.84	8.1	32.62	8.1	ns	ns
I25	25 Jan 2017	1142	6	1300	220e	220e	0.169	14.4	15.09	7.4	33.07	8.1	ns	ns
I25	25 Jan 2017	1142	9	800e	76	400e	0.095	14.4	12.12	7.4	33.08	8.1	ns	ns
I25	29 Jan 2017	1101	2	840	120e	82	0.143	14.1	38.24	7.0	33.24	8.1	ns	ns
I25	29 Jan 2017	1101	6	180e	32e	94	0.178	13.7	24.45	5.7	33.32	8.1	ns	ns
I25	29 Jan 2017	1101	9	80e	4e	22e	0.050	13.1	47.62	5.4	33.37	8.0	ns	ns
I26	06 Jan 2017	1222	2	8e	<2	<2	0.250	14.9	75.51	8.3	33.09	8.2	ns	ns
I26	06 Jan 2017	1222	6	8e	<2	2e	0.250	14.8	77.52	7.5	33.12	8.1	ns	ns
I26	06 Jan 2017	1222	9	80e	4e	12e	0.050	14.8	70.97	6.6	33.19	8.1	ns	ns
I26	13 Jan 2017	1147	2	1600e	400	140e	0.250	15.1	58.29	8.1	32.99	8.1	ns	ns
I26	13 Jan 2017	1147	6	1200e	72	160e	0.060	15.1	56.65	7.5	33.17	8.1	ns	ns
I26	13 Jan 2017	1147	9	800e	86	200e	0.107	15.1	27.45	7.5	33.18	8.1	ns	ns
I26	17 Jan 2017	1220	2	<2	<2	<2	1.000	15.3	75.03	8.9	33.11	8.2	ns	ns
I26	17 Jan 2017	1220	6	160e	2e	16e	0.012	15.0	68.92	7.0	33.16	8.2	ns	ns
I26	17 Jan 2017	1220	9	340e	32e	88	0.094	14.9	43.16	6.6	33.24	8.1	ns	ns
I26	25 Jan 2017	1151	2	400e	48	60	0.120	14.5	37.89	7.9	33.05	8.1	ns	ns
I26	25 Jan 2017	1151	6	700	50	220e	0.071	14.5	13.18	7.1	33.14	8.1	ns	ns
I26	25 Jan 2017	1151	9	960	60	240e	0.062	14.6	4.35	7.3	33.17	8.1	ns	ns
I26	29 Jan 2017	1115	2	<2	<2	<2	1.000	14.3	51.32	6.9	33.25	8.1	ns	ns
I26	29 Jan 2017	1115	6	24e	<2	4e	0.083	13.2	63.18	5.4	33.36	8.0	ns	ns
I26	29 Jan 2017	1115	9	40e	4e	6e	0.100	13.1	43.56	5.6	33.35	8.0	ns	ns
I32	06 Jan 2017	1237	2	1600e	42	18e	0.026	15.1	70.79	8.2	33.05	8.1	ns	ns
I32	06 Jan 2017	1237	6	800	68	10e	0.085	14.8	69.35	7.5	33.09	8.1	ns	ns
I32	06 Jan 2017	1237	9	72	<2	<2	0.028	14.8	34.70	7.1	33.11	8.1	ns	ns
I32	13 Jan 2017	1201	2	1000e	74	60	0.074	15.1	60.28	8.2	33.03	8.1	ns	ns
I32	13 Jan 2017	1201	6	800e	100	120	0.125	15.1	67.06	7.9	33.14	8.1	ns	ns
I32	13 Jan 2017	1201	9	700	74	82	0.106	15.1	62.47	7.8	33.16	8.1	ns	ns
I32	17 Jan 2017	1235	2	12e	<2	<2	0.167	15.3	65.75	7.8	33.17	8.1	ns	ns
I32	17 Jan 2017	1235	6	120e	16e	28e	0.133	14.9	59.85	6.8	33.18	8.1	ns	ns
I32	17 Jan 2017	1235	9	520	28e	62	0.054	14.9	35.99	6.8	33.22	8.1	ns	ns
I32	25 Jan 2017	1202	2	200e	14e	40	0.070	14.4	20.93	8.3	33.10	8.1	ns	ns
I32	25 Jan 2017	1202	6	580	36e	110	0.062	14.3	19.75	8.3	33.10	8.1	ns	ns
I32	25 Jan 2017	1202	9	540	66	220e	0.122	14.3	15.17	8.2	33.11	8.1	ns	ns
I32	29 Jan 2017	1132	2	2e	2e	58	1.000	14.0	38.37	6.7	33.27	8.1	ns	ns
I32	29 Jan 2017	1132	6	40e	4e	<2	0.100	13.4	44.59	5.4	33.34	8.1	ns	ns
I32	29 Jan 2017	1132	9	20e	6e	30e	0.300	13.3	13.99	5.6	33.35	8.0	ns	ns
I39	06 Jan 2017	1109	2	2600e	140	46	0.054	15.0	79.01	8.5	33.05	8.2	ns	ns

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH	OG	SUSO
I39	06 Jan 2017	1109	12	20e	<2	<2	0.100	14.8	83.74	7.5	33.23	8.1	ns	ns
I39	06 Jan 2017	1109	18	26e	2e	2e	0.077	14.6	77.72	6.5	33.29	8.1	ns	ns
I39	13 Jan 2017	1044	2	5400	600	700e	0.111	14.9	72.43	8.2	32.96	8.2	ns	ns
I39	13 Jan 2017	1044	12	80e	4e	6e	0.050	14.8	71.11	7.1	33.24	8.1	ns	ns
I39	13 Jan 2017	1044	18	40e	2e	12e	0.050	14.5	63.70	6.8	33.28	8.1	ns	ns
I39	17 Jan 2017	1118	2	14e	2e	8e	0.143	15.2	70.71	8.2	33.14	8.2	ns	ns
I39	17 Jan 2017	1118	12	260e	4e	68	0.015	14.9	74.33	6.8	33.18	8.1	ns	ns
I39	17 Jan 2017	1118	18	220e	22e	40	0.100	14.6	41.62	6.0	33.30	8.0	ns	ns
I39	25 Jan 2017	1033	2	>16000	1200e	1600e	0.075	14.1	38.11	8.0	32.19	8.2	ns	ns
I39	25 Jan 2017	1033	12	160e	26e	80	0.163	14.5	42.39	7.5	33.10	8.1	ns	ns
I39	25 Jan 2017	1033	18	320e	6e	160e	0.019	14.7	28.90	7.4	33.21	8.1	ns	ns
I39	29 Jan 2017	1012	2	<2	<2	<2	1.000	14.2	81.83	7.5	33.29	8.2	ns	ns
I39	29 Jan 2017	1012	12	<2	<2	<2	1.000	14.1	80.93	7.2	33.30	8.1	ns	ns
I39	29 Jan 2017	1012	18	2e	<2	<2	1.000	13.9	78.33	6.2	33.29	8.1	ns	ns
I40	06 Jan 2017	1151	2	>16000	3200e	1000e	0.200	15.2	46.21	8.4	32.40	8.1	ns	ns
I40	06 Jan 2017	1151	6	11000	760	300e	0.069	14.8	64.02	7.8	33.10	8.1	ns	ns
I40	06 Jan 2017	1151	9	2600e	100	220e	0.038	14.8	43.71	6.4	33.13	8.1	ns	ns
I40	13 Jan 2017	1119	2	>16000	2000e	15000e	0.125	15.1	1.67	8.3	32.56	8.1	ns	ns
I40	13 Jan 2017	1119	6	11000	560	1000	0.051	15.1	50.84	8.2	33.19	8.1	ns	ns
I40	13 Jan 2017	1119	9	12000	160e	220e	0.013	15.1	71.41	8.1	33.23	8.1	ns	ns
I40	17 Jan 2017	1153	2	880	130	56	0.148	15.2	46.00	7.7	33.16	8.1	ns	ns
I40	17 Jan 2017	1153	6	800e	66	100e	0.082	15.0	60.49	7.3	33.19	8.1	ns	ns
I40	17 Jan 2017	1153	9	900	74	300e	0.082	14.8	36.51	5.9	33.26	8.1	ns	ns
I40	25 Jan 2017	1125	2	>16000	4400	4400	0.275	14.1	8.94	7.8	32.46	8.1	ns	ns
I40	25 Jan 2017	1125	6	2000e	320e	760	0.160	14.4	15.51	7.3	33.06	8.1	ns	ns
I40	25 Jan 2017	1125	9	7800	1300e	2200e	0.167	14.5	11.19	7.0	33.14	8.1	ns	ns
I40	29 Jan 2017	1043	2	1800e	180e	140e	0.100	13.9	34.84	7.6	33.23	8.1	ns	ns
I40	29 Jan 2017	1043	6	5400	660	700	0.122	13.7	29.40	6.4	33.27	8.1	ns	ns
I40	29 Jan 2017	1043	9	300e	80e	180e	0.267	13.4	16.88	5.7	33.33	8.1	ns	ns

ns = not sampled

ND = no data

Table 3.9

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

Station	Date	Parameter	Value
I19	06 Jan 2017	Depth (m)	10
I19	06 Jan 2017	Arrive Time	1138
I19	06 Jan 2017	Depart Time	1144
I19	06 Jan 2017	Air Temp (C)	15
I19	06 Jan 2017	Weather	Clear
I19	06 Jan 2017	Visibility (mi)	9
I19	06 Jan 2017	Wind Speed (kts)	5
I19	06 Jan 2017	Wind Dir	S
I19	06 Jan 2017	Water Color	Green
I19	06 Jan 2017	Wave Ht Low (ft)	3
I19	06 Jan 2017	Wave Period (sec)	16
I19	06 Jan 2017	Sea State	Calm
I19	06 Jan 2017	High Tide (ft)	3.2
I19	06 Jan 2017	High Tide Time	1556
I19	06 Jan 2017	Low Tide (ft)	1.3
I19	06 Jan 2017	Low Tide Time	1022
I19	06 Jan 2017	Comments	
I19	13 Jan 2017	Depth (m)	11
I19	13 Jan 2017	Arrive Time	1107
I19	13 Jan 2017	Depart Time	1109
I19	13 Jan 2017	Air Temp (C)	14
I19	13 Jan 2017	Weather	Partly Cloudy
I19	13 Jan 2017	Visibility (mi)	9
I19	13 Jan 2017	Wind Speed (kts)	5
I19	13 Jan 2017	Wind Dir	NW
I19	13 Jan 2017	Water Color	Green
I19	13 Jan 2017	Wave Ht Low (ft)	6
I19	13 Jan 2017	Wave Period (sec)	4
I19	13 Jan 2017	Sea State	Confused swell
I19	13 Jan 2017	High Tide (ft)	6.5
I19	13 Jan 2017	High Tide Time	902
I19	13 Jan 2017	Low Tide (ft)	-1.4
I19	13 Jan 2017	Low Tide Time	1608
I19	13 Jan 2017	Comments	Low salinity at surface due to rain and runoff; Freshwater lens
I19	17 Jan 2017	Depth (m)	11
I19	17 Jan 2017	Arrive Time	1140
I19	17 Jan 2017	Depart Time	1144
I19	17 Jan 2017	Air Temp (C)	15
I19	17 Jan 2017	Weather	Clear
I19	17 Jan 2017	Visibility (mi)	9
I19	17 Jan 2017	Wind Speed (kts)	1
I19	17 Jan 2017	Wind Dir	S
I19	17 Jan 2017	Water Color	Green
I19	17 Jan 2017	Wave Ht Low (ft)	3
I19	17 Jan 2017	Wave Period (sec)	13
I19	17 Jan 2017	Sea State	Calm
I19	17 Jan 2017	High Tide (ft)	4.1
I19	17 Jan 2017	High Tide Time	1203
I19	17 Jan 2017	Low Tide (ft)	1.9

Station	Date	Parameter	Value
I19	17 Jan 2017	Low Tide Time	630
I19	17 Jan 2017	Comments	
I19	25 Jan 2017	Depth (m)	10
I19	25 Jan 2017	Arrive Time	1113
I19	25 Jan 2017	Depart Time	1117
I19	25 Jan 2017	Air Temp (C)	13
I19	25 Jan 2017	Weather	Clear
I19	25 Jan 2017	Visibility (mi)	12
I19	25 Jan 2017	Wind Speed (kts)	4
I19	25 Jan 2017	Wind Dir	NE
I19	25 Jan 2017	Water Color	Brownish-Green
I19	25 Jan 2017	Wave Ht Low (ft)	8
I19	25 Jan 2017	Wave Period (sec)	9
I19	25 Jan 2017	Sea State	Calm
I19	25 Jan 2017	High Tide (ft)	5.6
I19	25 Jan 2017	High Tide Time	703
I19	25 Jan 2017	Low Tide (ft)	-0.6
I19	25 Jan 2017	Low Tide Time	1413
I19	25 Jan 2017	Comments	Low salinity throughout water column
I19	29 Jan 2017	Depth (m)	12
I19	29 Jan 2017	Arrive Time	1031
I19	29 Jan 2017	Depart Time	1034
I19	29 Jan 2017	Air Temp (C)	15
I19	29 Jan 2017	Weather	Clear
I19	29 Jan 2017	Visibility (mi)	14
I19	29 Jan 2017	Wind Speed (kts)	9
I19	29 Jan 2017	Wind Dir	W
I19	29 Jan 2017	Water Color	Green
I19	29 Jan 2017	Wave Ht Low (ft)	3
I19	29 Jan 2017	Wave Period (sec)	9
I19	29 Jan 2017	Sea State	Calm
I19	29 Jan 2017	High Tide (ft)	5.7
I19	29 Jan 2017	High Tide Time	919
I19	29 Jan 2017	Low Tide (ft)	-0.8
I19	29 Jan 2017	Low Tide Time	1618
I19	29 Jan 2017	Comments	
I24	06 Jan 2017	Depth (m)	10
I24	06 Jan 2017	Arrive Time	1202
I24	06 Jan 2017	Depart Time	1207
I24	06 Jan 2017	Air Temp (C)	15
I24	06 Jan 2017	Weather	Clear
I24	06 Jan 2017	Visibility (mi)	9
I24	06 Jan 2017	Wind Speed (kts)	9
I24	06 Jan 2017	Wind Dir	NE
I24	06 Jan 2017	Water Color	Green
I24	06 Jan 2017	Wave Ht Low (ft)	3
I24	06 Jan 2017	Wave Period (sec)	16
I24	06 Jan 2017	Sea State	Calm
I24	06 Jan 2017	High Tide (ft)	3.2
I24	06 Jan 2017	High Tide Time	1556
I24	06 Jan 2017	Low Tide (ft)	1.3
I24	06 Jan 2017	Low Tide Time	1022

Station	Date	Parameter	Value
I24	06 Jan 2017	Comments	
I24	13 Jan 2017	Depth (m)	13
I24	13 Jan 2017	Arrive Time	1128
I24	13 Jan 2017	Depart Time	1131
I24	13 Jan 2017	Air Temp (C)	14
I24	13 Jan 2017	Weather	Partly Cloudy
I24	13 Jan 2017	Visibility (mi)	9
I24	13 Jan 2017	Wind Speed (kts)	8
I24	13 Jan 2017	Wind Dir	S
I24	13 Jan 2017	Water Color	Green
I24	13 Jan 2017	Wave Ht Low (ft)	6
I24	13 Jan 2017	Wave Period (sec)	4
I24	13 Jan 2017	Sea State	Confused swell
I24	13 Jan 2017	High Tide (ft)	6.5
I24	13 Jan 2017	High Tide Time	902
I24	13 Jan 2017	Low Tide (ft)	-1.4
I24	13 Jan 2017	Low Tide Time	1608
I24	13 Jan 2017	Comments	
I24	17 Jan 2017	Depth (m)	13
I24	17 Jan 2017	Arrive Time	1202
I24	17 Jan 2017	Depart Time	1206
I24	17 Jan 2017	Air Temp (C)	14
I24	17 Jan 2017	Weather	Clear
I24	17 Jan 2017	Visibility (mi)	9
I24	17 Jan 2017	Wind Speed (kts)	8
I24	17 Jan 2017	Wind Dir	NE
I24	17 Jan 2017	Water Color	Green
I24	17 Jan 2017	Wave Ht Low (ft)	3
I24	17 Jan 2017	Wave Period (sec)	13
I24	17 Jan 2017	Sea State	Calm
I24	17 Jan 2017	High Tide (ft)	4.1
I24	17 Jan 2017	High Tide Time	1203
I24	17 Jan 2017	Low Tide (ft)	1.9
I24	17 Jan 2017	Low Tide Time	630
I24	17 Jan 2017	Comments	
I24	25 Jan 2017	Depth (m)	10
I24	25 Jan 2017	Arrive Time	1134
I24	25 Jan 2017	Depart Time	1139
I24	25 Jan 2017	Air Temp (C)	12
I24	25 Jan 2017	Weather	Clear
I24	25 Jan 2017	Visibility (mi)	12
I24	25 Jan 2017	Wind Speed (kts)	4
I24	25 Jan 2017	Wind Dir	NW
I24	25 Jan 2017	Water Color	Brown
I24	25 Jan 2017	Wave Ht Low (ft)	8
I24	25 Jan 2017	Wave Period (sec)	9
I24	25 Jan 2017	Sea State	Calm
I24	25 Jan 2017	High Tide (ft)	5.6
I24	25 Jan 2017	High Tide Time	703
I24	25 Jan 2017	Low Tide (ft)	-0.6
I24	25 Jan 2017	Low Tide Time	1413
I24	25 Jan 2017	Comments	Low salinity low transmissivity high cdom due to runoff

Station	Date	Parameter	Value
I24	29 Jan 2017	Depth (m)	11
I24	29 Jan 2017	Arrive Time	1052
I24	29 Jan 2017	Depart Time	1056
I24	29 Jan 2017	Air Temp (C)	15
I24	29 Jan 2017	Weather	Clear
I24	29 Jan 2017	Visibility (mi)	14
I24	29 Jan 2017	Wind Speed (kts)	4
I24	29 Jan 2017	Wind Dir	E
I24	29 Jan 2017	Water Color	Brown
I24	29 Jan 2017	Wave Ht Low (ft)	3
I24	29 Jan 2017	Wave Period (sec)	9
I24	29 Jan 2017	Sea State	Calm
I24	29 Jan 2017	High Tide (ft)	5.7
I24	29 Jan 2017	High Tide Time	919
I24	29 Jan 2017	Low Tide (ft)	-0.8
I24	29 Jan 2017	Low Tide Time	1618
I24	29 Jan 2017	Comments	
I25	06 Jan 2017	Depth (m)	9
I25	06 Jan 2017	Arrive Time	1211
I25	06 Jan 2017	Depart Time	1215
I25	06 Jan 2017	Air Temp (C)	14
I25	06 Jan 2017	Weather	Clear
I25	06 Jan 2017	Visibility (mi)	9
I25	06 Jan 2017	Wind Speed (kts)	8
I25	06 Jan 2017	Wind Dir	N
I25	06 Jan 2017	Water Color	Green
I25	06 Jan 2017	Wave Ht Low (ft)	3
I25	06 Jan 2017	Wave Period (sec)	16
I25	06 Jan 2017	Sea State	Calm
I25	06 Jan 2017	High Tide (ft)	3.2
I25	06 Jan 2017	High Tide Time	1556
I25	06 Jan 2017	Low Tide (ft)	1.3
I25	06 Jan 2017	Low Tide Time	1022
I25	06 Jan 2017	Comments	
I25	13 Jan 2017	Depth (m)	12
I25	13 Jan 2017	Arrive Time	1136
I25	13 Jan 2017	Depart Time	1139
I25	13 Jan 2017	Air Temp (C)	14
I25	13 Jan 2017	Weather	Partly Cloudy
I25	13 Jan 2017	Visibility (mi)	9
I25	13 Jan 2017	Wind Speed (kts)	9
I25	13 Jan 2017	Wind Dir	SW
I25	13 Jan 2017	Water Color	Green
I25	13 Jan 2017	Wave Ht Low (ft)	6
I25	13 Jan 2017	Wave Period (sec)	4
I25	13 Jan 2017	Sea State	Confused swell
I25	13 Jan 2017	High Tide (ft)	6.5
I25	13 Jan 2017	High Tide Time	902
I25	13 Jan 2017	Low Tide (ft)	-1.4
I25	13 Jan 2017	Low Tide Time	1608
I25	13 Jan 2017	Comments	Freshwater lens

Station	Date	Parameter	Value
I25	17 Jan 2017	Depth (m)	9
I25	17 Jan 2017	Arrive Time	1209
I25	17 Jan 2017	Depart Time	1214
I25	17 Jan 2017	Air Temp (C)	14
I25	17 Jan 2017	Weather	Clear
I25	17 Jan 2017	Visibility (mi)	9
I25	17 Jan 2017	Wind Speed (kts)	9
I25	17 Jan 2017	Wind Dir	NE
I25	17 Jan 2017	Water Color	Green
I25	17 Jan 2017	Wave Ht Low (ft)	3
I25	17 Jan 2017	Wave Period (sec)	13
I25	17 Jan 2017	Sea State	Calm
I25	17 Jan 2017	High Tide (ft)	4.1
I25	17 Jan 2017	High Tide Time	1203
I25	17 Jan 2017	Low Tide (ft)	1.9
I25	17 Jan 2017	Low Tide Time	630
I25	17 Jan 2017	Comments	
I25	25 Jan 2017	Depth (m)	9
I25	25 Jan 2017	Arrive Time	1142
I25	25 Jan 2017	Depart Time	1145
I25	25 Jan 2017	Air Temp (C)	12
I25	25 Jan 2017	Weather	Clear
I25	25 Jan 2017	Visibility (mi)	12
I25	25 Jan 2017	Wind Speed (kts)	3
I25	25 Jan 2017	Wind Dir	SW
I25	25 Jan 2017	Water Color	Green
I25	25 Jan 2017	Wave Ht Low (ft)	8
I25	25 Jan 2017	Wave Period (sec)	9
I25	25 Jan 2017	Sea State	Calm
I25	25 Jan 2017	High Tide (ft)	5.6
I25	25 Jan 2017	High Tide Time	703
I25	25 Jan 2017	Low Tide (ft)	-0.6
I25	25 Jan 2017	Low Tide Time	1413
I25	25 Jan 2017	Comments	Lobster floats
I25	29 Jan 2017	Depth (m)	9
I25	29 Jan 2017	Arrive Time	1101
I25	29 Jan 2017	Depart Time	1105
I25	29 Jan 2017	Air Temp (C)	15
I25	29 Jan 2017	Weather	Clear
I25	29 Jan 2017	Visibility (mi)	14
I25	29 Jan 2017	Wind Speed (kts)	5
I25	29 Jan 2017	Wind Dir	NE
I25	29 Jan 2017	Water Color	Brown
I25	29 Jan 2017	Wave Ht Low (ft)	3
I25	29 Jan 2017	Wave Period (sec)	9
I25	29 Jan 2017	Sea State	Calm
I25	29 Jan 2017	High Tide (ft)	5.7
I25	29 Jan 2017	High Tide Time	919
I25	29 Jan 2017	Low Tide (ft)	-0.8
I25	29 Jan 2017	Low Tide Time	1618
I25	29 Jan 2017	Comments	
I26	06 Jan 2017	Depth (m)	9

Station	Date	Parameter	Value
I26	06 Jan 2017	Arrive Time	1222
I26	06 Jan 2017	Depart Time	1228
I26	06 Jan 2017	Air Temp (C)	14
I26	06 Jan 2017	Weather	Clear
I26	06 Jan 2017	Visibility (mi)	9
I26	06 Jan 2017	Wind Speed (kts)	7
I26	06 Jan 2017	Wind Dir	S
I26	06 Jan 2017	Water Color	Green
I26	06 Jan 2017	Wave Ht Low (ft)	3
I26	06 Jan 2017	Wave Period (sec)	16
I26	06 Jan 2017	Sea State	Calm
I26	06 Jan 2017	High Tide (ft)	3.2
I26	06 Jan 2017	High Tide Time	1556
I26	06 Jan 2017	Low Tide (ft)	1.3
I26	06 Jan 2017	Low Tide Time	1022
I26	06 Jan 2017	Comments	
I26	13 Jan 2017	Depth (m)	9
I26	13 Jan 2017	Arrive Time	1147
I26	13 Jan 2017	Depart Time	1150
I26	13 Jan 2017	Air Temp (C)	14
I26	13 Jan 2017	Weather	Partly Cloudy
I26	13 Jan 2017	Visibility (mi)	9
I26	13 Jan 2017	Wind Speed (kts)	7
I26	13 Jan 2017	Wind Dir	W
I26	13 Jan 2017	Water Color	Green
I26	13 Jan 2017	Wave Ht Low (ft)	6
I26	13 Jan 2017	Wave Period (sec)	4
I26	13 Jan 2017	Sea State	Confused swell
I26	13 Jan 2017	High Tide (ft)	6.5
I26	13 Jan 2017	High Tide Time	902
I26	13 Jan 2017	Low Tide (ft)	-1.4
I26	13 Jan 2017	Low Tide Time	1608
I26	13 Jan 2017	Comments	Freshwater lens
I26	17 Jan 2017	Depth (m)	9
I26	17 Jan 2017	Arrive Time	1220
I26	17 Jan 2017	Depart Time	1224
I26	17 Jan 2017	Air Temp (C)	14
I26	17 Jan 2017	Weather	Clear
I26	17 Jan 2017	Visibility (mi)	9
I26	17 Jan 2017	Wind Speed (kts)	9
I26	17 Jan 2017	Wind Dir	W
I26	17 Jan 2017	Water Color	Green
I26	17 Jan 2017	Wave Ht Low (ft)	3
I26	17 Jan 2017	Wave Period (sec)	13
I26	17 Jan 2017	Sea State	Calm
I26	17 Jan 2017	High Tide (ft)	4.1
I26	17 Jan 2017	High Tide Time	1203
I26	17 Jan 2017	Low Tide (ft)	1.9
I26	17 Jan 2017	Low Tide Time	630
I26	17 Jan 2017	Comments	
I26	25 Jan 2017	Depth (m)	9
I26	25 Jan 2017	Arrive Time	1151

Station	Date	Parameter	Value
I26	25 Jan 2017	Depart Time	1153
I26	25 Jan 2017	Air Temp (C)	12
I26	25 Jan 2017	Weather	Clear
I26	25 Jan 2017	Visibility (mi)	12
I26	25 Jan 2017	Wind Speed (kts)	4
I26	25 Jan 2017	Wind Dir	SE
I26	25 Jan 2017	Water Color	Green
I26	25 Jan 2017	Wave Ht Low (ft)	8
I26	25 Jan 2017	Wave Period (sec)	9
I26	25 Jan 2017	Sea State	Calm
I26	25 Jan 2017	High Tide (ft)	5.6
I26	25 Jan 2017	High Tide Time	703
I26	25 Jan 2017	Low Tide (ft)	-0.6
I26	25 Jan 2017	Low Tide Time	1413
I26	25 Jan 2017	Comments	
I26	29 Jan 2017	Depth (m)	10
I26	29 Jan 2017	Arrive Time	1115
I26	29 Jan 2017	Depart Time	1118
I26	29 Jan 2017	Air Temp (C)	15
I26	29 Jan 2017	Weather	Clear
I26	29 Jan 2017	Visibility (mi)	14
I26	29 Jan 2017	Wind Speed (kts)	8
I26	29 Jan 2017	Wind Dir	E
I26	29 Jan 2017	Water Color	Green
I26	29 Jan 2017	Wave Ht Low (ft)	3
I26	29 Jan 2017	Wave Period (sec)	9
I26	29 Jan 2017	Sea State	Calm
I26	29 Jan 2017	High Tide (ft)	5.7
I26	29 Jan 2017	High Tide Time	919
I26	29 Jan 2017	Low Tide (ft)	-0.8
I26	29 Jan 2017	Low Tide Time	1618
I26	29 Jan 2017	Comments	
I32	06 Jan 2017	Depth (m)	11
I32	06 Jan 2017	Arrive Time	1237
I32	06 Jan 2017	Depart Time	1241
I32	06 Jan 2017	Air Temp (C)	14
I32	06 Jan 2017	Weather	Clear
I32	06 Jan 2017	Visibility (mi)	9
I32	06 Jan 2017	Wind Speed (kts)	6
I32	06 Jan 2017	Wind Dir	S
I32	06 Jan 2017	Water Color	Greenish-Blue
I32	06 Jan 2017	Wave Ht Low (ft)	3
I32	06 Jan 2017	Wave Period (sec)	16
I32	06 Jan 2017	Sea State	Calm
I32	06 Jan 2017	High Tide (ft)	3.2
I32	06 Jan 2017	High Tide Time	1556
I32	06 Jan 2017	Low Tide (ft)	1.3
I32	06 Jan 2017	Low Tide Time	1022
I32	06 Jan 2017	Comments	
I32	13 Jan 2017	Depth (m)	10
I32	13 Jan 2017	Arrive Time	1201
I32	13 Jan 2017	Depart Time	1204

Station	Date	Parameter	Value
I32	13 Jan 2017	Air Temp (C)	14
I32	13 Jan 2017	Weather	Partly Cloudy
I32	13 Jan 2017	Visibility (mi)	9
I32	13 Jan 2017	Wind Speed (kts)	10
I32	13 Jan 2017	Wind Dir	NW
I32	13 Jan 2017	Water Color	Green
I32	13 Jan 2017	Wave Ht Low (ft)	6
I32	13 Jan 2017	Wave Period (sec)	4
I32	13 Jan 2017	Sea State	Confused swell
I32	13 Jan 2017	High Tide (ft)	6.5
I32	13 Jan 2017	High Tide Time	902
I32	13 Jan 2017	Low Tide (ft)	-1.4
I32	13 Jan 2017	Low Tide Time	1608
I32	13 Jan 2017	Comments	Freshwater lens
I32	17 Jan 2017	Depth (m)	10
I32	17 Jan 2017	Arrive Time	1235
I32	17 Jan 2017	Depart Time	1237
I32	17 Jan 2017	Air Temp (C)	14
I32	17 Jan 2017	Weather	Clear
I32	17 Jan 2017	Visibility (mi)	9
I32	17 Jan 2017	Wind Speed (kts)	5
I32	17 Jan 2017	Wind Dir	NW
I32	17 Jan 2017	Water Color	Green
I32	17 Jan 2017	Wave Ht Low (ft)	3
I32	17 Jan 2017	Wave Period (sec)	13
I32	17 Jan 2017	Sea State	Calm
I32	17 Jan 2017	High Tide (ft)	4.1
I32	17 Jan 2017	High Tide Time	1203
I32	17 Jan 2017	Low Tide (ft)	1.9
I32	17 Jan 2017	Low Tide Time	630
I32	17 Jan 2017	Comments	
I32	25 Jan 2017	Depth (m)	19
I32	25 Jan 2017	Arrive Time	1202
I32	25 Jan 2017	Depart Time	1205
I32	25 Jan 2017	Air Temp (C)	12
I32	25 Jan 2017	Weather	Clear
I32	25 Jan 2017	Visibility (mi)	12
I32	25 Jan 2017	Wind Speed (kts)	7
I32	25 Jan 2017	Wind Dir	SE
I32	25 Jan 2017	Water Color	Green
I32	25 Jan 2017	Wave Ht Low (ft)	8
I32	25 Jan 2017	Wave Period (sec)	9
I32	25 Jan 2017	Sea State	Calm
I32	25 Jan 2017	High Tide (ft)	5.6
I32	25 Jan 2017	High Tide Time	703
I32	25 Jan 2017	Low Tide (ft)	-0.6
I32	25 Jan 2017	Low Tide Time	1413
I32	25 Jan 2017	Comments	
I32	29 Jan 2017	Depth (m)	11
I32	29 Jan 2017	Arrive Time	1132
I32	29 Jan 2017	Depart Time	1136
I32	29 Jan 2017	Air Temp (C)	15

Station	Date	Parameter	Value
I32	29 Jan 2017	Weather	Clear
I32	29 Jan 2017	Visibility (mi)	14
I32	29 Jan 2017	Wind Speed (kts)	4
I32	29 Jan 2017	Wind Dir	W
I32	29 Jan 2017	Water Color	Green
I32	29 Jan 2017	Wave Ht Low (ft)	3
I32	29 Jan 2017	Wave Period (sec)	9
I32	29 Jan 2017	Sea State	Calm
I32	29 Jan 2017	High Tide (ft)	5.7
I32	29 Jan 2017	High Tide Time	919
I32	29 Jan 2017	Low Tide (ft)	-0.8
I32	29 Jan 2017	Low Tide Time	1618
I32	29 Jan 2017	Comments	
I39	06 Jan 2017	Depth (m)	18
I39	06 Jan 2017	Arrive Time	1109
I39	06 Jan 2017	Depart Time	1119
I39	06 Jan 2017	Air Temp (C)	14
I39	06 Jan 2017	Weather	Clear
I39	06 Jan 2017	Visibility (mi)	9
I39	06 Jan 2017	Wind Speed (kts)	4
I39	06 Jan 2017	Wind Dir	E
I39	06 Jan 2017	Water Color	Greenish-Blue
I39	06 Jan 2017	Wave Ht Low (ft)	3
I39	06 Jan 2017	Wave Period (sec)	16
I39	06 Jan 2017	Sea State	Calm
I39	06 Jan 2017	High Tide (ft)	3.2
I39	06 Jan 2017	High Tide Time	1556
I39	06 Jan 2017	Low Tide (ft)	1.3
I39	06 Jan 2017	Low Tide Time	1022
I39	06 Jan 2017	Comments	
I39	13 Jan 2017	Depth (m)	19
I39	13 Jan 2017	Arrive Time	1044
I39	13 Jan 2017	Depart Time	1048
I39	13 Jan 2017	Air Temp (C)	14
I39	13 Jan 2017	Weather	Partly Cloudy
I39	13 Jan 2017	Visibility (mi)	9
I39	13 Jan 2017	Wind Speed (kts)	9
I39	13 Jan 2017	Wind Dir	N
I39	13 Jan 2017	Water Color	Green
I39	13 Jan 2017	Wave Ht Low (ft)	6
I39	13 Jan 2017	Wave Period (sec)	4
I39	13 Jan 2017	Sea State	Confused swell
I39	13 Jan 2017	High Tide (ft)	6.5
I39	13 Jan 2017	High Tide Time	902
I39	13 Jan 2017	Low Tide (ft)	-1.4
I39	13 Jan 2017	Low Tide Time	1608
I39	13 Jan 2017	Comments	Low salinity first 4m probably due to rain and runoff;
I39	17 Jan 2017	Depth (m)	20
I39	17 Jan 2017	Arrive Time	1118
I39	17 Jan 2017	Depart Time	1122
I39	17 Jan 2017	Air Temp (C)	14
I39	17 Jan 2017	Weather	Clear

Station	Date	Parameter	Value
I39	17 Jan 2017	Visibility (mi)	9
I39	17 Jan 2017	Wind Speed (kts)	0
I39	17 Jan 2017	Wind Dir	
I39	17 Jan 2017	Water Color	Green
I39	17 Jan 2017	Wave Ht Low (ft)	3
I39	17 Jan 2017	Wave Period (sec)	13
I39	17 Jan 2017	Sea State	Calm
I39	17 Jan 2017	High Tide (ft)	4.1
I39	17 Jan 2017	High Tide Time	1203
I39	17 Jan 2017	Low Tide (ft)	1.9
I39	17 Jan 2017	Low Tide Time	630
I39	17 Jan 2017	Comments	
I39	25 Jan 2017	Depth (m)	19
I39	25 Jan 2017	Arrive Time	1033
I39	25 Jan 2017	Depart Time	1040
I39	25 Jan 2017	Air Temp (C)	12
I39	25 Jan 2017	Weather	Clear
I39	25 Jan 2017	Visibility (mi)	12
I39	25 Jan 2017	Wind Speed (kts)	0
I39	25 Jan 2017	Wind Dir	
I39	25 Jan 2017	Water Color	Brownish-Green
I39	25 Jan 2017	Wave Ht Low (ft)	8
I39	25 Jan 2017	Wave Period (sec)	9
I39	25 Jan 2017	Sea State	Calm
I39	25 Jan 2017	High Tide (ft)	5.6
I39	25 Jan 2017	High Tide Time	703
I39	25 Jan 2017	Low Tide (ft)	-0.6
I39	25 Jan 2017	Low Tide Time	1413
I39	25 Jan 2017	Comments	Low salinity in surface layer and bottom layer runoff rain
I39	29 Jan 2017	Depth (m)	19
I39	29 Jan 2017	Arrive Time	1012
I39	29 Jan 2017	Depart Time	1015
I39	29 Jan 2017	Air Temp (C)	15
I39	29 Jan 2017	Weather	Clear
I39	29 Jan 2017	Visibility (mi)	14
I39	29 Jan 2017	Wind Speed (kts)	5
I39	29 Jan 2017	Wind Dir	NE
I39	29 Jan 2017	Water Color	Green
I39	29 Jan 2017	Wave Ht Low (ft)	3
I39	29 Jan 2017	Wave Period (sec)	9
I39	29 Jan 2017	Sea State	Calm
I39	29 Jan 2017	High Tide (ft)	5.7
I39	29 Jan 2017	High Tide Time	919
I39	29 Jan 2017	Low Tide (ft)	-0.8
I39	29 Jan 2017	Low Tide Time	1618
I39	29 Jan 2017	Comments	Lobster floats
I40	06 Jan 2017	Depth (m)	9
I40	06 Jan 2017	Arrive Time	1151
I40	06 Jan 2017	Depart Time	1156
I40	06 Jan 2017	Air Temp (C)	14
I40	06 Jan 2017	Weather	Clear
I40	06 Jan 2017	Visibility (mi)	9

Station	Date	Parameter	Value
I40	06 Jan 2017	Wind Speed (kts)	8
I40	06 Jan 2017	Wind Dir	E
I40	06 Jan 2017	Water Color	Greenish-Brown
I40	06 Jan 2017	Wave Ht Low (ft)	3
I40	06 Jan 2017	Wave Period (sec)	16
I40	06 Jan 2017	Sea State	Calm
I40	06 Jan 2017	High Tide (ft)	3.2
I40	06 Jan 2017	High Tide Time	1556
I40	06 Jan 2017	Low Tide (ft)	1.3
I40	06 Jan 2017	Low Tide Time	1022
I40	06 Jan 2017	Comments	
I40	13 Jan 2017	Depth (m)	11
I40	13 Jan 2017	Arrive Time	1119
I40	13 Jan 2017	Depart Time	1123
I40	13 Jan 2017	Air Temp (C)	14
I40	13 Jan 2017	Weather	Partly Cloudy
I40	13 Jan 2017	Visibility (mi)	9
I40	13 Jan 2017	Wind Speed (kts)	10
I40	13 Jan 2017	Wind Dir	NW
I40	13 Jan 2017	Water Color	Brown
I40	13 Jan 2017	Wave Ht Low (ft)	6
I40	13 Jan 2017	Wave Period (sec)	4
I40	13 Jan 2017	Sea State	Confused swell
I40	13 Jan 2017	High Tide (ft)	6.5
I40	13 Jan 2017	High Tide Time	902
I40	13 Jan 2017	Low Tide (ft)	-1.4
I40	13 Jan 2017	Low Tide Time	1608
I40	13 Jan 2017	Comments	TJ river plume.;; Freshwater lens; Very low transmissivity at surface and low salinity and high cdom at surface due to river runoff;
I40	17 Jan 2017	Depth (m)	10
I40	17 Jan 2017	Arrive Time	1153
I40	17 Jan 2017	Depart Time	1158
I40	17 Jan 2017	Air Temp (C)	14
I40	17 Jan 2017	Weather	Clear
I40	17 Jan 2017	Visibility (mi)	9
I40	17 Jan 2017	Wind Speed (kts)	8
I40	17 Jan 2017	Wind Dir	SW
I40	17 Jan 2017	Water Color	Green
I40	17 Jan 2017	Wave Ht Low (ft)	3
I40	17 Jan 2017	Wave Period (sec)	13
I40	17 Jan 2017	Sea State	Calm
I40	17 Jan 2017	High Tide (ft)	4.1
I40	17 Jan 2017	High Tide Time	1203
I40	17 Jan 2017	Low Tide (ft)	1.9
I40	17 Jan 2017	Low Tide Time	630
I40	17 Jan 2017	Comments	
I40	25 Jan 2017	Depth (m)	10
I40	25 Jan 2017	Arrive Time	1125
I40	25 Jan 2017	Depart Time	1129
I40	25 Jan 2017	Air Temp (C)	12
I40	25 Jan 2017	Weather	Clear
I40	25 Jan 2017	Visibility (mi)	12

Station	Date	Parameter	Value
I40	25 Jan 2017	Wind Speed (kts)	4
I40	25 Jan 2017	Wind Dir	W
I40	25 Jan 2017	Water Color	Brown
I40	25 Jan 2017	Wave Ht Low (ft)	8
I40	25 Jan 2017	Wave Period (sec)	9
I40	25 Jan 2017	Sea State	Calm
I40	25 Jan 2017	High Tide (ft)	5.6
I40	25 Jan 2017	High Tide Time	703
I40	25 Jan 2017	Low Tide (ft)	-0.6
I40	25 Jan 2017	Low Tide Time	1413
I40	25 Jan 2017	Comments	Runoff low salinity
I40	29 Jan 2017	Depth (m)	11
I40	29 Jan 2017	Arrive Time	1043
I40	29 Jan 2017	Depart Time	1047
I40	29 Jan 2017	Air Temp (C)	16
I40	29 Jan 2017	Weather	Clear
I40	29 Jan 2017	Visibility (mi)	14
I40	29 Jan 2017	Wind Speed (kts)	4
I40	29 Jan 2017	Wind Dir	S
I40	29 Jan 2017	Water Color	Brown
I40	29 Jan 2017	Wave Ht Low (ft)	3
I40	29 Jan 2017	Wave Period (sec)	9
I40	29 Jan 2017	Sea State	Calm
I40	29 Jan 2017	High Tide (ft)	5.7
I40	29 Jan 2017	High Tide Time	919
I40	29 Jan 2017	Low Tide (ft)	-0.8
I40	29 Jan 2017	Low Tide Time	1618
I40	29 Jan 2017	Comments	

Table 3.10

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

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I19	06 Jan 2017	1	15.12	70.43	8.4	33.03	8.1	24.4	0.31
I19	06 Jan 2017	2	15.14	70.73	8.5	33.04	8.1	24.4	0.38
I19	06 Jan 2017	3	15.02	70.54	8.2	33.14	8.1	24.5	0.37
I19	06 Jan 2017	4	14.93	70.05	8.1	33.16	8.2	24.6	1.41
I19	06 Jan 2017	5	14.89	71.90	8.2	33.16	8.2	24.6	2.74
I19	06 Jan 2017	6	14.84	71.82	8.3	33.16	8.2	24.6	2.59
I19	06 Jan 2017	7	14.82	72.88	7.8	33.14	8.2	24.6	2.74
I19	06 Jan 2017	8	14.81	73.07	7.3	33.14	8.1	24.6	2.81
I19	06 Jan 2017	9	14.80	64.27	7.2	33.16	8.1	24.6	2.67
I19	06 Jan 2017	10	14.78	33.70	6.9	33.18	8.1	24.6	2.55
I19	13 Jan 2017	1	15.17	48.13	8.1	33.06	8.1	24.4	2.57
I19	13 Jan 2017	2	15.17	48.54	7.9	33.08	8.1	24.5	2.80
I19	13 Jan 2017	3	15.17	51.04	7.8	33.16	8.1	24.5	2.66
I19	13 Jan 2017	4	15.16	51.06	7.8	33.20	8.1	24.6	2.73
I19	13 Jan 2017	5	15.16	49.97	7.8	33.20	8.1	24.6	2.56
I19	13 Jan 2017	6	15.15	48.31	7.8	33.21	8.1	24.6	2.52
I19	13 Jan 2017	7	15.15	51.22	7.8	33.20	8.1	24.6	2.54
I19	13 Jan 2017	8	15.14	45.53	7.8	33.21	8.1	24.6	2.55
I19	13 Jan 2017	9	15.14	39.47	7.7	33.21	8.1	24.6	2.51
I19	13 Jan 2017	10	15.14	40.39	7.8	33.21	8.1	24.6	2.47
I19	17 Jan 2017	1	15.13	36.21	7.8	33.14	8.1	24.5	2.75
I19	17 Jan 2017	2	15.00	36.00	7.6	33.17	8.1	24.6	2.38
I19	17 Jan 2017	3	14.95	43.64	7.6	33.20	8.1	24.6	2.24
I19	17 Jan 2017	4	14.92	51.80	7.6	33.20	8.1	24.6	2.14
I19	17 Jan 2017	5	14.91	47.73	7.6	33.21	8.1	24.6	1.90
I19	17 Jan 2017	6	14.91	43.62	7.6	33.21	8.1	24.6	1.74
I19	17 Jan 2017	7	14.91	49.85	7.5	33.21	8.1	24.6	1.71
I19	17 Jan 2017	8	14.91	52.68	7.4	33.21	8.1	24.6	1.59
I19	17 Jan 2017	9	14.90	54.55	7.1	33.22	8.1	24.6	1.54
I19	17 Jan 2017	10	14.89	60.65	6.8	33.24	8.1	24.6	1.71
I19	25 Jan 2017	1	14.67	18.06	8.1	33.08	8.1	24.6	1.13
I19	25 Jan 2017	2	14.66	17.86	8.3	33.09	8.1	24.6	1.25
I19	25 Jan 2017	3	14.63	17.42	8.3	33.11	8.1	24.6	1.29
I19	25 Jan 2017	4	14.61	16.50	8.3	33.11	8.1	24.6	1.50
I19	25 Jan 2017	5	14.60	15.27	8.3	33.12	8.1	24.6	1.44
I19	25 Jan 2017	6	14.60	14.83	8.3	33.12	8.1	24.6	1.58
I19	25 Jan 2017	7	14.58	14.63	8.3	33.13	8.1	24.6	1.55
I19	25 Jan 2017	8	14.57	13.56	8.3	33.14	8.1	24.6	1.56
I19	25 Jan 2017	9	14.56	12.89	8.3	33.15	8.1	24.6	1.59
I19	25 Jan 2017	10	14.55	9.64	8.4	33.15	8.1	24.6	1.87
I19	29 Jan 2017	1	13.85	41.43	6.8	33.30	8.1	24.9	0.63
I19	29 Jan 2017	2	13.84	40.39	6.2	33.30	8.1	24.9	0.81
I19	29 Jan 2017	3	13.68	40.70	5.6	33.31	8.1	25.0	0.92
I19	29 Jan 2017	4	13.46	46.49	5.6	33.34	8.1	25.0	1.01
I19	29 Jan 2017	5	13.41	32.65	5.7	33.34	8.0	25.0	0.98
I19	29 Jan 2017	6	13.32	24.44	5.7	33.34	8.0	25.0	0.99
I19	29 Jan 2017	7	13.28	23.05	5.6	33.34	8.0	25.1	0.87

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I19	29 Jan 2017	8	13.22	13.97	5.5	33.35	8.0	25.1	0.77
I19	29 Jan 2017	9	13.06	9.18	5.5	33.36	8.0	25.1	0.81
I19	29 Jan 2017	10	12.98	26.41	5.5	33.36	8.0	25.1	0.87
I24	06 Jan 2017	1	15.02	58.14	7.0	32.54	8.1	24.1	0.36
I24	06 Jan 2017	2	14.96	62.24	7.9	32.66	8.1	24.2	0.35
I24	06 Jan 2017	3	14.85	66.71	7.7	32.92	8.1	24.4	0.40
I24	06 Jan 2017	4	14.81	70.90	7.5	33.04	8.1	24.5	0.43
I24	06 Jan 2017	5	14.78	76.00	7.7	33.10	8.1	24.6	1.30
I24	06 Jan 2017	6	14.77	76.85	7.9	33.11	8.1	24.6	2.10
I24	06 Jan 2017	7	14.77	77.29	7.8	33.11	8.1	24.6	2.32
I24	06 Jan 2017	8	14.78	75.94	7.2	33.13	8.1	24.6	2.58
I24	06 Jan 2017	9	14.79	74.37	6.9	33.15	8.1	24.6	2.43
I24	06 Jan 2017	10	14.79	72.97	6.6	33.16	8.1	24.6	2.47
I24	13 Jan 2017	1	15.21	57.19	8.3	33.11	8.2	24.5	2.37
I24	13 Jan 2017	2	15.21	55.76	8.3	33.11	8.1	24.5	2.49
I24	13 Jan 2017	3	15.21	56.35	8.3	33.11	8.2	24.5	2.73
I24	13 Jan 2017	4	15.20	58.29	8.3	33.11	8.2	24.5	2.90
I24	13 Jan 2017	5	15.20	58.04	8.3	33.11	8.2	24.5	2.92
I24	13 Jan 2017	6	15.20	57.71	8.2	33.11	8.2	24.5	2.92
I24	13 Jan 2017	7	15.16	60.95	8.0	33.13	8.2	24.5	2.61
I24	13 Jan 2017	8	15.11	73.83	7.7	33.17	8.2	24.5	2.41
I24	13 Jan 2017	9	15.11	75.39	7.6	33.23	8.2	24.6	2.39
I24	13 Jan 2017	10	15.08	52.70	7.6	33.24	8.1	24.6	2.46
I24	13 Jan 2017	11	15.08	35.99	7.7	33.23	8.1	24.6	2.41
I24	17 Jan 2017	1	15.40	51.24	7.9	33.06	8.1	24.4	2.16
I24	17 Jan 2017	2	15.38	50.99	7.8	33.07	8.1	24.4	2.71
I24	17 Jan 2017	3	15.11	53.75	7.7	33.15	8.1	24.5	2.50
I24	17 Jan 2017	4	15.01	59.36	7.6	33.17	8.1	24.6	2.16
I24	17 Jan 2017	5	14.99	64.11	7.6	33.17	8.1	24.6	1.83
I24	17 Jan 2017	6	14.97	65.80	7.5	33.17	8.1	24.6	1.59
I24	17 Jan 2017	7	14.99	66.74	7.3	33.18	8.1	24.6	1.53
I24	17 Jan 2017	8	14.99	67.46	7.0	33.18	8.1	24.6	1.48
I24	17 Jan 2017	9	14.94	65.38	6.9	33.20	8.1	24.6	1.49
I24	17 Jan 2017	10	14.90	59.53	6.9	33.23	8.1	24.6	1.56
I24	17 Jan 2017	11	14.92	52.08	6.8	33.22	8.1	24.6	1.58
I24	25 Jan 2017	1	14.37	7.36	8.1	31.69	8.1	23.6	1.42
I24	25 Jan 2017	2	14.45	10.97	8.1	32.09	8.1	23.9	1.35
I24	25 Jan 2017	3	14.49	12.60	8.0	32.36	8.1	24.0	1.33
I24	25 Jan 2017	4	14.44	17.42	7.8	32.87	8.1	24.4	1.32
I24	25 Jan 2017	5	14.35	21.03	7.7	33.06	8.1	24.6	1.31
I24	25 Jan 2017	6	14.35	18.43	7.7	33.07	8.1	24.6	1.28
I24	25 Jan 2017	7	14.35	18.63	7.8	33.07	8.1	24.6	1.29
I24	25 Jan 2017	8	14.35	18.68	7.7	33.07	8.1	24.6	1.32
I24	25 Jan 2017	9	14.35	16.43	7.7	33.07	8.1	24.6	1.25
I24	25 Jan 2017	10	14.35	14.58	7.8	33.07	8.1	24.6	1.27
I24	29 Jan 2017	1	14.29	37.29	7.7	33.22	8.1	24.8	1.00
I24	29 Jan 2017	2	14.23	36.50	7.7	33.22	8.1	24.8	1.36
I24	29 Jan 2017	3	14.08	34.96	7.6	33.22	8.1	24.8	1.21
I24	29 Jan 2017	4	13.98	34.08	7.5	33.22	8.1	24.8	1.11
I24	29 Jan 2017	5	13.94	33.28	7.0	33.24	8.1	24.8	1.16

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I24	29 Jan 2017	6	13.90	33.00	6.1	33.29	8.1	24.9	1.25
I24	29 Jan 2017	7	13.78	33.28	5.4	33.30	8.1	24.9	1.33
I24	29 Jan 2017	8	13.59	22.27	5.5	33.33	8.1	25.0	1.28
I24	29 Jan 2017	9	13.57	10.54	5.5	33.33	8.1	25.0	1.17
I24	29 Jan 2017	10	13.53	8.66	5.6	33.33	8.0	25.0	1.16
I24	29 Jan 2017	11	13.35	12.87	6.0	33.35	8.0	25.0	1.22
I25	06 Jan 2017	1	15.18	59.94	7.2	32.53	8.1	24.0	0.29
I25	06 Jan 2017	2	15.02	65.60	8.4	32.66	8.1	24.2	0.31
I25	06 Jan 2017	3	14.80	73.33	8.3	32.98	8.1	24.5	0.32
I25	06 Jan 2017	4	14.77	72.42	8.1	33.08	8.2	24.5	0.31
I25	06 Jan 2017	5	14.77	74.56	8.0	33.10	8.2	24.6	0.33
I25	06 Jan 2017	6	14.77	77.16	7.8	33.12	8.1	24.6	1.02
I25	06 Jan 2017	7	14.80	75.51	7.3	33.15	8.1	24.6	2.02
I25	06 Jan 2017	8	14.80	72.49	6.8	33.17	8.1	24.6	1.03
I25	06 Jan 2017	9	14.81	70.47	6.8	33.19	8.1	24.6	0.46
I25	13 Jan 2017	1	15.21	53.96	8.4	33.05	8.2	24.4	2.75
I25	13 Jan 2017	2	15.21	54.48	8.3	33.09	8.2	24.5	3.04
I25	13 Jan 2017	3	15.20	55.02	8.2	33.10	8.2	24.5	2.85
I25	13 Jan 2017	4	15.17	68.17	8.1	33.12	8.2	24.5	2.54
I25	13 Jan 2017	5	15.12	77.14	7.9	33.20	8.2	24.6	2.29
I25	13 Jan 2017	6	15.11	71.60	7.7	33.22	8.1	24.6	2.02
I25	13 Jan 2017	7	15.09	61.37	7.6	33.22	8.1	24.6	1.83
I25	13 Jan 2017	8	15.06	54.56	7.7	33.22	8.1	24.6	1.89
I25	13 Jan 2017	9	15.06	52.03	7.7	33.22	8.1	24.6	1.88
I25	17 Jan 2017	1	15.23	50.96	8.5	33.11	8.2	24.5	5.56
I25	17 Jan 2017	2	15.14	50.53	8.2	33.13	8.2	24.5	4.61
I25	17 Jan 2017	3	15.08	50.54	7.8	33.14	8.2	24.5	3.10
I25	17 Jan 2017	4	15.04	51.72	7.5	33.15	8.2	24.5	2.53
I25	17 Jan 2017	5	15.03	54.71	7.4	33.16	8.1	24.5	2.01
I25	17 Jan 2017	6	15.03	55.52	7.3	33.17	8.1	24.6	1.80
I25	17 Jan 2017	7	15.03	53.69	7.3	33.18	8.1	24.6	1.73
I25	17 Jan 2017	8	15.02	50.53	7.3	33.18	8.1	24.6	1.67
I25	17 Jan 2017	9	15.02	47.56	7.4	33.18	8.1	24.6	1.76
I25	25 Jan 2017	1	14.29	41.46	7.9	32.56	8.1	24.2	0.45
I25	25 Jan 2017	2	14.23	40.84	8.1	32.62	8.1	24.3	0.79
I25	25 Jan 2017	3	14.40	39.94	7.9	32.78	8.1	24.4	0.82
I25	25 Jan 2017	4	14.41	25.98	7.5	33.01	8.1	24.6	0.78
I25	25 Jan 2017	5	14.40	17.18	7.2	33.06	8.1	24.6	0.87
I25	25 Jan 2017	6	14.40	15.09	7.4	33.07	8.1	24.6	1.03
I25	25 Jan 2017	7	14.40	14.84	7.6	33.07	8.1	24.6	1.15
I25	25 Jan 2017	8	14.41	12.88	7.4	33.08	8.1	24.6	1.19
I25	25 Jan 2017	9	14.41	12.12	7.4	33.08	8.1	24.6	1.72
I25	29 Jan 2017	1	14.14	38.88	7.3	33.24	8.1	24.8	0.89
I25	29 Jan 2017	2	14.09	38.24	7.0	33.24	8.1	24.8	1.02
I25	29 Jan 2017	3	13.94	37.02	6.7	33.26	8.1	24.9	1.08
I25	29 Jan 2017	4	13.89	35.84	6.3	33.28	8.1	24.9	1.15
I25	29 Jan 2017	5	13.78	33.56	5.9	33.30	8.1	24.9	1.15
I25	29 Jan 2017	6	13.68	24.45	5.7	33.32	8.1	25.0	0.90
I25	29 Jan 2017	7	13.66	20.07	5.5	33.32	8.1	25.0	0.78
I25	29 Jan 2017	8	13.51	24.46	5.3	33.33	8.1	25.0	0.69

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I25	29 Jan 2017	9	13.09	47.62	5.4	33.37	8.0	25.1	0.70
I26	06 Jan 2017	1	14.89	75.46	8.2	33.08	8.2	24.5	0.41
I26	06 Jan 2017	2	14.89	75.51	8.3	33.09	8.2	24.5	1.06
I26	06 Jan 2017	3	14.85	75.42	8.1	33.11	8.1	24.5	1.47
I26	06 Jan 2017	4	14.86	75.91	8.0	33.10	8.1	24.5	2.80
I26	06 Jan 2017	5	14.84	76.59	8.1	33.12	8.1	24.6	2.69
I26	06 Jan 2017	6	14.83	77.52	7.5	33.12	8.1	24.6	2.65
I26	06 Jan 2017	7	14.83	75.06	7.1	33.16	8.1	24.6	2.57
I26	06 Jan 2017	8	14.83	71.57	6.9	33.19	8.1	24.6	2.81
I26	06 Jan 2017	9	14.83	70.97	6.6	33.19	8.1	24.6	2.53
I26	13 Jan 2017	1	15.07	58.30	8.3	32.98	8.1	24.4	3.52
I26	13 Jan 2017	2	15.07	58.29	8.1	32.99	8.1	24.4	3.08
I26	13 Jan 2017	3	15.07	57.49	7.7	33.02	8.1	24.4	2.16
I26	13 Jan 2017	4	15.11	56.33	7.6	33.14	8.1	24.5	1.98
I26	13 Jan 2017	5	15.11	59.47	7.5	33.17	8.1	24.5	1.76
I26	13 Jan 2017	6	15.08	56.65	7.5	33.17	8.1	24.5	1.72
I26	13 Jan 2017	7	15.07	58.64	7.5	33.17	8.1	24.5	1.77
I26	13 Jan 2017	8	15.05	51.72	7.5	33.18	8.1	24.6	1.76
I26	13 Jan 2017	9	15.06	27.45	7.5	33.18	8.1	24.6	1.72
I26	17 Jan 2017	1	15.48	75.41	8.6	33.10	8.2	24.4	4.52
I26	17 Jan 2017	2	15.35	75.03	8.9	33.11	8.2	24.4	8.83
I26	17 Jan 2017	3	15.11	69.61	8.7	33.11	8.2	24.5	6.37
I26	17 Jan 2017	4	15.06	63.29	8.0	33.13	8.2	24.5	3.26
I26	17 Jan 2017	5	15.03	65.84	7.5	33.15	8.2	24.5	2.14
I26	17 Jan 2017	6	14.99	68.92	7.0	33.16	8.2	24.6	1.73
I26	17 Jan 2017	7	14.98	67.77	6.5	33.16	8.1	24.6	1.71
I26	17 Jan 2017	8	14.95	56.44	6.4	33.23	8.1	24.6	1.76
I26	17 Jan 2017	9	14.89	43.16	6.6	33.24	8.1	24.6	2.04
I26	25 Jan 2017	1	14.54	37.29	8.0	33.05	8.1	24.6	1.11
I26	25 Jan 2017	2	14.48	37.89	7.9	33.05	8.1	24.6	1.12
I26	25 Jan 2017	3	14.35	36.35	7.6	33.06	8.1	24.6	1.24
I26	25 Jan 2017	4	14.38	33.35	7.3	33.08	8.1	24.6	1.21
I26	25 Jan 2017	5	14.48	19.14	7.2	33.12	8.1	24.6	1.33
I26	25 Jan 2017	6	14.53	13.18	7.1	33.14	8.1	24.6	1.52
I26	25 Jan 2017	7	14.60	5.53	7.1	33.17	8.1	24.6	1.47
I26	25 Jan 2017	8	14.60	4.56	7.2	33.17	8.1	24.6	1.51
I26	25 Jan 2017	9	14.60	4.35	7.3	33.17	8.1	24.6	1.50
I26	29 Jan 2017	1	14.28	51.28	7.5	33.25	8.1	24.8	0.86
I26	29 Jan 2017	2	14.26	51.32	6.9	33.25	8.1	24.8	1.09
I26	29 Jan 2017	3	13.94	49.63	5.7	33.26	8.1	24.9	0.78
I26	29 Jan 2017	4	13.62	54.06	5.2	33.32	8.1	25.0	0.70
I26	29 Jan 2017	5	13.33	60.82	5.3	33.35	8.1	25.1	0.64
I26	29 Jan 2017	6	13.16	63.18	5.4	33.36	8.0	25.1	0.67
I26	29 Jan 2017	7	13.11	61.38	5.5	33.35	8.0	25.1	0.68
I26	29 Jan 2017	8	13.07	51.22	5.6	33.35	8.0	25.1	0.72
I26	29 Jan 2017	9	13.06	43.56	5.6	33.35	8.0	25.1	0.72
I32	06 Jan 2017	1	15.13	71.00	8.1	33.07	8.1	24.5	0.35
I32	06 Jan 2017	2	15.12	70.79	8.2	33.05	8.1	24.4	0.35
I32	06 Jan 2017	3	15.12	70.85	7.9	33.05	8.1	24.4	2.41

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I32	06 Jan 2017	4	15.11	70.76	7.7	33.05	8.1	24.4	2.66
I32	06 Jan 2017	5	15.00	69.96	7.5	33.08	8.1	24.5	2.53
I32	06 Jan 2017	6	14.82	69.35	7.5	33.09	8.1	24.5	2.61
I32	06 Jan 2017	7	14.82	71.17	7.7	33.09	8.1	24.5	2.52
I32	06 Jan 2017	8	14.82	71.03	7.7	33.10	8.1	24.5	2.53
I32	06 Jan 2017	9	14.85	34.70	7.1	33.11	8.1	24.5	2.24
I32	06 Jan 2017	10	14.86	30.86	6.9	33.13	8.1	24.6	2.09
I32	13 Jan 2017	1	15.11	62.92	8.2	33.03	8.1	24.4	3.03
I32	13 Jan 2017	2	15.11	60.28	8.2	33.03	8.1	24.4	3.08
I32	13 Jan 2017	3	15.11	62.98	8.0	33.04	8.1	24.4	2.75
I32	13 Jan 2017	4	15.11	63.52	7.8	33.05	8.1	24.4	2.34
I32	13 Jan 2017	5	15.08	64.04	7.8	33.10	8.1	24.5	2.16
I32	13 Jan 2017	6	15.08	67.06	7.9	33.14	8.1	24.5	2.03
I32	13 Jan 2017	7	15.08	66.97	7.8	33.15	8.1	24.5	2.03
I32	13 Jan 2017	8	15.08	65.71	7.8	33.15	8.1	24.5	1.94
I32	13 Jan 2017	9	15.08	62.47	7.8	33.16	8.1	24.5	1.93
I32	13 Jan 2017	10	15.08	53.42	7.8	33.16	8.1	24.5	1.86
I32	17 Jan 2017	1	15.29	66.10	7.8	33.16	8.1	24.5	1.71
I32	17 Jan 2017	2	15.27	65.75	7.8	33.17	8.1	24.5	2.20
I32	17 Jan 2017	3	15.04	63.53	7.8	33.17	8.2	24.6	2.21
I32	17 Jan 2017	4	15.00	63.12	7.5	33.16	8.2	24.6	1.84
I32	17 Jan 2017	5	14.98	63.79	7.0	33.17	8.1	24.6	1.71
I32	17 Jan 2017	6	14.95	59.85	6.8	33.18	8.1	24.6	1.75
I32	17 Jan 2017	7	14.95	52.57	6.7	33.21	8.1	24.6	1.76
I32	17 Jan 2017	8	14.94	44.74	6.7	33.22	8.1	24.6	1.85
I32	17 Jan 2017	9	14.92	35.99	6.8	33.22	8.1	24.6	1.94
I32	17 Jan 2017	10	14.93	28.55	6.8	33.22	8.1	24.6	1.91
I32	25 Jan 2017	1	14.47	20.91	8.3	33.10	8.1	24.6	1.20
I32	25 Jan 2017	2	14.42	20.93	8.3	33.10	8.1	24.6	1.48
I32	25 Jan 2017	3	14.36	20.69	8.3	33.10	8.1	24.6	1.44
I32	25 Jan 2017	4	14.35	19.60	8.3	33.10	8.1	24.6	1.48
I32	25 Jan 2017	5	14.33	19.56	8.2	33.10	8.1	24.7	1.38
I32	25 Jan 2017	6	14.32	19.75	8.3	33.10	8.1	24.7	1.44
I32	25 Jan 2017	7	14.31	18.81	8.3	33.10	8.1	24.7	1.33
I32	25 Jan 2017	8	14.29	18.44	8.2	33.11	8.1	24.7	1.42
I32	25 Jan 2017	9	14.29	15.17	8.2	33.11	8.1	24.7	1.46
I32	25 Jan 2017	10	14.29	13.90	8.3	33.11	8.1	24.7	1.37
I32	29 Jan 2017	1	14.03	38.66	7.7	33.27	8.1	24.8	1.08
I32	29 Jan 2017	2	14.01	38.37	6.7	33.27	8.1	24.8	1.21
I32	29 Jan 2017	3	13.74	37.46	5.6	33.29	8.1	24.9	1.04
I32	29 Jan 2017	4	13.58	40.18	5.4	33.32	8.1	25.0	0.99
I32	29 Jan 2017	5	13.48	43.82	5.5	33.34	8.1	25.0	0.95
I32	29 Jan 2017	6	13.44	44.59	5.4	33.34	8.1	25.0	0.96
I32	29 Jan 2017	7	13.37	37.23	5.5	33.34	8.0	25.0	0.94
I32	29 Jan 2017	8	13.32	15.54	5.5	33.35	8.0	25.0	1.00
I32	29 Jan 2017	9	13.29	13.99	5.6	33.35	8.0	25.1	1.04
I32	29 Jan 2017	10	13.28	10.67	5.6	33.35	8.0	25.1	1.01
I39	06 Jan 2017	1	15.04	78.84	8.8	33.02	8.2	24.4	0.43
I39	06 Jan 2017	2	15.04	79.01	8.5	33.05	8.2	24.5	0.78
I39	06 Jan 2017	3	14.95	76.37	7.9	33.14	8.2	24.6	2.25

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I39	06 Jan 2017	4	14.77	74.86	7.5	33.16	8.2	24.6	2.47
I39	06 Jan 2017	5	14.74	78.10	7.2	33.15	8.2	24.6	2.48
I39	06 Jan 2017	6	14.74	80.08	7.1	33.14	8.2	24.6	2.61
I39	06 Jan 2017	7	14.74	81.33	7.2	33.15	8.2	24.6	2.69
I39	06 Jan 2017	8	14.75	82.22	7.4	33.14	8.2	24.6	2.78
I39	06 Jan 2017	9	14.77	83.58	7.7	33.13	8.1	24.6	2.96
I39	06 Jan 2017	10	14.78	83.85	7.9	33.13	8.1	24.6	2.79
I39	06 Jan 2017	11	14.77	84.01	7.8	33.16	8.1	24.6	2.90
I39	06 Jan 2017	12	14.76	83.74	7.5	33.23	8.1	24.7	3.41
I39	06 Jan 2017	13	14.74	83.59	7.3	33.26	8.1	24.7	2.80
I39	06 Jan 2017	14	14.71	83.82	7.1	33.28	8.1	24.7	2.63
I39	06 Jan 2017	15	14.68	83.07	6.9	33.29	8.1	24.7	2.30
I39	06 Jan 2017	16	14.63	81.59	6.7	33.30	8.1	24.7	2.26
I39	06 Jan 2017	17	14.61	79.72	6.4	33.29	8.1	24.7	1.60
I39	06 Jan 2017	18	14.61	77.72	6.5	33.29	8.1	24.7	1.80
I39	13 Jan 2017	1	14.91	73.38	8.2	32.95	8.2	24.4	2.47
I39	13 Jan 2017	2	14.91	72.43	8.2	32.96	8.2	24.4	2.56
I39	13 Jan 2017	3	14.91	73.91	7.9	32.97	8.2	24.4	2.46
I39	13 Jan 2017	4	14.91	77.24	7.8	33.10	8.1	24.5	2.33
I39	13 Jan 2017	5	14.92	78.40	7.5	33.12	8.1	24.5	1.94
I39	13 Jan 2017	6	14.92	78.67	7.3	33.20	8.1	24.6	1.72
I39	13 Jan 2017	7	14.86	77.43	7.3	33.23	8.1	24.6	1.61
I39	13 Jan 2017	8	14.85	75.25	7.4	33.23	8.1	24.6	1.51
I39	13 Jan 2017	9	14.84	74.73	7.4	33.23	8.1	24.6	1.43
I39	13 Jan 2017	10	14.83	73.73	7.3	33.23	8.1	24.6	1.43
I39	13 Jan 2017	11	14.83	73.12	7.2	33.24	8.1	24.6	1.33
I39	13 Jan 2017	12	14.79	71.11	7.1	33.24	8.1	24.7	1.30
I39	13 Jan 2017	13	14.77	69.89	7.0	33.24	8.1	24.7	1.26
I39	13 Jan 2017	14	14.72	70.03	6.8	33.26	8.1	24.7	1.25
I39	13 Jan 2017	15	14.65	70.48	6.7	33.27	8.1	24.7	1.15
I39	13 Jan 2017	16	14.55	67.03	6.8	33.28	8.1	24.7	1.15
I39	13 Jan 2017	17	14.54	66.47	6.8	33.28	8.1	24.7	1.13
I39	13 Jan 2017	18	14.52	63.70	6.8	33.28	8.1	24.8	1.12
I39	17 Jan 2017	1	15.29	71.20	8.3	33.13	8.2	24.5	2.80
I39	17 Jan 2017	2	15.18	70.71	8.2	33.14	8.2	24.5	3.24
I39	17 Jan 2017	3	15.11	69.84	8.0	33.14	8.2	24.5	3.03
I39	17 Jan 2017	4	15.07	65.94	7.8	33.14	8.2	24.5	3.05
I39	17 Jan 2017	5	15.02	67.04	7.8	33.15	8.2	24.5	2.96
I39	17 Jan 2017	6	14.97	70.14	7.8	33.16	8.2	24.6	2.88
I39	17 Jan 2017	7	14.96	71.53	7.8	33.16	8.2	24.6	2.58
I39	17 Jan 2017	8	14.96	72.13	7.8	33.17	8.1	24.6	2.02
I39	17 Jan 2017	9	14.96	72.64	7.8	33.17	8.1	24.6	1.76
I39	17 Jan 2017	10	14.95	72.76	7.7	33.17	8.1	24.6	1.57
I39	17 Jan 2017	11	14.94	73.45	7.4	33.18	8.1	24.6	1.40
I39	17 Jan 2017	12	14.93	74.33	6.8	33.18	8.1	24.6	1.35
I39	17 Jan 2017	13	14.92	74.74	6.1	33.19	8.1	24.6	1.30
I39	17 Jan 2017	14	14.80	75.43	5.8	33.24	8.1	24.7	1.32
I39	17 Jan 2017	15	14.66	68.90	5.7	33.29	8.1	24.7	1.36
I39	17 Jan 2017	16	14.61	59.54	5.8	33.30	8.1	24.7	1.52
I39	17 Jan 2017	17	14.57	49.63	5.9	33.30	8.0	24.8	1.58
I39	17 Jan 2017	18	14.55	41.62	6.0	33.30	8.0	24.8	1.53
I39	25 Jan 2017	1	14.12	38.24	8.0	32.08	8.2	23.9	1.28

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I39	25 Jan 2017	2	14.12	38.11	8.0	32.19	8.2	24.0	1.61
I39	25 Jan 2017	3	14.25	39.90	7.9	32.73	8.2	24.4	1.40
I39	25 Jan 2017	4	14.26	45.53	8.0	32.89	8.1	24.5	1.11
I39	25 Jan 2017	5	14.29	46.57	8.0	32.96	8.1	24.6	0.98
I39	25 Jan 2017	6	14.29	46.02	7.9	32.99	8.1	24.6	0.87
I39	25 Jan 2017	7	14.29	45.28	7.8	32.99	8.1	24.6	0.87
I39	25 Jan 2017	8	14.32	45.37	7.7	33.01	8.1	24.6	0.86
I39	25 Jan 2017	9	14.38	43.35	7.6	33.03	8.1	24.6	0.81
I39	25 Jan 2017	10	14.41	35.07	7.5	33.06	8.1	24.6	0.81
I39	25 Jan 2017	11	14.43	36.40	7.5	33.08	8.1	24.6	0.86
I39	25 Jan 2017	12	14.48	42.39	7.5	33.10	8.1	24.6	0.95
I39	25 Jan 2017	13	14.52	48.70	7.5	33.12	8.1	24.6	0.94
I39	25 Jan 2017	14	14.64	51.24	7.5	33.18	8.1	24.6	0.98
I39	25 Jan 2017	15	14.66	48.09	7.4	33.20	8.1	24.7	1.06
I39	25 Jan 2017	16	14.66	40.54	7.4	33.21	8.1	24.7	1.28
I39	25 Jan 2017	17	14.66	39.13	7.4	33.21	8.1	24.7	1.33
I39	25 Jan 2017	18	14.66	28.90	7.4	33.21	8.1	24.7	1.21
I39	29 Jan 2017	1	14.26	81.89	7.5	33.29	8.2	24.8	0.71
I39	29 Jan 2017	2	14.24	81.83	7.5	33.29	8.2	24.8	0.85
I39	29 Jan 2017	3	14.19	81.68	7.4	33.29	8.2	24.8	0.97
I39	29 Jan 2017	4	14.16	81.48	7.4	33.29	8.2	24.8	1.10
I39	29 Jan 2017	5	14.15	81.46	7.4	33.29	8.2	24.8	1.26
I39	29 Jan 2017	6	14.14	81.48	7.4	33.29	8.2	24.8	1.44
I39	29 Jan 2017	7	14.14	81.49	7.4	33.29	8.2	24.8	1.57
I39	29 Jan 2017	8	14.14	81.24	7.4	33.29	8.2	24.8	1.71
I39	29 Jan 2017	9	14.13	81.00	7.3	33.29	8.2	24.8	1.66
I39	29 Jan 2017	10	14.11	81.04	7.3	33.29	8.2	24.8	1.69
I39	29 Jan 2017	11	14.09	80.94	7.2	33.29	8.2	24.9	1.65
I39	29 Jan 2017	12	14.05	80.93	7.2	33.30	8.1	24.9	1.62
I39	29 Jan 2017	13	13.99	80.76	7.2	33.30	8.1	24.9	1.57
I39	29 Jan 2017	14	13.97	80.27	7.2	33.30	8.1	24.9	1.57
I39	29 Jan 2017	15	13.95	79.95	7.2	33.29	8.1	24.9	1.53
I39	29 Jan 2017	16	13.94	79.64	7.1	33.29	8.1	24.9	1.49
I39	29 Jan 2017	17	13.91	79.11	6.9	33.29	8.1	24.9	1.30
I39	29 Jan 2017	18	13.88	78.33	6.2	33.29	8.1	24.9	0.87
I40	06 Jan 2017	1	15.25	37.57	7.8	32.50	8.1	24.0	0.31
I40	06 Jan 2017	2	15.25	46.21	8.4	32.40	8.1	23.9	0.35
I40	06 Jan 2017	3	15.04	56.68	8.1	32.60	8.1	24.1	0.44
I40	06 Jan 2017	4	14.86	60.11	7.6	33.01	8.1	24.5	0.52
I40	06 Jan 2017	5	14.80	61.54	7.4	33.08	8.1	24.5	1.95
I40	06 Jan 2017	6	14.77	64.02	7.8	33.10	8.1	24.6	1.57
I40	06 Jan 2017	7	14.76	65.17	7.6	33.10	8.1	24.6	2.58
I40	06 Jan 2017	8	14.74	66.69	7.0	33.11	8.1	24.6	0.87
I40	06 Jan 2017	9	14.75	43.71	6.4	33.13	8.1	24.6	2.48
I40	06 Jan 2017	10	14.76	19.44	6.4	33.15	8.1	24.6	2.82
I40	13 Jan 2017	1	15.14	1.28	8.3	31.78	8.1	23.5	3.28
I40	13 Jan 2017	2	15.13	1.67	8.3	32.56	8.1	24.1	3.09
I40	13 Jan 2017	3	15.12	22.44	8.1	32.92	8.1	24.3	2.93
I40	13 Jan 2017	4	15.11	35.16	8.1	33.02	8.1	24.4	2.96
I40	13 Jan 2017	5	15.11	37.98	8.2	33.12	8.1	24.5	3.01
I40	13 Jan 2017	6	15.13	50.84	8.2	33.19	8.1	24.6	2.91
I40	13 Jan 2017	7	15.12	68.56	8.1	33.22	8.1	24.6	2.66

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ($\sigma\text{-t}$)	Chlor ($\mu\text{g/L}$)
I40	13 Jan 2017	8	15.12	77.14	8.0	33.22	8.2	24.6	2.89
I40	13 Jan 2017	9	15.11	71.41	8.1	33.23	8.1	24.6	2.77
I40	13 Jan 2017	10	15.11	68.45	8.0	33.23	8.1	24.6	2.68
I40	17 Jan 2017	1	15.29	47.27	7.9	33.15	8.1	24.5	1.27
I40	17 Jan 2017	2	15.21	46.00	7.7	33.16	8.1	24.5	1.46
I40	17 Jan 2017	3	15.07	49.05	7.6	33.18	8.1	24.6	1.54
I40	17 Jan 2017	4	15.03	56.13	7.6	33.18	8.1	24.6	1.51
I40	17 Jan 2017	5	15.03	58.66	7.6	33.19	8.1	24.6	1.55
I40	17 Jan 2017	6	15.02	60.49	7.3	33.19	8.1	24.6	1.61
I40	17 Jan 2017	7	15.01	58.82	6.8	33.20	8.1	24.6	1.76
I40	17 Jan 2017	8	14.94	49.77	6.2	33.23	8.1	24.6	1.84
I40	17 Jan 2017	9	14.85	36.51	5.9	33.26	8.1	24.7	2.13
I40	17 Jan 2017	10	14.78	20.88	6.1	33.28	8.1	24.7	2.05
I40	25 Jan 2017	1	14.12	6.48	7.9	31.94	8.1	23.8	1.84
I40	25 Jan 2017	2	14.06	8.94	7.8	32.46	8.1	24.2	1.56
I40	25 Jan 2017	3	14.25	25.20	7.5	32.87	8.1	24.5	1.25
I40	25 Jan 2017	4	14.31	26.54	7.4	32.97	8.1	24.6	1.25
I40	25 Jan 2017	5	14.37	19.69	7.4	33.05	8.1	24.6	1.17
I40	25 Jan 2017	6	14.40	15.51	7.3	33.06	8.1	24.6	1.14
I40	25 Jan 2017	7	14.48	13.94	7.2	33.11	8.1	24.6	1.11
I40	25 Jan 2017	8	14.50	11.44	7.1	33.13	8.1	24.6	1.22
I40	25 Jan 2017	9	14.52	11.19	7.0	33.14	8.1	24.6	1.28
I40	25 Jan 2017	10	14.54	4.70	7.0	33.16	8.1	24.6	1.27
I40	29 Jan 2017	1	13.98	35.43	7.6	33.23	8.1	24.8	1.07
I40	29 Jan 2017	2	13.92	34.84	7.6	33.23	8.1	24.8	1.25
I40	29 Jan 2017	3	13.69	33.03	7.4	33.22	8.1	24.9	1.16
I40	29 Jan 2017	4	13.63	31.41	7.2	33.23	8.1	24.9	1.17
I40	29 Jan 2017	5	13.67	30.73	7.0	33.25	8.1	24.9	1.11
I40	29 Jan 2017	6	13.73	29.40	6.4	33.27	8.1	24.9	1.10
I40	29 Jan 2017	7	13.75	27.87	5.8	33.29	8.1	24.9	1.13
I40	29 Jan 2017	8	13.63	22.94	5.6	33.32	8.1	25.0	1.16
I40	29 Jan 2017	9	13.45	16.88	5.7	33.33	8.1	25.0	1.25
I40	29 Jan 2017	10	13.45	11.04	5.9	33.33	8.0	25.0	1.24

NA = not available

APPENDIX A

Quality Assurance

Table A.1

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

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Enter
I19	06 Jan 2017	6	AR	LAB DUPLICATE	56	10e	<2
I19	13 Jan 2017	6	ZV	LAB DUPLICATE	1000	92	160e
I19	17 Jan 2017	6	JT	LAB DUPLICATE	ns	ns	220e
I19	17 Jan 2017	6	ZV	LAB DUPLICATE	4000	100e	ns
I19	25 Jan 2017	6	AR	LAB DUPLICATE	3000e	160e	600
I19	29 Jan 2017	6	JT	LAB DUPLICATE	<20	<2	16e
I40	06 Jan 2017	6	AR	LAB DUPLICATE	9600	880	140e
I40	13 Jan 2017	6	ZV	LAB DUPLICATE	12000	800	1200
I40	17 Jan 2017	6	JT	LAB DUPLICATE	ns	ns	140e
I40	17 Jan 2017	6	ZV	LAB DUPLICATE	600e	92	ns
I40	25 Jan 2017	6	ZV	LAB DUPLICATE	3200e	440	620
I40	29 Jan 2017	6	JT	LAB DUPLICATE	4800	680	540
S12	03 Jan 2017		LMA	FIELD DUPLICATE	520	<20	22e
S12	03 Jan 2017		LMA	LAB DUPLICATE	600	18e	30e
S12	10 Jan 2017		AR	FIELD DUPLICATE	300e	72	84
S12	10 Jan 2017		AR	LAB DUPLICATE	220e	62	100
S12	17 Jan 2017		JT	FIELD DUPLICATE	300e	40	16e
S12	17 Jan 2017		JT	LAB DUPLICATE	180e	28e	16e
S12	24 Jan 2017		JT	FIELD DUPLICATE	960	80	240e
S12	24 Jan 2017		JT	LAB DUPLICATE	1400e	98	280e
S12	31 Jan 2017		JT	FIELD DUPLICATE	60	14e	14e
S12	31 Jan 2017		JT	LAB DUPLICATE	28e	2e	8e

ns = not sampled

ND = no data

