

## Section 5-8

### Rockport Harbor & Tribs (Rockport Conservation Commission)

#### Overview

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Rockport Harbor is located in Knox County on the mid-coast of Maine in the Penobscot Bay region. The watershed, which has a total area of approximately 10 mi<sup>2</sup> (25.9 km<sup>2</sup>) has three sub-watersheds: Goose River, coastal and Lilly Pond. The Goose River, which drains the largest sub-watershed (6.6 mi<sup>2</sup> or 22.3 km<sup>2</sup>), arises as the outflow of Hosmer Pond near the base of Bald and Ragged Mountains in Camden, and flows 4.4 miles (7.1 km) southeast to Rockport Harbor. Other smaller streams draining to Rockport Harbor are Harkness Brook and Ott Brook, both of which drain the small coastal subwatershed located along the harbor's western shore, and the unnamed stream draining from Lilly Pond (referred to as Lilly Pond Stream). While relatively small, the Lilly Pond subwatershed contains the Midcoast Solid Waste Corporation facility and grazing pastures associated with the Maine Coast Heritage Trust's Aldermere Farm. A small seasonal stream also drains to the harbor from an upland area to the east. Land uses throughout these subwatersheds include recreation (e.g. golf courses, ski slopes and associated facilities), residential development, light industry, second-growth forest and pasture (Town of Rockport Comprehensive Plan, 2004).

While Lilly Pond has been the subject of previous nutrient-related water quality management efforts (MDEP 2005), there are limited data describing water quality conditions in Rockport Harbor or its freshwater inflows. However, the issuance of public health advisories at Goodies Beach near the head of Rockport Harbor based on bacterial monitoring by Maine Healthy Beaches (MHB) in 2009-2011 prompted efforts by the Rockport Conservation Commission (RCC) to identify potential pollution sources. Results to date were documented in a RCC report (Kennedy 2011). While bacterial levels in Goose River, Ott Brook, Harkness Brook and Lilly Pond stream often exceeded the saltwater criterion for *Enterococcus*, data were insufficient to identify specific upstream sources. However, storm drainage from residential and wetland areas to the west of the harbor clearly had adverse impacts on Goodies Beach. Based on these latter results, the Town of Rockport initiated a house-by-house inspection of plumbing and sewer connections as a means to identify possible sources. The Town of Rockport is also developing a protocol for issuing health advisories based on antecedent precipitation.

Recognizing that Rockport Harbor has significant aesthetic value and is an important natural resource for the Town of Rockport and the surrounding area, the RCC is pursuing an investigative program designed to better understand factors affecting water and environmental quality. This expands RCC's initial efforts from the identification and resolution of bacteria-related impairments at Goodies Beach to include eutrophication-related issues in the harbor.

## Monitoring History

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- The Maine Biological Monitoring Program monitored the Goose River in 2002. The data is available on DEP's website.
- With assistance from DEP's Marine Unit, Rockport Conservation Commission (RCC) began monitoring Rockport Harbor in 2012. In 2013, RCC joined the VRMP with the purpose of monitoring Rockport Harbor, Goose River and other minor streams draining to the harbor.
- Maine Healthy Beaches has been monitoring bacterial levels at Goodies Beach since 2009 and issues advisories as required.
- The current RCC program has the following goals and objectives:
  - 1) Assess bacterial inputs to Rockport Harbor from the watershed;
  - 2) Establish baseline water quality and trophic condition information for Rockport Harbor
  - 3) Assess nutrient inputs to Rockport Harbor from selected freshwater inflows
  - 4) Assess the potential influence of inflow mixing on water quality responses in Rockport Harbor.

## Methods and Sampling Sites

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Rockport Conservation Commission monitors four sites in Rockport Harbor. They also monitor the Goose River, three streams, and an intermittent stream/ditch. All of the tributary sites are freshwater.

Monitoring is conducted 1-2 times per month from May through September. Additional sampling may also be conducted at Goose River for nutrient samples and stage for nutrient loading. At the freshwater sites, the monitors measure water temperature and dissolved oxygen using a YSI meter. Conductivity is measured with either a YSI meter or Oakton EC Testr 11+11 pen. Grab samples may be collected for total nitrogen, total phosphorus, *E. coli* and *Enterococci* bacteria (Goose River). At the harbor sites, vertical profiles are obtained for temperature and dissolved oxygen using a YSI meter. Salinity profiles are obtained by either pumping water to the surface and measuring salinity with a Model 850036 Large Display Salinity Pen or measured directly with a YSI meter. Grab samples are collected at 0.1 meter depths for chlorophyll a, total phosphorus, and total nitrogen. Grab samples are also collected for *Enterococci* bacteria from May to September. Lastly, Secchi depth transparency is measured.

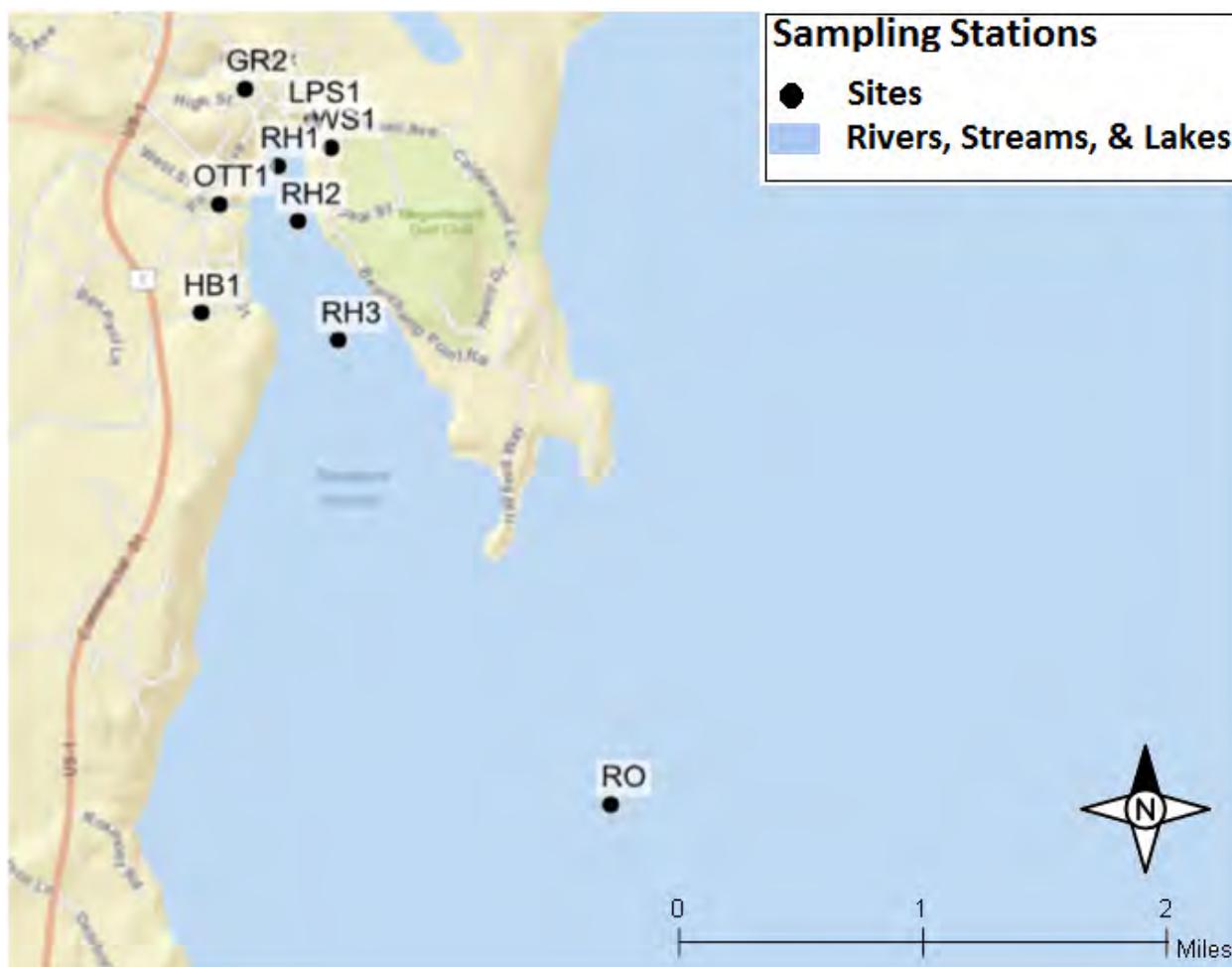
Bacteria samples are transported to Mirror Lake Laboratory (Maine Water, Rockport, ME) for analysis. Chlorophyll a samples are filtered at Mirror Lake Laboratory and frozen. Chlorophyll along with frozen nutrient samples were sent to Nutrient Analytical Services Lab, University of Maryland for analysis.

**Table 5-8-1:** Rockport Harbor and Tributaries Sampling Sites

<b>VRMP Site ID</b>	<b>Organization Site Code</b>	<b>Sample Location</b>	<b>Class</b>
Goose River-NGR01-VRMP	GR-2	Pascal Avenue Bridge	B
Harkness Brook-NHK00-VRMP	HB-1	Elm Street	B
Lily Pond Stream-NLP00-VRMP	LPS-1	Outlet by Head of Cove	B
Ott Brook-NOT02-VRMP	OTT-1	Footbridge in Harkness Preserve	B
Winter Street Ditch-Ditch-N01	WS-1	Southern side of Winter St	B
Rockport Harbor-RH1-VRMP	RH1	Rockport Harbor	SB
Rockport Harbor-RH2-VRMP	RH2	Rockport Harbor	SB
Rockport Harbor-RH3-VRMP	RH3	Rockport Harbor	SB
Penobscot Bay-RO-VRMP	RO	Penobscot Bay	SB

## Rockport Harbor & Tributaries Sampling Sites

### Rockport Conservation Commission



**Figure 5-8-1:** Map of Rockport Conservation Commission sampling sites.

## Results

Refer to Appendices A-1 and A-2 in discussion of individual site data and trends at the end of this report.

### Dissolved Oxygen

Dissolved oxygen levels are generally lowest early in the morning and then increase during the day, peaking mid to late afternoon. Monitors should try to collect some samples early in the morning. Dissolved oxygen is also affected by flow conditions and temperature. During high flow conditions, more oxygen is added to the river from the atmosphere as the water is more turbulent and there is more opportunity for mixing. If flow during the summer months is higher or lower than normal, this will affect the dissolved oxygen.

Class B criteria for dissolved oxygen are a minimum of 7 mg/l (milligrams/liter) or 75% saturation. To meet water quality criteria, both concentration and saturation standards must be met. The Class SB standard is 85% saturation.

### **2014 Results:**

**Dissolved oxygen (DO) was measured 3 times at the freshwater sites. All the measurements were high and all were above the Class B dissolved oxygen criteria of 7 mg/l and the percent saturation criterion of 75%. The summer of 2014 again had above normal flows which likely contributed to overall good dissolved oxygen.**

**At the harbor sites, dissolved oxygen was measured 6 times 1-2 times/month from June to October and included depth profiles. The four sampling sites follow similar patterns through the sampling season and were overall similar. Dissolved oxygen never fell below the Class SB criterion of 85% saturation, except at sites RH2 and RH3 late in the season at lower depths. Site RO and RH3 generally had slightly better DO. This makes sense since RH3 is the furthest harbor site and RO is Penobscot Bay. Observed maxima in concentration and saturation at depths near or immediately above the thermocline, or strata of rapidly changing temperature, are common for surface waters and likely related to increased algal photosynthesis at these depths.**

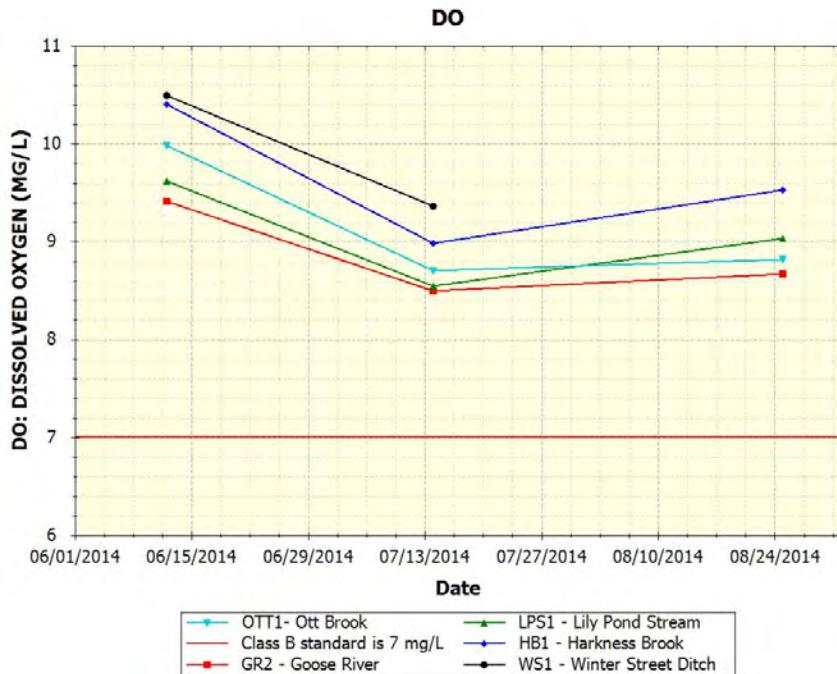
**Table 5-8-2:** A summary of minimum, maximum, and average dissolved oxygen concentration (mg/l) values at Rockport Conservation Commission monitoring sites. \* (Harbor Sites are surface values only).

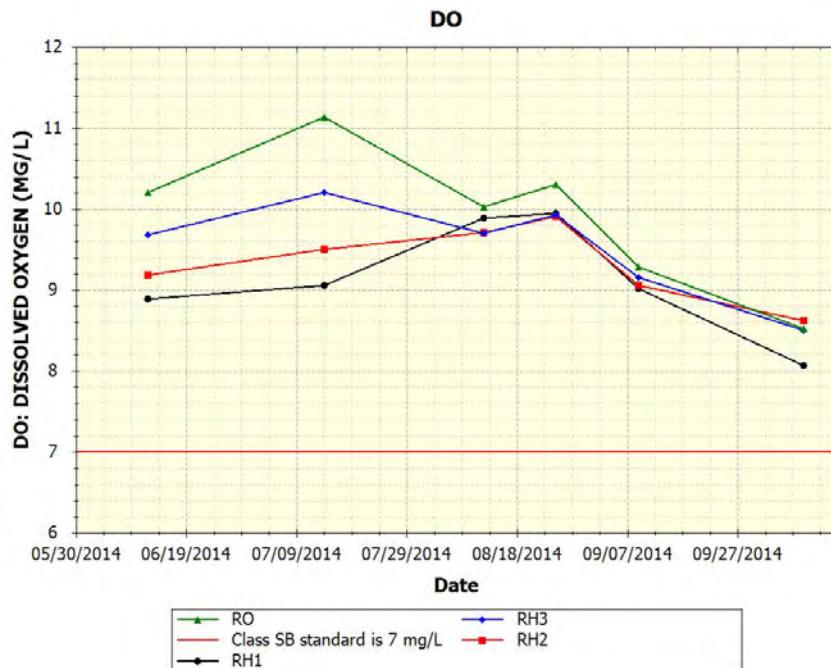
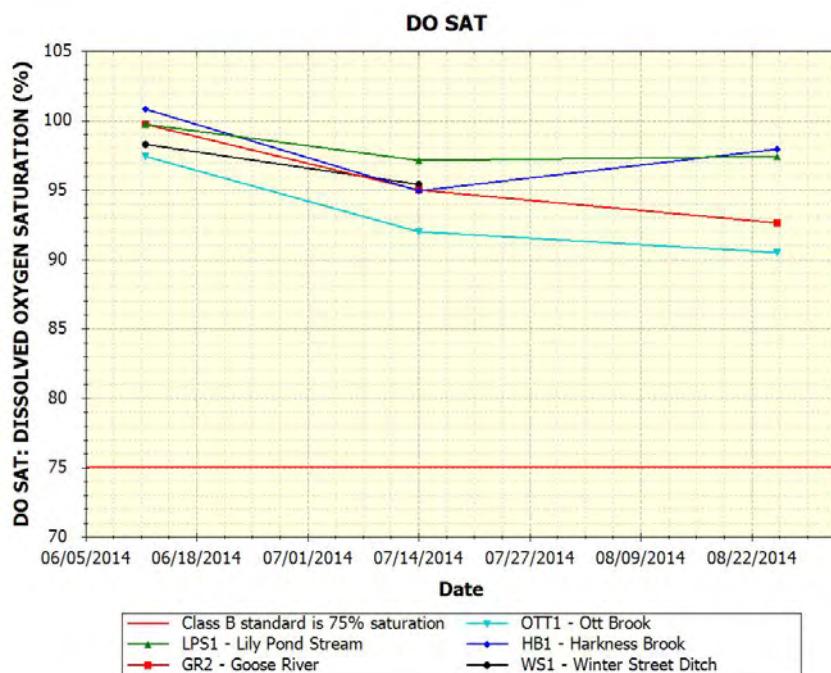
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
GR-2	B	3	8.8	8.5	9.4	7	0
HB-1	B	3	9.6	9.0	10.4	7	0
LPS-1	B	3	9.1	8.6	9.6	7	0
OTT-1	B	3	9.2	8.7	10.0	7	0
WS-1	B	2	9.9	9.4	10.5	7	0
RH1	SB	6	9.1	8.0	10.0	n/a	n/a
RH2	SB	6	9.3	8.6	9.7	n/a	n/a
RH3	SB	6	9.5	8.5	10.2	n/a	n/a
RO	SB	6	9.9	8.5	11.1	n/a	n/a

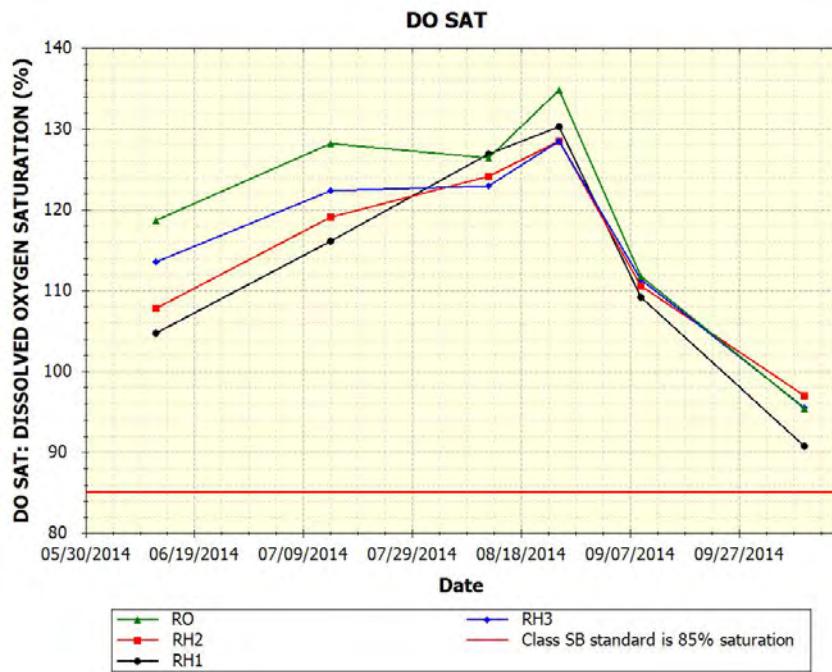
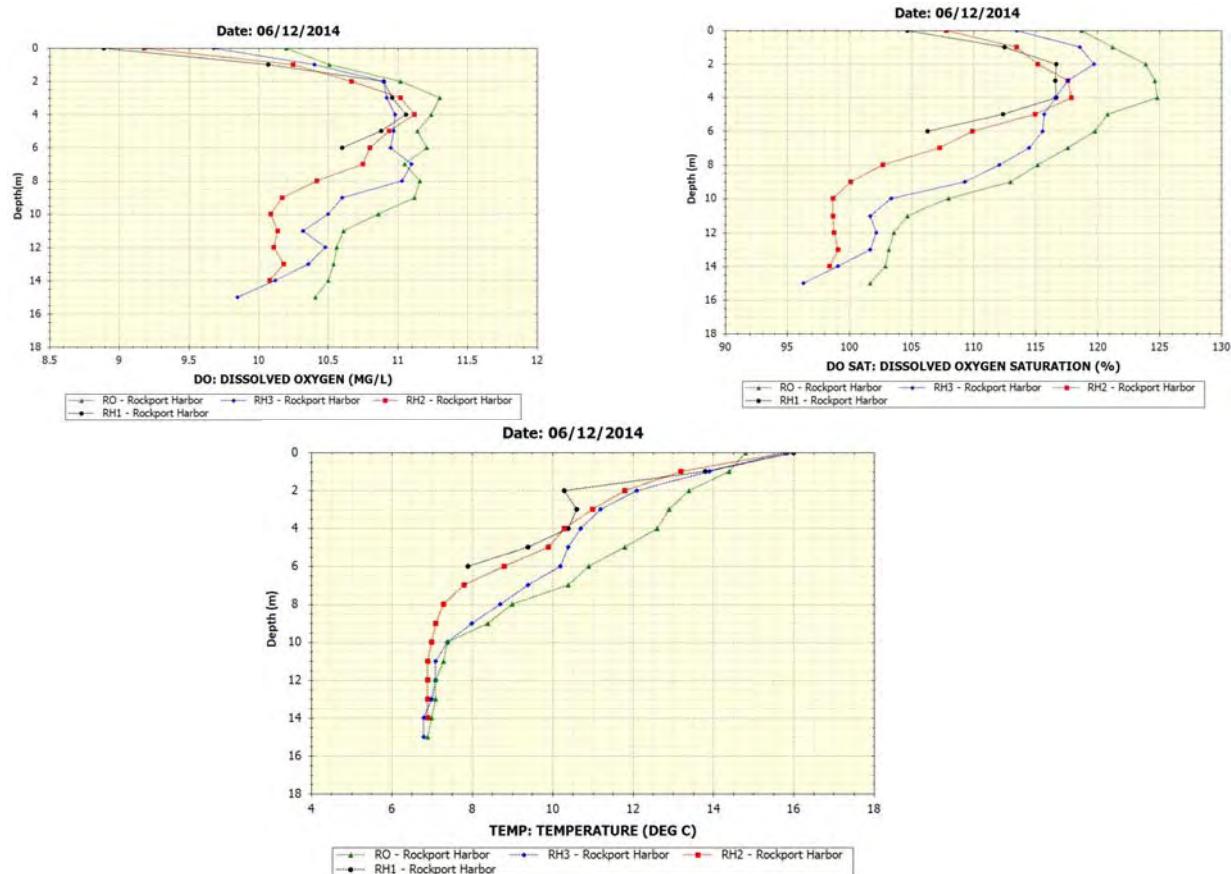
**Table 5-8-3:** A summary of minimum, maximum, and average dissolved oxygen saturation (%) values at Rockport Conservation Commission monitoring sites. \*Harbor sites are surface values only.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
GR-2	B	3	95.8	92.6	99.7	75	0
HB-1	B	3	97.9	94.9	100.8	75	0
LPS-1	B	3	98.1	97.1	99.7	75	0
OTT-1	B	3	93.3	90.5	97.4	75	0
WS-1	B	2	96.9	95.4	98.3	75	0
RH1	SB	6	113.0	90.8	130.3	85	0
RH2	SB	6	114.5	97.0	128.5	85	0
RH3	SB	6	115.5	95.5	128.5	85	0
RO	SB	6	119.2	95.4	134.8	85	0

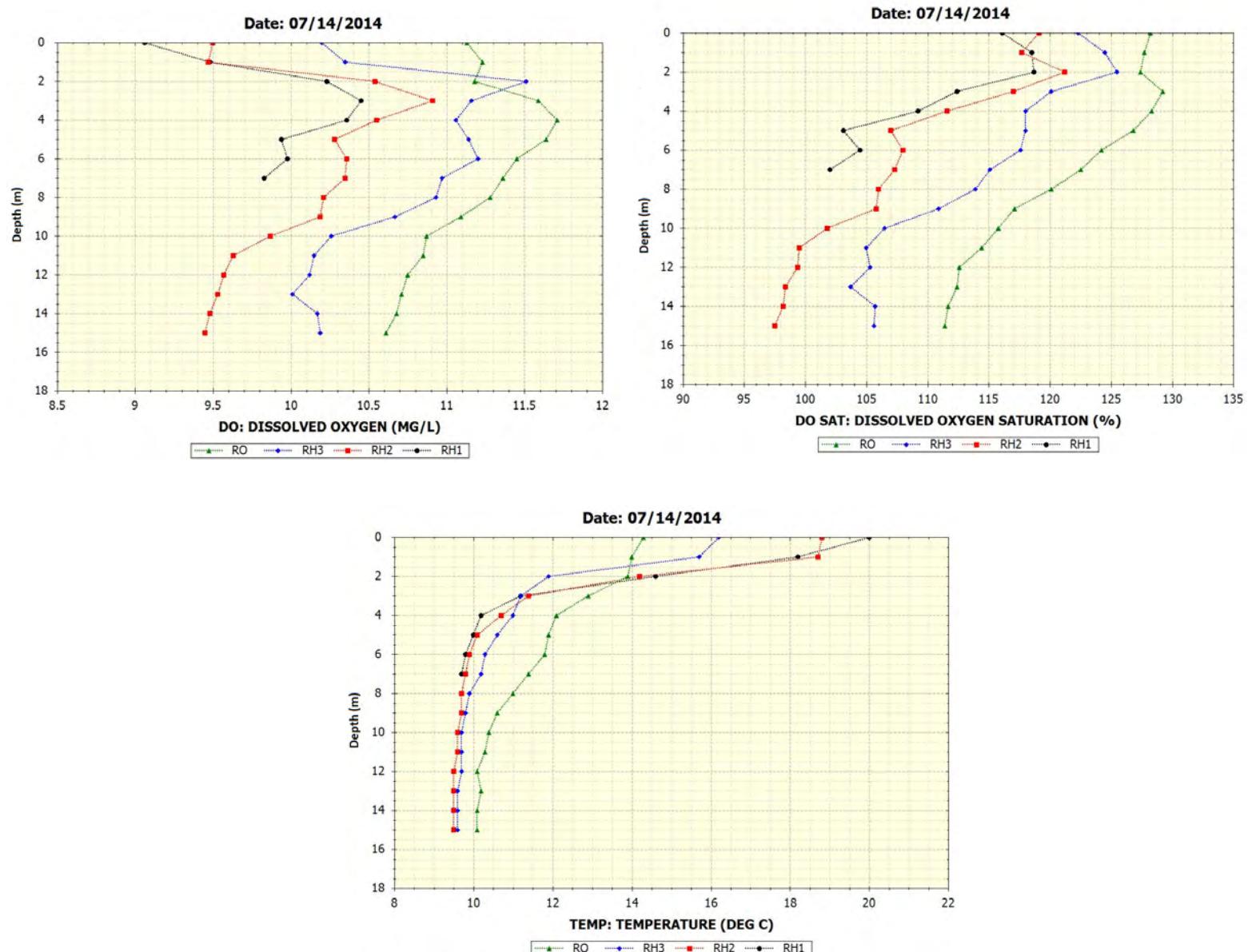
**Figure 5-8-2:** Graph of dissolved oxygen concentrations at stream sites



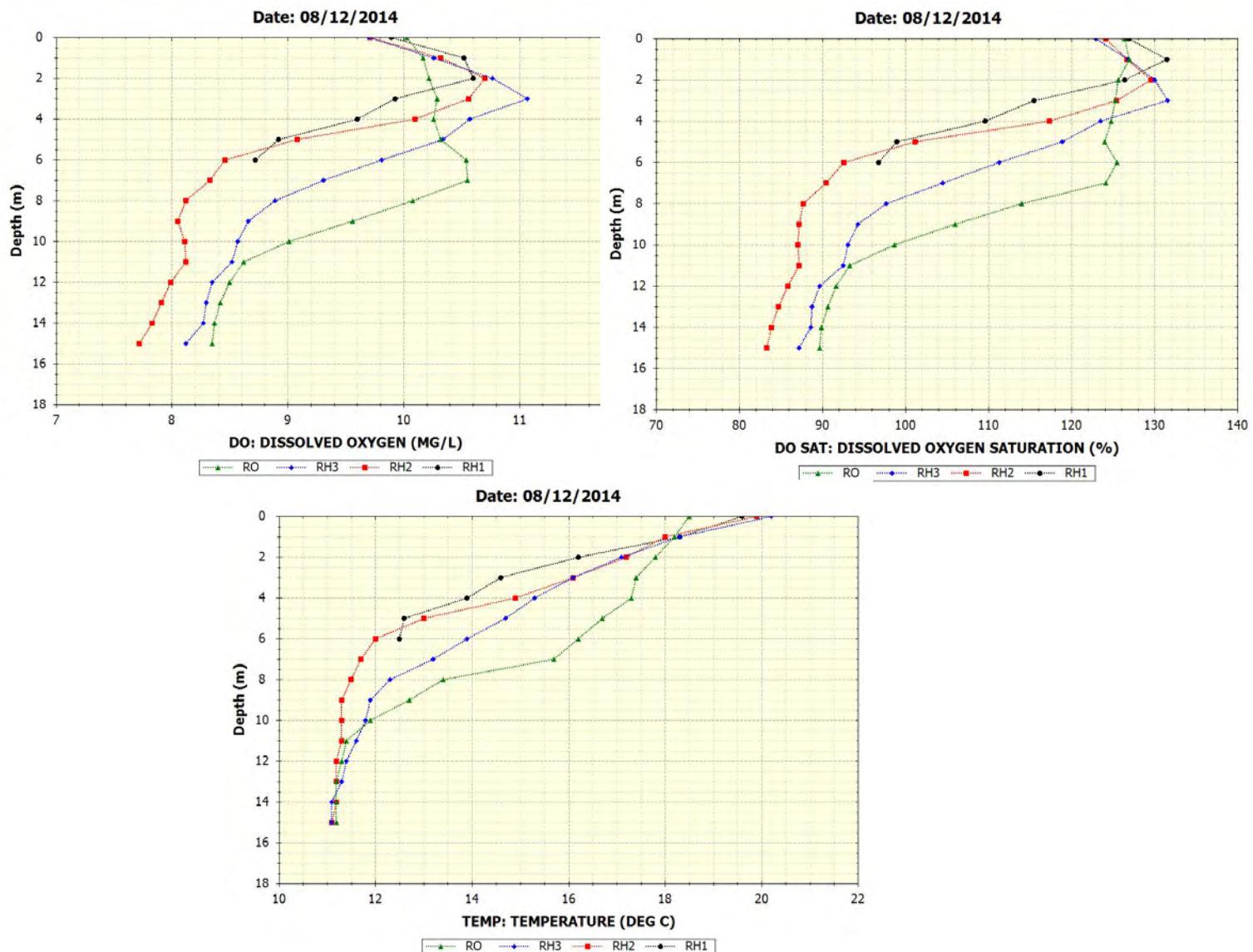
**Figure 5-8-3:** Graph of surface dissolved oxygen concentrations at harbor sites**Figure 5-8-4:** Graph of dissolved oxygen saturation at stream sites

**Figure 5-8-5:** Graph of surface dissolved oxygen saturation at harbor sites**Figure 5-8-6:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on June 12<sup>th</sup>.

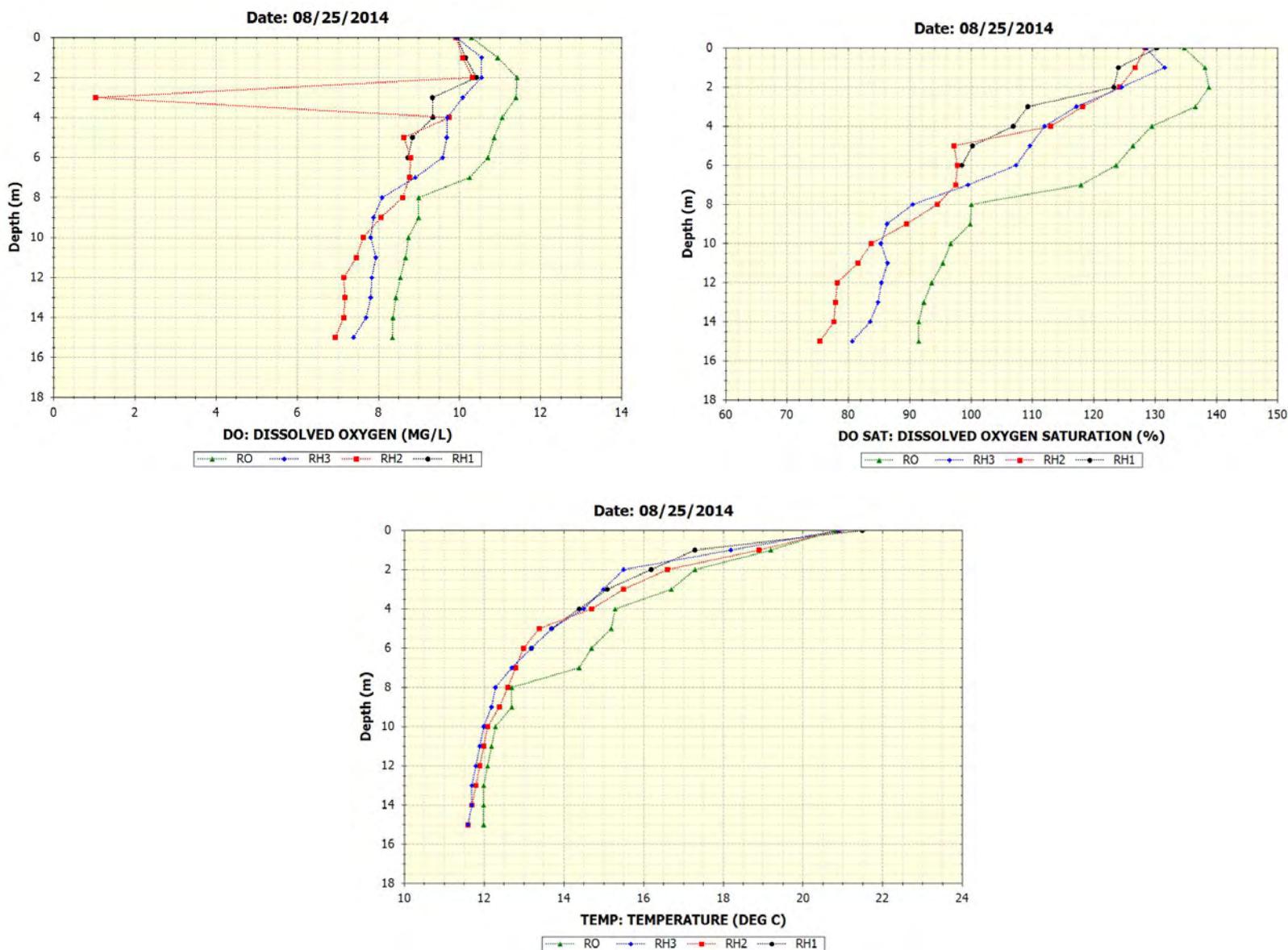
**Figure 5-8-7:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on July 14<sup>th</sup>.



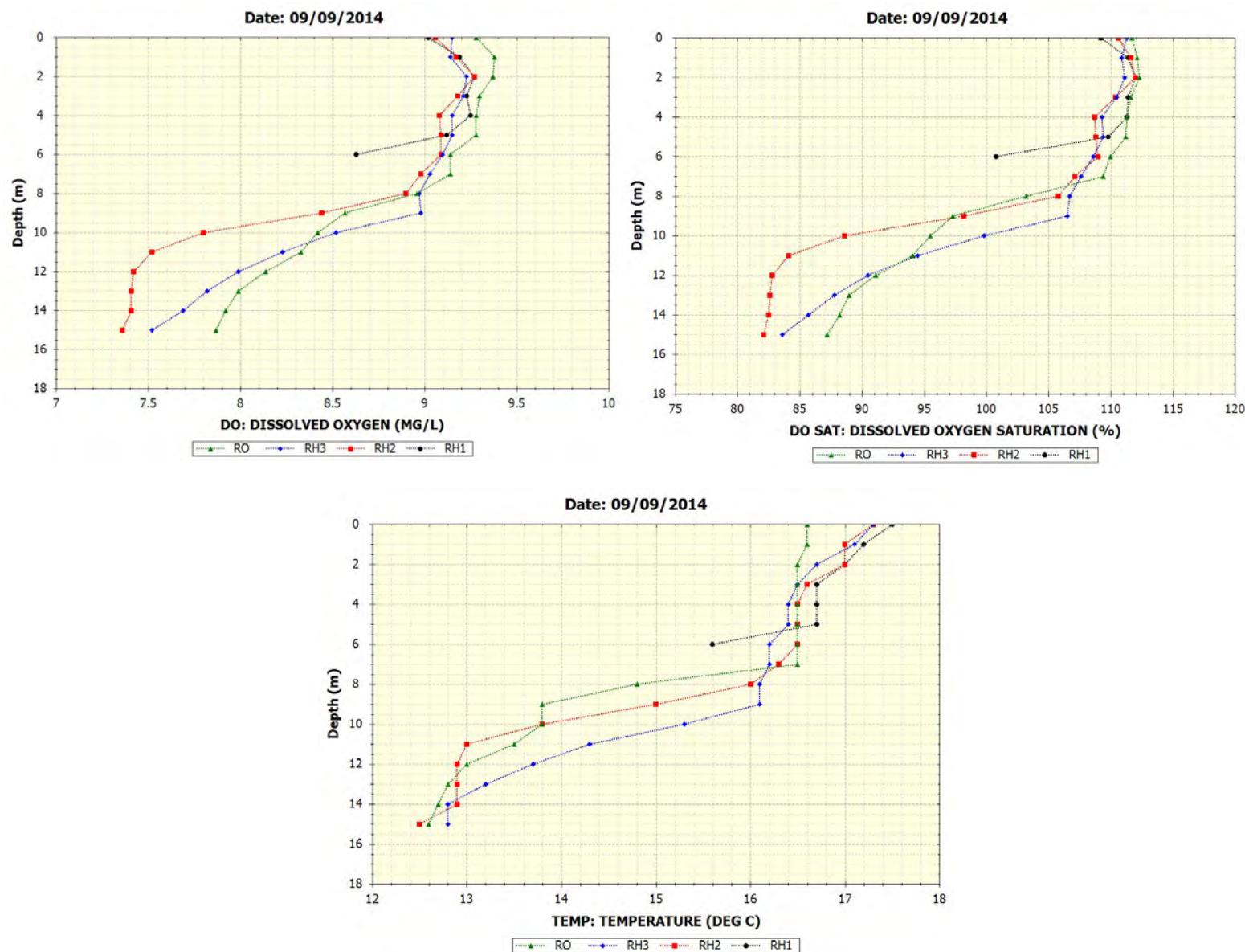
**Figure 5-8-8:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on August 12th.



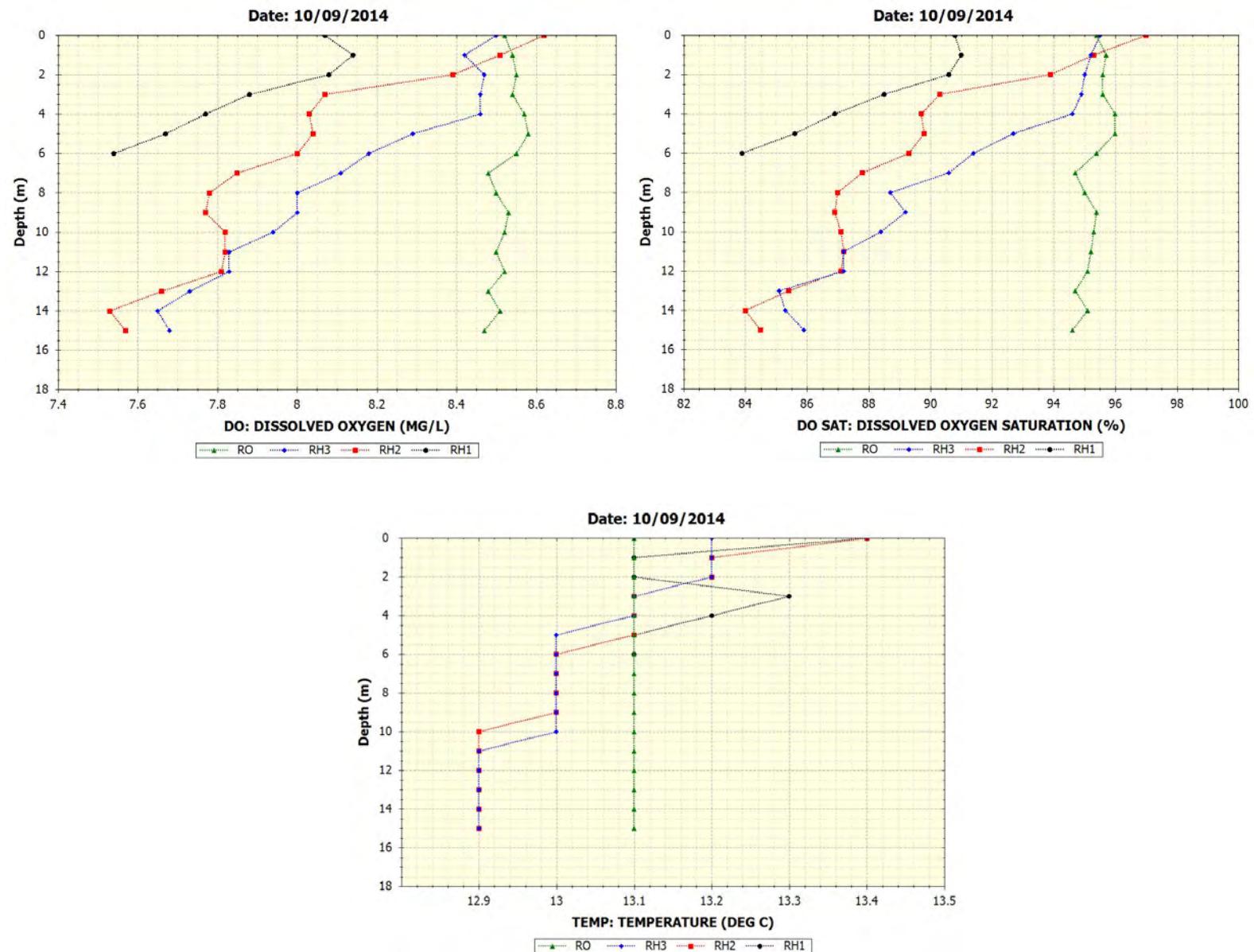
**Figure 5-8-9:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on August 20<sup>th</sup>



**Figure 5-8-10:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on September 9<sup>th</sup>.



**Figure 5-8-11:** Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on October 9<sup>th</sup>.



### **Water Temperature**

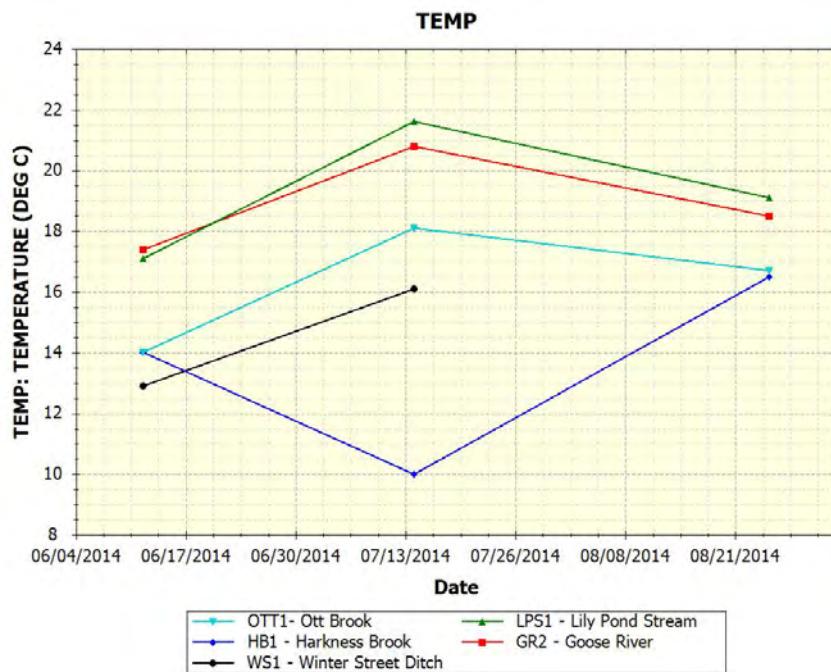
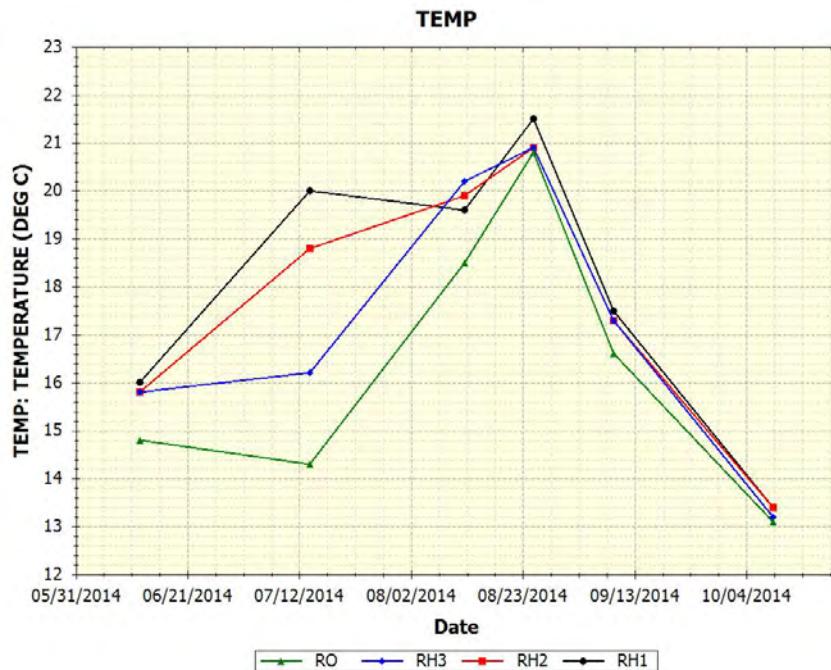
Maine's Regulations Relating to Temperature (06-096 CMR Chapter 582) require that discharge of pollutants not raise the temperature of any river and stream above the EPA criteria for indigenous species (23°C maximum and 19°C weekly average) or 0.3°C (0.5°F) above the temperature that would naturally occur outside a mixing zone established by the Board of Environmental Protection. Pollutant is defined in statute as many things including dirt and heat. For tidal waters, discharge of pollutants may not raise the temperature more than 4°F (2.2°C) or more than 1.5°F (0.8°C) from June 1 to September 1, and may not cause the temperature of any tidal waters to exceed 85°F (29°C) at any point outside a mixing zone established by the Board of Environmental Protection.

**2014 Results:**

**Temperature was measured 3 times at the freshwater sites. Temperature was lowest at sampling sites OTT-1, HB-1 and WS-1 with maximum temperature at these three sites 18.1°C. Temperature at sites GR-2 and LPS-1 had maximum temperatures of 20.8°C and 21.6°C. The Goose River is impounded prior to flowing under Route 1 toward sampling site GR-2 and is not shaded where measurements are made. Site LPS-1 is the outlet of Lilly Pond. It is not surprising that these two sites are somewhat higher due to solar heat gain. Overall temperatures at the freshwater sites was good.**

**Table 5-8-4:** A summary of minimum, maximum, and average water temperature (°C) values at Rockport Conservation Commission monitoring sites. \*Harbor sites are surface values only.

<b>Site</b>	<b>Class</b>	<b># of Observations</b>	<b>Average</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Criterion</b>	<b># Exceeding</b>
GR-2	B	3	18.9	17.4	20.8	n/a	n/a
HB-1	B	3	13.5	10.0	16.5	n/a	n/a
LPS-1	B	3	19.3	17.1	21.6	n/a	n/a
OTT-1	B	3	16.3	14.0	18.1	n/a	n/a
WS-1	B	2	14.5	12.9	16.1	n/a	n/a
RH1	SB	6	18.0	13.4	21.5	n/a	n/a
RH2	SB	6	17.7	13.4	20.9	n/a	n/a
RH3	SB	6	17.3	13.2	20.9	n/a	n/a
RO	SB	6	16.4	13.1	20.8	n/a	n/a

**Figure 5-8-12:** Graph of water temperature at stream sites**Figure 5-8-13:** Graph of surface water temperature at harbor sites

### Specific Conductance

Specific conductance is related to the amount of dissolved materials in the water. While there are no numerical standards, a relationship exists between conductivity and chloride which has numerical criteria. In general, streams located in urban areas tend to have high specific conductance due to polluted urban stormwater runoff. This may also in large part be due to salt buildup in surface and groundwater from road maintenance practices.

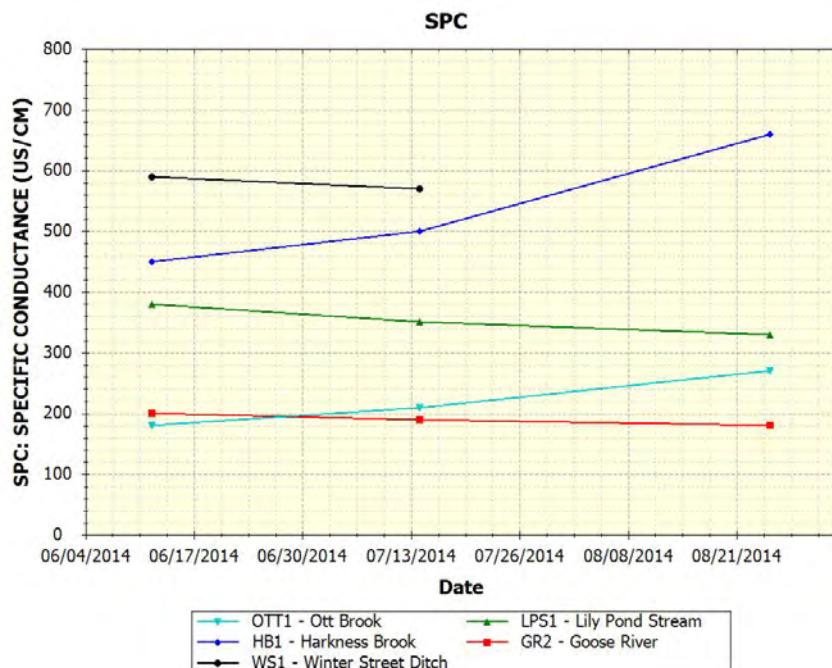
**2014 Results:**

Specific conductance at sampling site WS-1 was high ( 570-590  $\mu\text{S}/\text{cm}$ ). Site HB-1 was also high with values ranging from 450-660  $\mu\text{S}/\text{cm}$ . Site LPS-1 values were moderate to high. Site OTT-1 values were moderate with measurements ranging from 180-270  $\mu\text{S}/\text{cm}$ . The lowest values overall were at site GR-2. Overall, specific conductance is consistent at each sampling site.

**Table 5-8-5:** A summary of minimum, maximum, and average specific conductance ( $\mu\text{S}/\text{cm}$ ) values at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
GR-2	B	3	190	180	190	n/a	n/a
HB-1	B	3	537	450	660	n/a	n/a
LPS-1	B	3	353	330	380	n/a	n/a
OTT-1	B	3	220	180	270	n/a	n/a
WS-1	B	2	580	570	590	n/a	n/a

**Figure 5-8-14:** Graph of specific conductance



## **Bacteria**

Enterococcus bacteria are used as the indicator organism for marine waters and *E. coli* bacteria are used for freshwaters. While these types of bacteria are not pathogens, their presence in the water may indicate the presence of other organisms including bacteria and viruses that can cause gastrointestinal illnesses.

Class B criteria for bacteria are as follows: “Between May 15<sup>th</sup> and Sept 30<sup>th</sup>, *E. coli* of human and domestic origin shall not exceed a geometric mean of 64/100 ml (milliliters) or an instantaneous level of 236/100 ml.” Class SB criteria are as follows: “Between May 15<sup>th</sup> and September 30<sup>th</sup>, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters.” Geometric means are calculated instead of average because it is more appropriate to use this calculation for an indicator such as bacteria where there may be one or more very high or low values that can skew the mean.

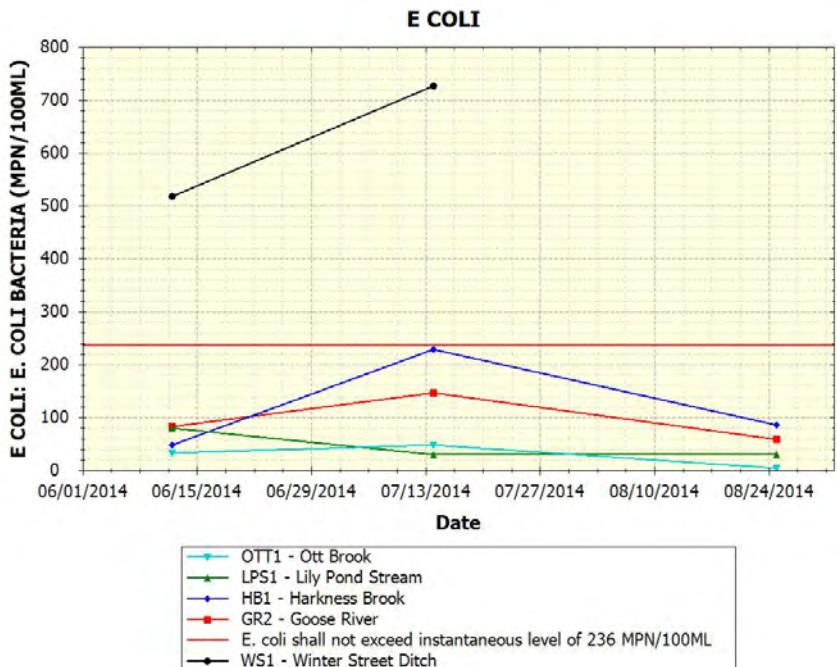
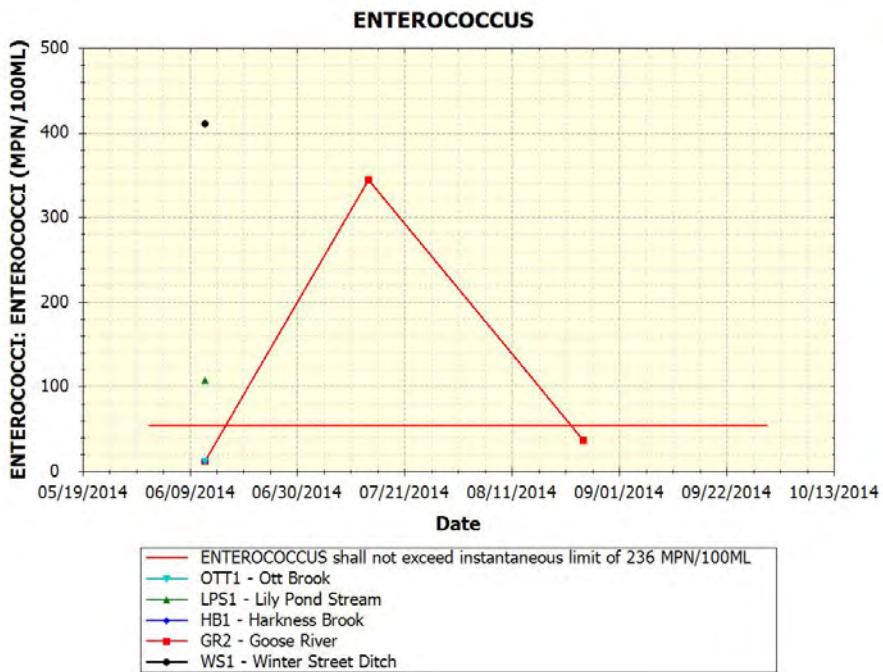
### **2014 Results:**

At the freshwater sites, *Escherichia coli* bacteria was sampled just 2-3 times. The Class B instantaneous criterion was exceeded the 2 times it was sampled at site WS-1. None of the other sites exceeded the instantaneous criterion. The harbor sites were sampled 4 times. There were 2 exceedances at site RH1 and 1 exceedance at the other harbor sites. All of the samples were collected during baseflow conditions. In order to calculate an accurate geometric mean, at least 6 samples should be collected and they should include both baseflow and storm event samples. While the harbor samples were, on average, low to moderate, sampling done through the Maine Healthy Beaches Program at Goodies Beach had a number of high values through the summer period. Values for 5 out of 16 sampling events were above the criterion of 104 MPN/100 ml. The values for these 5 dates ranged from 122 to 10462 MPN/100 ml.

**Table 5-8-6:** A summary of minimum, maximum, and geometric means for bacteria (MPN/100 mL) values at Rockport Conservation Commission monitoring sites.

Site	Class	Bacteria Type	# of Observations	Geo Mean	Minimum	Maximum	Criterion Inst/Geo	# Exceeding
GR-2	B	<i>E. coli</i>	3	88*	58	147	236/64	0
GR-2	B	Enterotoxigenic	3	54*	12	344	--	-
HB-1	B	<i>E. coli</i>	3	98*	48	228	236/64	0
LPS-1	B	<i>E. coli</i>	3	41*	29	79	236/64	0
OTT-1	B	<i>E. coli</i>	3	18*	4	48	236/64	0
WS-1	B	<i>E. coli</i>	2	613*	517	727	236/64	2
RH1	SB	Enterotoxigenic	4	70*	46	158	54/5	2
RH2	SB	Enterotoxigenic	4	55*	32	156	54/8	1
RH3	SB	Enterotoxigenic	4	42*	25	103	54/8	1
RO	SB	Enterotoxigenic	4	33*	14	115	54/8	1

**\*At least 6 samples should be collected to calculate the geometric mean**

**Figure 5-8-15:** Graph of E. coli (MPN/ml)**Figure 5-8-16:** Graph of Enterococcus (MPN/ml)

### Nutrients and Chlorophyll a

Nutrient criterion for freshwaters have been developed, but not yet adopted. The draft criteria for Class B waters are  $\leq 30$  mg/l (total phosphorus). In regards to total nitrogen, DEP Biomonitoring Program staff suggests that good water streams have values below 600 mg/l. Nutrient criteria for marine waters have not been developed.

**2014 Results:**

Total phosphorus and total nitrogen were measured 8 times at sampling site GR-2 and 2 times at the other freshwater sites. Three of 8 samples were above 0.030 mg/l [30 µg/l] for total phosphorus and 2 samples were above 0.60 mg/l [600 µg/l] for total nitrogen. The value of 0.03 mg/l is the proposed nutrient criteria value. The value of 0.6 mg/l is the value that DEP Biologists estimate distinguishes between enriched versus non-enriched streams. Site HB-1 had 1 value slightly above 0.03 mg/l for total phosphorus and 0.6 mg/l for total nitrogen. Site LPS-1 had 2 values above 0.03 mg/l for total phosphorus. Site OTT-1 had 1 value above 0.6 mg/l for total nitrogen. The total nitrogen for both samples taken at site WS-1 were well above 0.6 mg/l. Overall, nutrients were moderate at the freshwater sites. Total phosphorus and total nitrogen at the harbor sites were all similar. At the harbor sites, the chlorophyll *a* are considered low (< 5 µg/l).

**Table 5-8-7:** A summary of minimum, maximum, and average phosphorus (mg/l) values at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
GR-2	B	8	0.0341	0.0111	0.0711	n/a	n/a
HB-1	B	2	0.0256	0.0197	0.0314	n/a	n/a
LPS-1	B	2	0.0420	0.0351	0.0488	n/a	n/a
OTT-1	B	2	0.0242	0.0218	0.0266	n/a	n/a
WS-1	B	2	0.0223	0.0219	0.0227	n/a	n/a
RH1	SB	6	0.0325	0.0207	0.0456	n/a	n/a
RH2	SB	6	0.0250	0.0191	0.0321	n/a	n/a
RH3	SB	6	0.0241	0.0173	0.0335	n/a	n/a
RO	SB	6	0.0247	0.0168	0.0400	n/a	n/a

**Table 5-8-8:** A summary of minimum, maximum, and average nitrogen (mg/l) values at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
GR-2	B	8	0.4575	0.27	0.72	n/a	n/a
HB-1	B	2	0.62	0.58	0.66	n/a	n/a
LPS-1	B	2	0.52	0.52	0.52	n/a	n/a
OTT-1	B	2	0.655	0.55	0.76	n/a	n/a
WS-1	B	2	1.34	1.04	1.64	n/a	n/a
RH1	SB	6	0.26	0.21	0.34	n/a	n/a
RH2	SB	6	0.2183	0.16	0.28	n/a	n/a

RH3	SB	6	0.2267	0.13	0.27	n/a	n/a
RO	SB	5	0.24	0.19	0.30	n/a	n/a

**Table 5-8-9:** A summary of minimum, minimum and average chlorophyll a (ug/l) values at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
RH1	SB	4	2.30	1.23	4.27	n/a	n/a
RH2	SB	4	1.69	1.30	2.28	n/a	n/a
RH3	SB	4	1.82	1.48	2.19	n/a	n/a
RO	SB	4	2.72	1.38	3.99	n/a	n/a

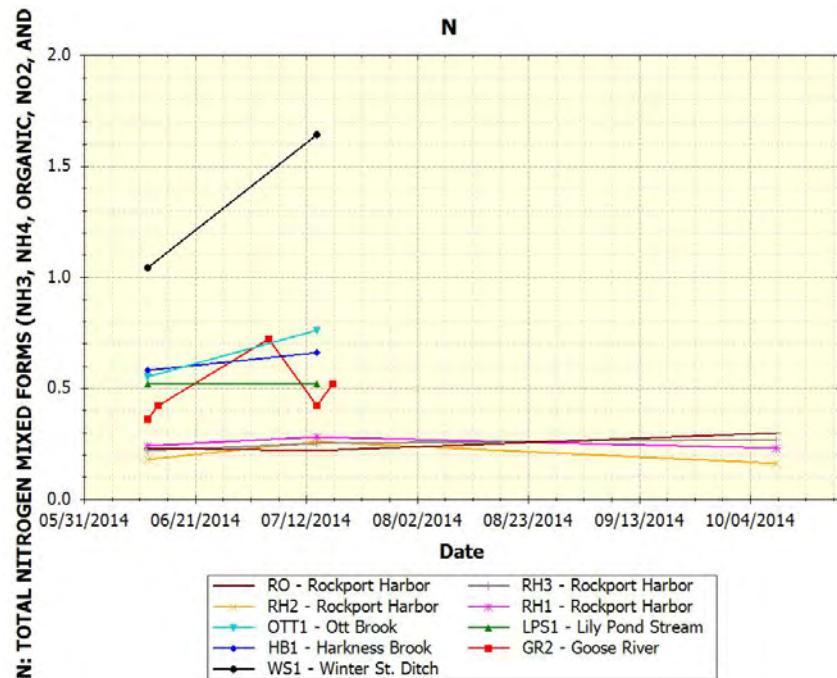
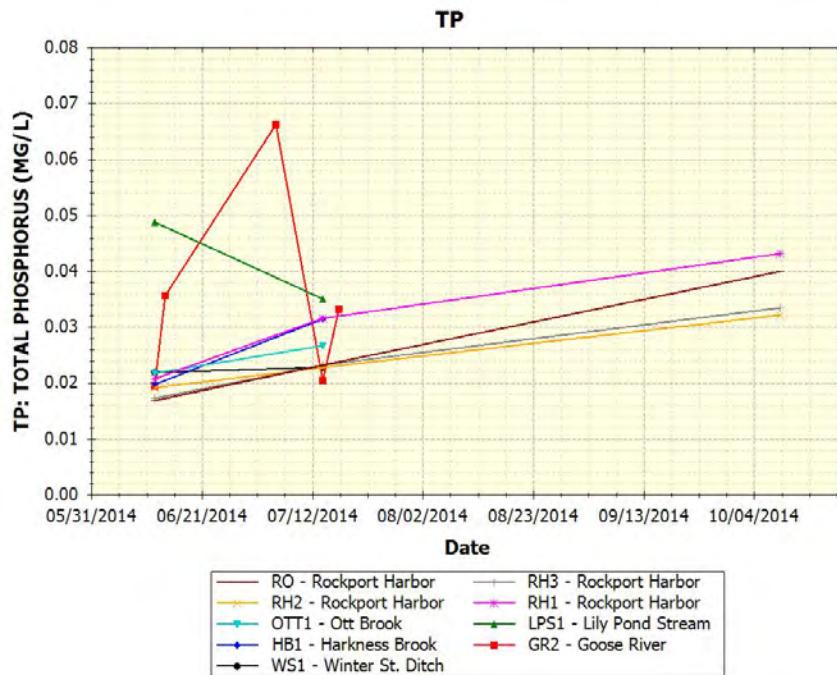
**Table 5-8-10:** A summary of minimum, maximum, and average phaeophytin (ug/l) values at Rockport Conservation Commission monitoring sites.

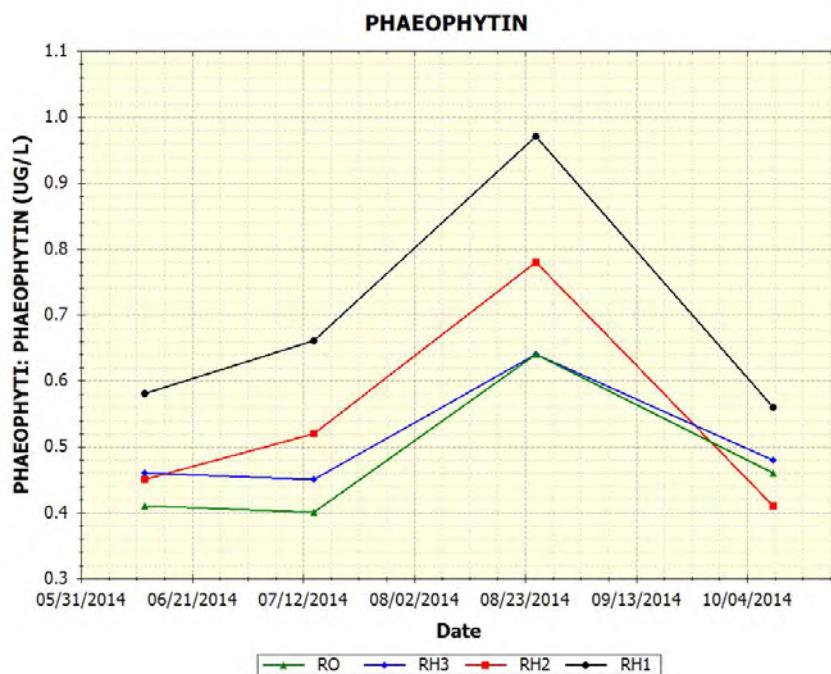
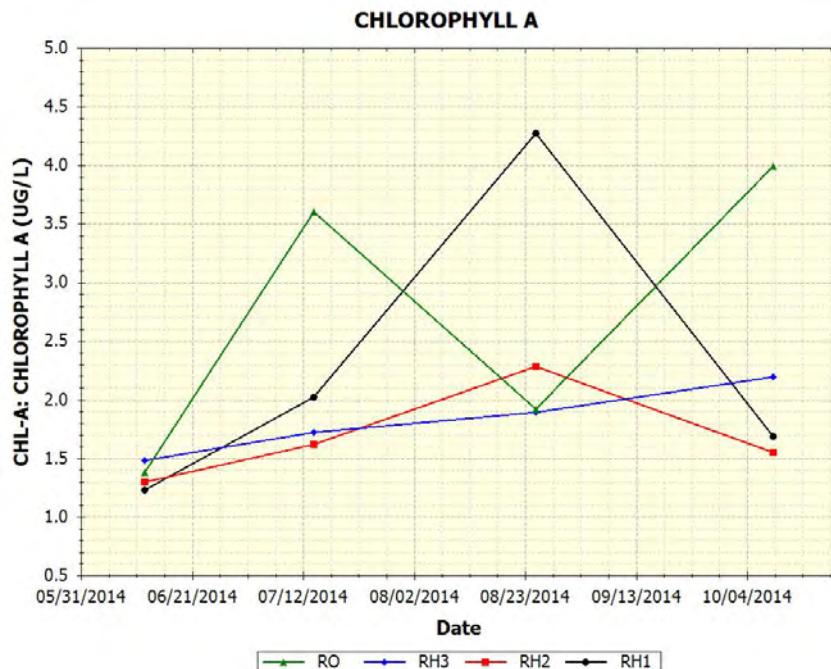
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
RH1	SB	4	0.69	0.56	0.97	n/a	n/a
RH2	SB	4	0.54	0.41	0.78	n/a	n/a
RH3	SB	4	0.51	0.45	0.64	n/a	n/a
RO	SB	4	0.48	0.40	0.64	n/a	n/a

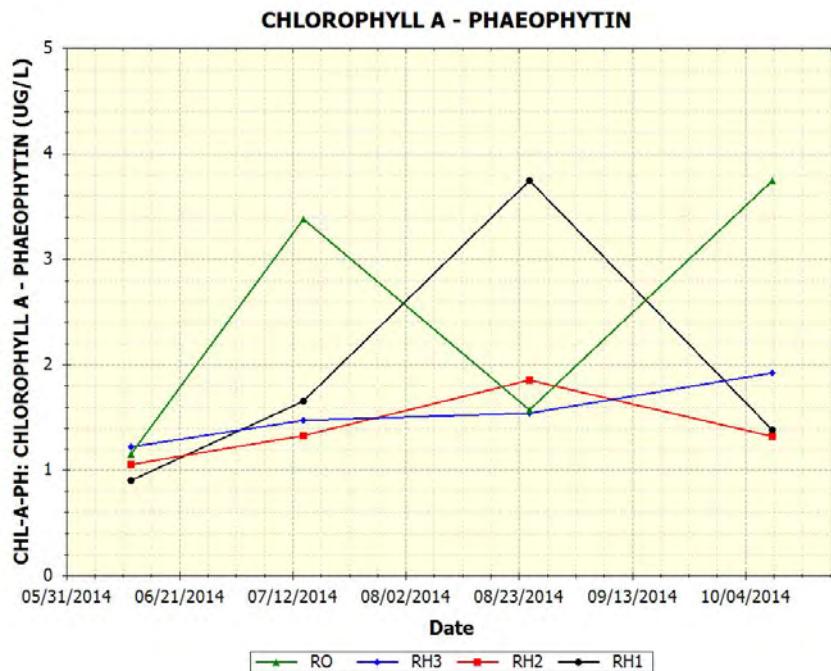
**Table 5-8-11:** A summary of minimum, maximum, and average chlorophyll a minus phaeophytin (ug/l) values at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
RH1	SB	4	1.92	0.90	3.74	n/a	n/a
RH2	SB	4	1.39	1.05	1.85	n/a	n/a
RH3	SB	4	1.54	1.22	1.92	n/a	n/a
RO	SB	4	2.46	1.15	3.74	n/a	n/a

**Figure 5-8-17:** Graphs of nitrogen and phosphorus (mg/l), and chlorophyll a, phaeophytin, and chlorophyll a minus phaeophytin (ug/l)







### Transparency

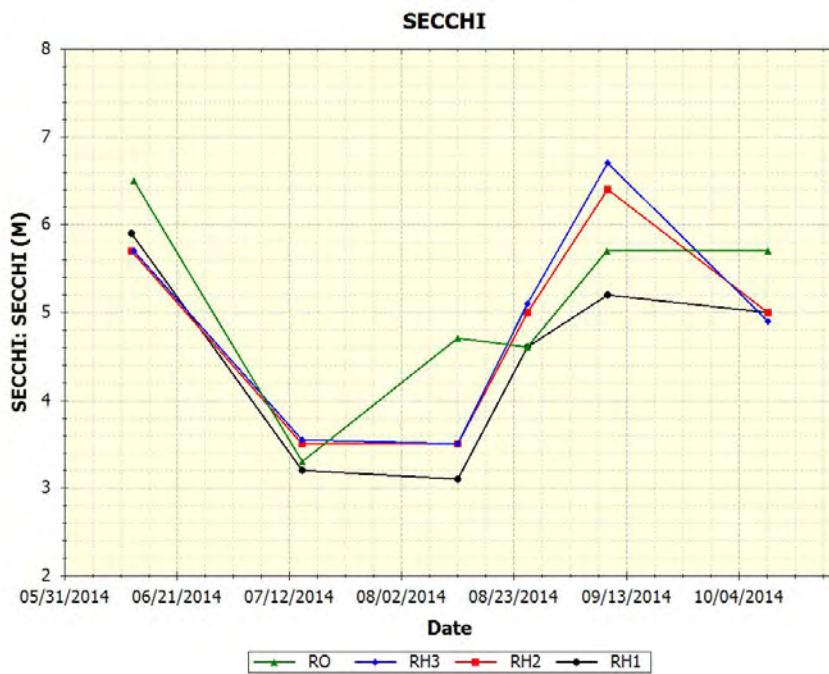
Transparency is a measure of the water clarity. Transparency is reduced by suspended materials in the water—primarily algae but may also include suspended sediments that are delivered to a water body during a storm event or stirred up from the bottom. It is measured by lowering a black and white disk called a Secchi disk into the water. The point at which the disk is no longer visible is recorded as the transparency or Secchi depth.

#### **2014 Results:**

**Transparency at the four harbor sites were generally similar. Sampling site RH1 was just a bit lower.**

**Table 5-8-7:** A summary of minimum, maximum, and average transparency at Rockport Conservation Commission monitoring sites.

Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
RH1	SB	6	4.5	3.1	5.9	n/a	n/a
RH2	SB	6	4.9	3.5	6.4	n/a	n/a
RH3	SB	6	4.9	3.5	6.7	n/a	n/a
RO	SB	6	5.1	3.3	6.5	n/a	n/a

**Figure 5-8-18:** Graph of Transparency (meters).

## Discussion and Recommendations

There are numerous sources of pollution and other stresses to Rockport Harbor and tributaries monitored by the Rockport Conservation Commission that could potentially have a collective impact on water quality. Some of those sources of pollution and stress may include:

- Non-point source pollution (e.g., septic systems, eroded soil, fertilizers, pesticides, heavy metals, petroleum residues, road salt, wildlife and pet feces) and polluted stormwater originating from urban impervious surfaces (e.g., streets, parking lots, driveways, rooftops) (even though urban development and roads are fairly sparse in the watershed), agriculture, and forestry.
- Ponds and impoundments (which often create more pond-like aquatic habitat conditions that may have higher water temperatures and lower dissolved oxygen concentrations than free-flowing waters).
- Natural effects of wetlands (such as contributing waters to a stream/river that have low dissolved oxygen levels due to the decomposition of large amounts of organic matter, respiration of abundant plant matter, and low re-aeration rates that is characteristic of many wetlands).

### The following are recommendations for future monitoring:

- **Work with the Maine Healthy Beaches Program and DEP Division of Environmental Assessment staff on tracking bacteria sources to Goodies Beach.**
- **Bacteria samples should be collected at least 6 times over the sampling season (May 15-September 30) and include both baseflow and storm event samples.**

- **Since the Goose River is the predominant source to the harbor, perhaps the monitors should try to monitor the river more often through the field season.**
- **Continue monitoring at all stations to develop a long term trend database.**

Appendix A-1. 2014 water quality data for "Approved" and "Non-Approved" sites. Non-Approved sites do not yet meet official VRMP sample location criteria and/or require further inspection and review.

\* Sampling depths are only reported for Tier 1 VRMP sites.

\*\* "N" = normal environmental sample ; "D" = field duplicate; "D.O." = dissolved oxygen; "Spec. Cond" = specific conductance; "TSS" = total suspended solids.

Refer to Appendix A-2 for observational data and quality assurance/quality control (QA/QC) notes.

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
<b>Rockport Harbor - Rockport Conservation Commission : Approved Sites</b>																
GR-2	GOOSE RIVER - NGR01 - VRMP	6/12/2014	8:23 AM	N			17.4	99.7	9.36	200					82	12
GR-2	GOOSE RIVER - NGR01 - VRMP	6/12/2014	8:23 AM	D			17.4	98.3	9.41	200						
GR-2	GOOSE RIVER - NGR01 - VRMP	7/14/2014	7:40 AM	N			20.8	95	8.5	190					147	344
GR-2	GOOSE RIVER - NGR01 - VRMP	8/25/2014	7:35 AM	N			18.5	92.6	8.67	180					58	37
HB-1	HARKNESS BROOK - NHK00 - VRMP	6/12/2014	8:06 AM	N			14	100.8	10.4	450					48	12
HB-1	HARKNESS BROOK - NHK00 - VRMP	7/14/2014	7:15 AM	N			10	94.9	8.98	500					228	
HB-1	HARKNESS BROOK - NHK00 - VRMP	8/25/2014	7:23 AM	N			16.5	97.9	9.53	660					86	
LPS-1	LILY POND STREAM - NLP00 - VRMP	6/12/2014	8:44 AM	N			17.1	99.7	9.62	380					79	108
LPS-1	LILY POND STREAM - NLP00 - VRMP	7/14/2014	7:50 AM	N			21.6	97.1	8.55	350					29	
LPS-1	LILY POND STREAM - NLP00 - VRMP	8/25/2014	7:49 AM	N			19.1	97.4	9.03	330					29	
OTT-1	OTT BROOK - NOT02 - VRMP	6/12/2014	7:42 AM	N			14	97.4	9.98	180					32	12
OTT-1	OTT BROOK - NOT02 - VRMP	7/14/2014	6:58 AM	N			18.1	92	8.7	210					48	
OTT-1	OTT BROOK - NOT02 - VRMP	8/25/2014	7:00 AM	N			16.7	90.5	8.82	270					4	
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N												48
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	.0	M	16	104.7	8.89		24.347					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	1.0	M	13.8	112.5	10.07		28.774					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	2.0	M	10.3	116.7	10.9		29.512					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	3.0	M	10.6	117	11.02		29.934					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	4.0	M	10.4	116.7	11.06		30.039					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	5.0	M	9.4	112.4	10.88		30.461					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N	6.0	M	7.9	106.3	10.6		30.988					
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	D												43
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	D	3.0	M	10.6	116.6	10.96		29.9					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N												158
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	.0	M	20	116.1	9.06		26.5					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	1.0	M	18.2	118.5	9.48		27.1					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	2.0	M	14.6	118.7	10.23		30.1					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	3.0	M	11.4	112.4	10.45		31.3					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	4.0	M	10.2	109.2	10.36		31.6					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	5.0	M	10	103.1	9.94		31.6					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	6.0	M	9.8	104.5	9.98		31.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N	7.0	M	9.7	102	9.83		31.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	D												167

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	D	3.0	M	11.2	112.9	10.53		31.3					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N												
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	.0	M	19.6	126.9	9.89		27.509					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	1.0	M	18.3	131.5	10.52		29.196					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	2.0	M	16.2	126.4	10.6		29.934					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	3.0	M	14.6	115.5	9.93		30.355					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	4.0	M	13.9	109.6	9.6		30.671					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	5.0	M	12.6	99	8.92		31.198					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N	6.0	M	12.5	96.8	8.72		31.198					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	D												
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	D	3.0	M	14.8	115.7	9.95		30.4					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N												46
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	.0	M	21.5	130.3	9.95		27.9					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	1.0	M	17.3	124	10.15		28.8					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	2.0	M	16.2	123.3	10.42		29.9					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	3.0	M	15.4	109.7	9.34		30.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	4.0	M	14.4	106.9	9.35		31					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	5.0	M	13.7	100.3	8.85		31.2					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N	6.0	M	13.2	98.5	8.73		31.4					
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	D												55
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	D	3.0	M	15.1	109.3	9.34		30.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N												
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	.0	M	17.5	109.2	9.02		29.4					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	1.0	M	17.2	111.4	9.19		29.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	2.0	M	17	112	9.27		29.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	3.0	M	16.9	112.2	9.3		29.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	4.0	M	16.7	111.3	9.25		29.8					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	5.0	M	16.7	109.8	9.12		30.1					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N	6.0	M	15.6	100.8	8.63		30.4					
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	D												
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	D	3.0	M	16.7	111.4	9.23		29.7					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N												70
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	.0	M	13.4	90.8	8.07		31					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	1.0	M	13.1	91	8.14		31.6					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	2.0	M	13.1	90.6	8.08		31.9					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	3.0	M	13.3	89.4	7.96		32.1					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	4.0	M	13.2	86.9	7.77		32.2					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	5.0	M	13.1	85.6	7.67		32.2					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N	6.0	M	13.1	83.9	7.54		32.3					
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	D												
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	D	3.0	M	13.3	88.5	7.88		32					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N												32
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	.0	M	15.8	107.8	9.18		27.826					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	1.0	M	13.2	113.5	10.25		28.88					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	2.0	M	11.8	115.2	10.67		29.512					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	3.0	M	11	117.6	11.02		29.828					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	4.0	M	10.3	117.9	11.12		30.144					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	5.0	M	9.9	115	10.94		30.25					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	6.0	M	8.8	109.9	10.8		30.566					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	7.0	M	7.8	107.3	10.75		31.093					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	8.0	M	7.3	102.7	10.42		31.198					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	9.0	M	7.1	100.1	10.17		31.304					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	10.0	M	7	98.7	10.09		31.304					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	11.0	M	6.9	98.7	10.14		31.304					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	12.0	M	6.9	98.8	10.11		31.409					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	13.0	M	6.9	99.1	10.18		31.409					
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N	14.0	M	6.9	98.4	10.08		31.409					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N												156
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	.0	M	18.8	119.1	9.5		27.299					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	1.0	M	18.7	117.7	9.47		27.299					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	2.0	M	14.2	121.2	10.54		30.25					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	3.0	M	11.4	117	10.91		31.198					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	4.0	M	10.7	111.6	10.55		31.409					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	5.0	M	10.1	107	10.28		31.62					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	6.0	M	9.9	108	10.36		31.62					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	7.0	M	9.8	107.3	10.35		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	8.0	M	9.7	106	10.21		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	9.0	M	9.7	105.8	10.19		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	10.0	M	9.6	101.8	9.87		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	11.0	M	9.6	99.5	9.63		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	12.0	M	9.5	99.4	9.57		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	13.0	M	9.5	98.4	9.53		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	14.0	M	9.5	98.2	9.48		31.831					
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N	15.0	M	9.5	97.5	9.45		31.831					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N												
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	.0	M	19.9	124.1	9.71		28.88					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	1.0	M	18	126.7	10.32		29.301					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	2.0	M	17.2	129.6	10.7		29.512					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	3.0	M	16.1	125.4	10.56		29.934					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	4.0	M	14.9	117.3	10.1		30.355					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	5.0	M	13	101.2	9.08		31.093					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	6.0	M	12	92.6	8.46		31.409					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	** E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	7.0	M	11.7	90.5	8.33		31.515					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	8.0	M	11.5	87.7	8.12		31.515					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	9.0	M	11.3	87.2	8.05		31.62					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	10.0	M	11.3	87.1	8.11		31.62					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	11.0	M	11.3	87.2	8.12		31.62					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	12.0	M	11.2	85.9	7.99		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	13.0	M	11.2	84.7	7.91		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	14.0	M	11.2	83.9	7.83		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N	15.0	M	11.1	83.3	7.72		31.725					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N												43
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	.0	M	20.9	128.5	9.91		28.1					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	1.0	M	18.9	126.8	10.08		28.9					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	2.0	M	16.6	124.2	10.33		29.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	3.0	M	15.5	118.2	1.04		30.5					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	4.0	M	14.7	113	9.75		30.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	5.0	M	13.4	97.3	8.63		31.3					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	6.0	M	13	97.8	8.8		31.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	7.0	M	12.8	97.5	8.78		31.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	8.0	M	12.6	94.5	8.61		31.5					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	9.0	M	12.4	89.5	8.07		31.5					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	10.0	M	12.1	83.8	7.63		31.6					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	11.0	M	12	81.6	7.47		31.6					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	12.0	M	11.9	78.2	7.15		31.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	13.0	M	11.8	77.9	7.18		31.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	14.0	M	11.7	77.7	7.15		31.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N	15.0	M	11.6	75.4	6.94		31.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N												
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	.0	M	17.3	110.6	9.06		29.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	1.0	M	17	111.6	9.17		29.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	2.0	M	17	112	9.27		29.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	3.0	M	16.6	110.4	9.18		29.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	4.0	M	16.5	108.7	9.08		29.9					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	5.0	M	16.5	108.8	9.09		29.9					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	6.0	M	16.5	109	9.09		29.9					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	7.0	M	16.3	107.1	8.98		30					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	8.0	M	16	105.8	8.9		30.2					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	9.0	M	15	98.2	8.44		30.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	10.0	M	13.8	88.6	7.8		31.2					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	11.0	M	13	84.1	7.52		31.5					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	12.0	M	12.9	82.8	7.42		31.5					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	13.0	M	12.9	82.6	7.41		31.6					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	14.0	M	12.9	82.5	7.41		31.6					
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/9/2014	11:47 AM	N	15.0	M	12.5	82.1	7.36		31.6					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N												43
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	.0	M	13.4	97	8.62		31.7					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	1.0	M	13.2	95.3	8.51		31.8					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	2.0	M	13.2	93.9	8.39		31.9					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	3.0	M	13.1	90.3	8.07		32.1					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	4.0	M	13.1	89.7	8.03		32.2					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	5.0	M	13.1	89.8	8.04		32.3					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	6.0	M	13	89.3	8		32.3					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	7.0	M	13	87.8	7.85		32.3					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	8.0	M	13	87	7.78		32.3					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	9.0	M	13	86.9	7.77		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	10.0	M	12.9	87.1	7.82		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	11.0	M	12.9	87.2	7.82		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	12.0	M	12.9	87.1	7.81		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	13.0	M	12.9	85.4	7.66		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	14.0	M	12.9	84	7.53		32.4					
RH-2	ROCKPORT HARBOR-RH2-VRMP	10/9/2014	12:21 PM	N	15.0	M	12.9	84.5	7.57		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N												25
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	.0	M	15.8	113.5	9.68		27.931					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	1.0	M	13.9	118.6	10.4		28.669					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	2.0	M	12.1	119.7	10.9		29.301					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	3.0	M	11.2	117.6	10.92		29.723					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	4.0	M	10.7	116.6	10.98		30.039					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	5.0	M	10.4	115.7	10.97		30.144					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	6.0	M	10.2	115.6	10.95		30.25					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	7.0	M	9.4	114.5	11.1		30.461					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	8.0	M	8.7	112.1	11.03		30.566					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	9.0	M	8	109.3	10.6		30.882					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	10.0	M	7.4	103.4	10.5		31.198					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	11.0	M	7.1	101.7	10.32		31.198					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	12.0	M	7.1	102.2	10.48		31.304					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	13.0	M	7	101.7	10.36		31.304					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	14.0	M	6.8	99.1	10.12		31.409					
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/12/2014	11:30 PM	N	15.0	M	6.8	96.3	9.85		31.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N												103
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	.0	M	16.2	122.3	10.2		28.142					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	1.0	M	15.7	124.5	10.35		29.301					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	2.0	M	11.9	125.5	11.51		30.882					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	3.0	M	11.2	120.1	11.16		31.198					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	4.0	M	11	118	11.06		31.304					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	5.0	M	10.6	118	11.14		31.409					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	6.0	M	10.3	117.6	11.2		31.515					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	7.0	M	10.2	115.1	10.97		31.515					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	8.0	M	9.9	113.9	10.93		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	9.0	M	9.8	110.9	10.67		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	10.0	M	9.7	106.5	10.26		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	11.0	M	9.7	105	10.15		31.725					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	12.0	M	9.7	105.3	10.12		31.725					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	13.0	M	9.6	103.7	10.01		31.725					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	14.0	M	9.6	105.7	10.17		31.831					
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/14/2014	12:00 PM	N	15.0	M	9.6	105.6	10.19		31.725					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N												
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	.0	M	20.2	122.9	9.7		28.774					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	1.0	M	18.3	126.8	10.26		29.196					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	2.0	M	17.1	130	10.77		29.512					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	3.0	M	16.1	131.6	11.07		29.934					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	4.0	M	15.3	123.5	10.57		30.144					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	5.0	M	14.7	118.9	10.34		30.461					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	6.0	M	13.9	111.3	9.81		30.777					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	7.0	M	13.2	104.5	9.31		30.988					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	8.0	M	12.3	97.7	8.89		31.304					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	9.0	M	11.9	94.3	8.66		31.409					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	10.0	M	11.8	93.1	8.57		31.409					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	11.0	M	11.6	92.5	8.52		31.515					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	12.0	M	11.4	89.7	8.35		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	13.0	M	11.3	88.8	8.3		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	14.0	M	11.1	88.6	8.27		31.62					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/12/2014	1:29 PM	N	15.0	M	11.1	87.2	8.12		31.725					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N												31
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	.0	M	20.9	128.5	9.93		27.9					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	1.0	M	18.2	131.6	10.55		28.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	2.0	M	15.5	124.6	10.55		30					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	3.0	M	15	117.2	10.09		30.5					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	4.0	M	14.5	112	9.71		30.8					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	5.0	M	13.7	109.6	9.69		31.1					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	6.0	M	13.2	107.4	9.59		31.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	7.0	M	12.7	99.5	8.91		31.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	8.0	M	12.3	90.5	8.1		31.5					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	9.0	M	12.2	86.3	7.89		31.5					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	10.0	M	12	85.3	7.81		31.6					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	11.0	M	11.9	86.4	7.94		31.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	12.0	M	11.8	85.4	7.85		31.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	13.0	M	11.7	84.9	7.82		31.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	14.0	M	11.7	83.6	7.71		31.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/25/2014	12:11 PM	N	15.0	M	11.6	80.7	7.4		31.8					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N												
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	.0	M	17.3	111.3	9.15		29.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	1.0	M	17.1	110.9	9.14		29.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	2.0	M	16.7	111.1	9.23		29.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	3.0	M	16.5	110.5	9.21		29.8					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	4.0	M	16.4	109.3	9.15		29.9					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	5.0	M	16.4	109.4	9.15		29.9					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	6.0	M	16.2	108.6	9.1		30.1					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	7.0	M	16.2	107.6	9.03		30.2					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	8.0	M	16.1	106.7	8.97		30.2					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	9.0	M	16.1	106.5	8.98		30.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	10.0	M	15.3	99.8	8.52		30.7					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	11.0	M	14.3	94.5	8.23		31					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	12.0	M	13.7	90.5	7.99		31.2					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	13.0	M	13.2	87.8	7.82		31.5					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	14.0	M	12.8	85.7	7.69		31.6					
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/9/2014	11:19 AM	N	15.0	M	12.8	83.6	7.52		31.6					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N												38
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	.0	M	13.2	95.5	8.5		31.9					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	1.0	M	13.2	95.2	8.42		31.9					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	2.0	M	13.2	95	8.47		32					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	3.0	M	13.1	94.9	8.46		32.1					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	4.0	M	13.1	94.6	8.46		32.2					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	5.0	M	13	92.7	8.29		32.2					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	6.0	M	13	91.4	8.18		32.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	7.0	M	13	90.6	8.11		32.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	8.0	M	13	88.7	8		32.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	9.0	M	13	89.2	8		32.3					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	10.0	M	13	88.4	7.94		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	11.0	M	12.9	87.2	7.83		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	12.0	M	12.9	87.2	7.83		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	13.0	M	12.9	85.1	7.73		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	14.0	M	12.9	85.3	7.65		32.4					
RH-3	ROCKPORT HARBOR-RH3-VRMP	10/9/2014	12:05 PM	N	15.0	M	12.9	85.9	7.68		32.4					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N												14
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	.0	M	14.8	118.7	10.2		27.299					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	** E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	1.0	M	14.4	121.2	10.51		27.509					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	2.0	M	13.4	123.9	11.02		28.563					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	3.0	M	12.9	124.6	11.3		29.09					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	4.0	M	12.6	124.8	11.24		29.196					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	5.0	M	11.8	120.8	11.14		29.512					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	6.0	M	10.9	119.8	11.21		29.828					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	7.0	M	10.4	117.6	11.05		29.934					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	8.0	M	9	115.2	11.16		30.461					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	9.0	M	8.4	113	11.12		30.566					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	10.0	M	7.4	108	10.86		31.093					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	11.0	M	7.3	104.7	10.61		31.198					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	12.0	M	7.1	103.6	10.56		31.198					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	13.0	M	7.1	103.2	10.54		31.304					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	14.0	M	7	102.9	10.5		31.304					
RO	ROCKPORT HARBOR-RO-VRMP	6/12/2014	11:00 PM	N	15.0	M	6.9	101.7	10.41		31.304					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N												115
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	.0	M	14.3	128.2	11.13		28.88					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	1.0	M	14	127.7	11.23		29.09					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	2.0	M	13.9	127.4	11.18		29.301					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	3.0	M	12.9	129.2	11.59		29.512					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	4.0	M	12.1	128.3	11.71		29.934					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	5.0	M	11.9	126.8	11.64		30.039					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	6.0	M	11.8	124.2	11.45		30.461					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	7.0	M	11.4	122.5	11.36		30.777					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	8.0	M	11	120.1	11.28		31.093					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	9.0	M	10.6	117.1	11.09		31.304					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	10.0	M	10.4	115.8	10.87		31.409					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	11.0	M	10.3	114.4	10.85		31.409					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	12.0	M	10.1	112.6	10.75		31.515					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	13.0	M	10.2	112.4	10.71		31.515					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	14.0	M	10.1	111.7	10.68		31.515					
RO	ROCKPORT HARBOR-RO-VRMP	7/14/2014	11:34 AM	N	15.0	M	10.1	111.4	10.61		31.515					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N												
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	.0	M	18.5	126.4	10.03		28.036					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	1.0	M	18.2	127	10.17		28.036					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	2.0	M	17.8	125.6	10.22		28.985					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	3.0	M	17.4	125.3	10.29		29.09					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	4.0	M	17.3	124.8	10.26		29.196					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	5.0	M	16.7	124	10.32		29.407					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	6.0	M	16.2	125.5	10.54		29.617					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	7.0	M	15.7	124.1	10.55		29.934					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	8.0	M	13.4	114	10.08		30.988					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	9.0	M	12.7	106	9.56		31.198					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	10.0	M	11.9	98.7	9.01		31.304					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	11.0	M	11.4	93.3	8.62		31.515					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	12.0	M	11.3	91.7	8.5		31.62					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	13.0	M	11.2	90.7	8.42		31.62					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	14.0	M	11.2	89.9	8.37		31.62					
RO	ROCKPORT HARBOR-RO-VRMP	8/12/2014	1:06 PM	N	15.0	M	11.2	89.7	8.35		31.725					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N												37
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	.0	M	20.8	134.8	10.3		28.1					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	1.0	M	19.2	138.2	10.95		28.1					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	2.0	M	17.3	138.8	11.42		29.2					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	3.0	M	16.7	136.6	11.39		29.4					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	4.0	M	15.3	129.5	11.05		30.3					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	5.0	M	15.2	126.4	10.86		30.4					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	6.0	M	14.7	123.7	10.71		30.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	7.0	M	14.4	117.9	10.26		31.3					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	8.0	M	12.7	100.1	9		31.6					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	9.0	M	12.7	99.9	9		31.7					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	10.0	M	12.3	96.7	8.74		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	11.0	M	12.2	95.4	8.67		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	12.0	M	12.1	93.6	8.55		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	13.0	M	12	92.3	8.43		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	14.0	M	12	91.5	8.36		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	8/25/2014	11:43 AM	N	15.0	M	12	91.5	8.35		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N												
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	.0	M	16.6	111.7	9.28		29.5					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	1.0	M	16.6	112.1	9.38		29.5					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	2.0	M	16.5	112.3	9.37		29.6					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	3.0	M	16.5	111.6	9.3		29.6					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	4.0	M	16.5	111.3	9.28		29.6					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	5.0	M	16.5	111.2	9.28		29.7					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	6.0	M	16.5	110	9.14		30					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	7.0	M	16.5	109.4	9.14		29.8					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	8.0	M	14.8	103.2	8.96		30.2					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	9.0	M	13.8	97.3	8.57		31.2					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	10.0	M	13.8	95.5	8.42		31.3					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	11.0	M	13.5	94.1	8.33		31.4					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	12.0	M	13	91.1	8.14		31.6					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	13.0	M	12.8	89	7.99		31.7					
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	14.0	M	12.7	88.2	7.92		31.8					

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp (DEG C)	** D.O. Sat. (%)	** D.O. (MG/L)	** Spec. Cond. (US/CM)	Salinity (PPTH)	Turbidity (NTU)	Total Diss. Solids (MG/L)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)	Enterococci (MPN/100ML)
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N	15.0	M	12.6	87.2	7.87		31.8					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N												21
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	.0	M	13.1	95.4	8.52		32.2					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	1.0	M	13.1	95.7	8.54		32.2					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	2.0	M	13.1	95.6	8.55		32.2					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	3.0	M	13.1	95.6	8.54		32.2					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	4.0	M	13.1	96	8.57		32.2					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	5.0	M	13.1	96	8.58		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	6.0	M	13.1	95.4	8.55		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	7.0	M	13.1	94.7	8.48		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	8.0	M	13.1	95	8.5		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	9.0	M	13.1	95.4	8.53		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	10.0	M	13.1	95.3	8.52		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	11.0	M	13.1	95.2	8.5		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	12.0	M	13.1	95.1	8.52		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	13.0	M	13.1	94.7	8.48		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	14.0	M	13.1	95.1	8.51		32.3					
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N	15.0	M	13.1	94.6	8.47		32.3					
WS-1	WINTER STREET DITCH-N01	6/12/2014	8:58 AM	N			12.9	98.3	10.49	590					517	411
WS-1	WINTER STREET DITCH-N01	7/14/2014	8:00 AM	N			16.1	95.4	9.36	570					727	

Appendix A-2. 2014 observational data and quality assurance/quality control (QA/QC) notes for "approved" and "non-approved" sites.

\*\* "N" = normal environmental sample; "D" = field duplicate; "L" = lab duplicate

Refer to Appendix A-1 for water quality data

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
<b>Goose River, Rockport Harbor, Rockport Conservation Commission - Approved Sites:</b>														
GR-2	GOOSE RIVER - NGR01 - VRMP	6/12/2014	8:23 AM	N	BASEFLOW	MEDIUM		BANK	LIGHT RAIN	CALM	CLEAR, PARTLY CLOUDY	CASCADE	MEDIUM STAINED	WADEABLE/MID-DEPTH
GR-2	GOOSE RIVER - NGR01 - VRMP	6/12/2014	8:23 AM	D				BANK						WADEABLE/MID-DEPTH
GR-2	GOOSE RIVER - NGR01 - VRMP	7/14/2014	7:40 AM	N	BASEFLOW	LOW	23.5	BANK	CLOUDY	BREEZE	CLOUDY, PARTLY CLOUDY	RIFFLE	MILKY	WADEABLE/MID-DEPTH
GR-2	GOOSE RIVER - NGR01 - VRMP	8/25/2014	7:35 AM	N	BASEFLOW	LOW	19.3	BANK	CLEAR	CALM	CLEAR	RIFFLE	CLEAR	WADEABLE/MID-DEPTH
HB-1	HARKNESS BROOK - NHK00 - VRMP	6/12/2014	8:06 AM	N	BASEFLOW	MEDIUM		BANK	LIGHT RAIN	CALM	CLEAR, PARTLY CLOUDY	RIFFLE	MEDIUM STAINED	WADEABLE/MID-DEPTH
HB-1	HARKNESS BROOK - NHK00 - VRMP	7/14/2014	7:15 AM	N	BASEFLOW	MEDIUM	23.5	BANK	CLOUDY	BREEZE	CLOUDY, PARTLY CLOUDY	RIFFLE	CLEAR	WADEABLE/MID-DEPTH
HB-1	HARKNESS BROOK - NHK00 - VRMP	8/25/2014	7:23 AM	N	BASEFLOW	LOW	19.3	BANK	CLEAR	CALM	CLEAR	RIFFLE	CLEAR	WADEABLE/MID-DEPTH
LPS-1	LILY POND STREAM - NLP00 - VRMP	6/12/2014	8:44 AM	N	BASEFLOW	MEDIUM		BANK	LIGHT RAIN	CALM	CLEAR, PARTLY CLOUDY	RIFFLE	CLEAR	WADEABLE/MID-DEPTH
LPS-1	LILY POND STREAM - NLP00 - VRMP	7/14/2014	7:50 AM	N	BASEFLOW	MEDIUM	23.5	BANK	CLOUDY	BREEZE	CLOUDY, PARTLY CLOUDY	CASCADE	CLEAR	WADEABLE/MID-DEPTH
LPS-1	LILY POND STREAM - NLP00 - VRMP	8/25/2014	7:49 AM	N	BASEFLOW	LOW	19.3	BANK	CLEAR	CALM	CLEAR	CASCADE	CLEAR	WADEABLE/MID-DEPTH
OTT-1	OTT BROOK - NOT02 - VRMP	6/12/2014	7:42 AM	N	BASEFLOW	LOW		BANK	LIGHT RAIN	CALM	CLEAR, PARTLY CLOUDY	RUN	MEDIUM STAINED	WADEABLE/MID-DEPTH
OTT-1	OTT BROOK - NOT02 - VRMP	7/14/2014	6:58 AM	N	BASEFLOW	MEDIUM	23.5	BANK	CLOUDY	BREEZE	CLOUDY, PARTLY CLOUDY	RIFFLE	DARKLY STAINED	WADEABLE/MID-DEPTH
OTT-1	OTT BROOK - NOT02 - VRMP	8/25/2014	7:00 AM	N	BASEFLOW	LOW	19.3	BANK	CLEAR	CALM	CLEAR	RIFFLE	DARKLY STAINED	WADEABLE/MID-DEPTH
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT	CLOUDY, LIGHT RAIN	BREEZE	CLEAR, PARTLY CLOUDY			OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	N				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	D				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	D				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/12/2014	12:30 PM	D				BOAT						OIL PRESENT ON SURFACE
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT	CLEAR	BREEZE	CLOUDY, PARTLY CLOUDY			

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/14/2014	12:45 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N			21.1	BOAT	CLEAR	BREEZE	CLEAR, PARTLY CLOUDY			
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/12/2014	2:10 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N			24	BOAT	CLEAR		CLEAR			
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/25/2014	12:49 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N			13.1	BOAT	CLEAR	BREEZE				
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/9/2014	11:54 AM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N			13.1	BOAT	CLEAR	STRONG WIND	PARTLY CLOUDY			
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	N				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	D				BOAT						
RH-1	ROCKPORT HARBOR-RH1-VRMP	10/9/2014	12:37 PM	D				BOAT						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT	CLOUDY, LIGHT RAIN	BREEZE	CLEAR, PARTLY CLOUDY			
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT						

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance		Comments
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/12/2014	12:00 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT	CLEAR	BREEZE	CLOUDY, PARTLY CLOUDY				
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/14/2014	12:20 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N			21.1	BOAT	CLEAR	BREEZE	CLEAR, PARTLY CLOUDY				
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/12/2014	1:54 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N			24	BOAT	CLEAR	BREEZE	CLEAR				
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/25/2014	12:28 PM	N				BOAT							









Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	
														Comments
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	9/9/2014	10:55 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N			13.1	BOAT	CLEAR	STRONG WIND	PARTLY CLOUDY			
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
RO	ROCKPORT HARBOR-RO-VRMP	10/9/2014	11:25 AM	N				BOAT						
WS-1	WINTER STREET DITCH-N01	6/12/2014	8:58 AM	N	BASEFLOW	MEDIUM		BANK	LIGHT RAIN	CALM	CLEAR, PARTLY CLOUDY	RIFFLE	CLEAR	WADEABLE/MID-DEPTH
WS-1	WINTER STREET DITCH-N01	7/14/2014	8:00 AM	N	BASEFLOW	MEDIUM	23.5	BANK	CLOUDY	BREEZE	CLOUDY, PARTLY CLOUDY	RIFFLE	CLEAR	WADEABLE/MID-DEPTH