

Section 5-8 Rockport Harbor & Tribs (Rockport Conservation Commission)

Rockport Harbor & Tribs

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 mi² (25.9 km²) has three sub-watersheds: Goose River, coastal and Lilly Pond. The Goose River, which drains the largest sub-watershed (6.6 mi² or 22.3 km²), 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

- 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

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 has also been 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

VRMP Site ID	Organization Site Code	Sample Location	Class
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

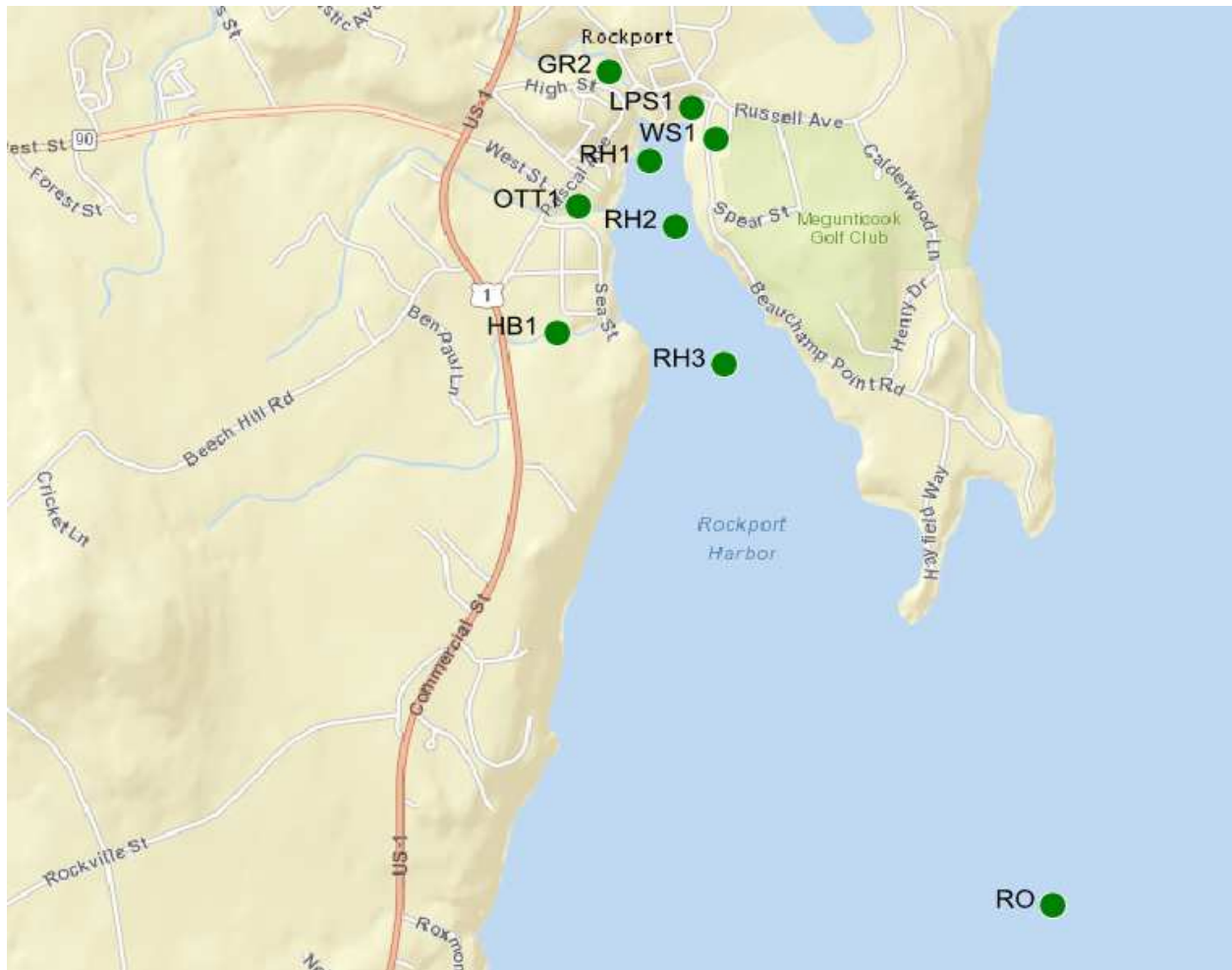


Figure 5-8-1: Map of Rockport Conservation Commission sampling sites.

Results

Refer to Appendix A 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.

2015 Results:

Freshwater sites: Dissolved oxygen (DO) was measured 6 times at Goose River and 2 times at the other freshwater sites. All the measurements were high and were above the Class B dissolved oxygen criterion of 7 mg/l and the percent saturation of 75%. The sites on Harkness Brook, Lily Pond Stream, Ott Brook and Winter Street ditch were sampled just 2 times early in the season so may not be representative of values through the season. Dissolved oxygen at least at Goose River was excellent.

Harbor sites: Dissolved oxygen was measured 5 times from June through September and included depth profiles. The four sampling sites follow similar patterns through the sampling season and were overall similar. Differences in the sites relate to depth and stratification (ie when sites stratified and depth of stratification). Dissolved oxygen never fell below the Class SB criterion of 85% saturation, except at sites RH1, RH2 and RH3 late in the season at mid-lower depths. The saturation values ranged from 76-84% at depths ranging from 4-14 meters. 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 mean dissolved oxygen concentration (mg/l) values at Rockport Conservation Commission monitoring sites. * (Harbor Sites are surface values only).

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Not Meeting Criterion
GR-2	B	6	9.5	8.2	11.9	7	0
HB-1	B	2	10.6	8.8	12.3	7	0
LPS-1	B	2	10.1	8.8	11.4	7	0
OTT-1	B	2	9.8	7.7	11.8	7	0
WS-1	B	2	10.1	9.0	11.2	7	0
RH1	SB	5	9.4	8.9	10.1	n/a	n/a
RH2	SB	5	9.6	9.1	10.2	n/a	n/a
RH3	SB	5	9.6	9.1	10.3	n/a	n/a
RO	SB	5	9.8	8.6	10.5	n/a	n/a

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Not Meeting Criterion
GR-2	B	6	96.6	89.2	108.5	75	0
HB-1	B	2	97.9	86.6	109.2	75	0
LPS-1	B	2	97.3	88.0	106.5	75	0
OTT-1	B	2	90.1	75.4	104.7	75	0
WS-1	B	2	94.6	88.6	100.6	75	0
RH1	SB	5	115.1	107.6	121.1	85	0
RH2	SB	5	116.9	109.6	123.9	85	0
RH3	SB	5	116.1	108.3	124.9	85	0
RO	SB	5	115.5	100.8	125.1	85	0

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

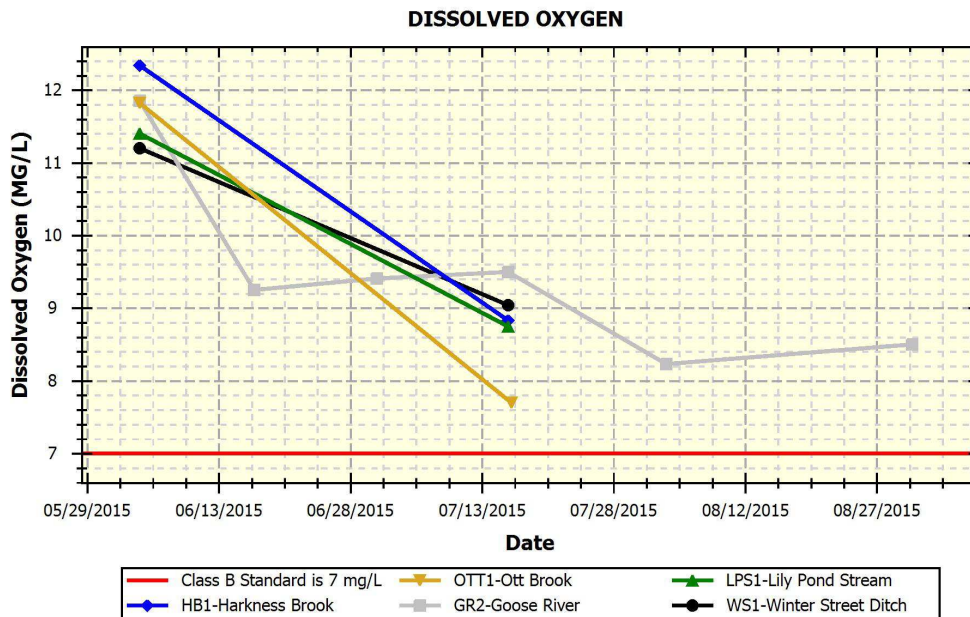


Figure 5-8-3: Graph of dissolved oxygen saturation at stream sites

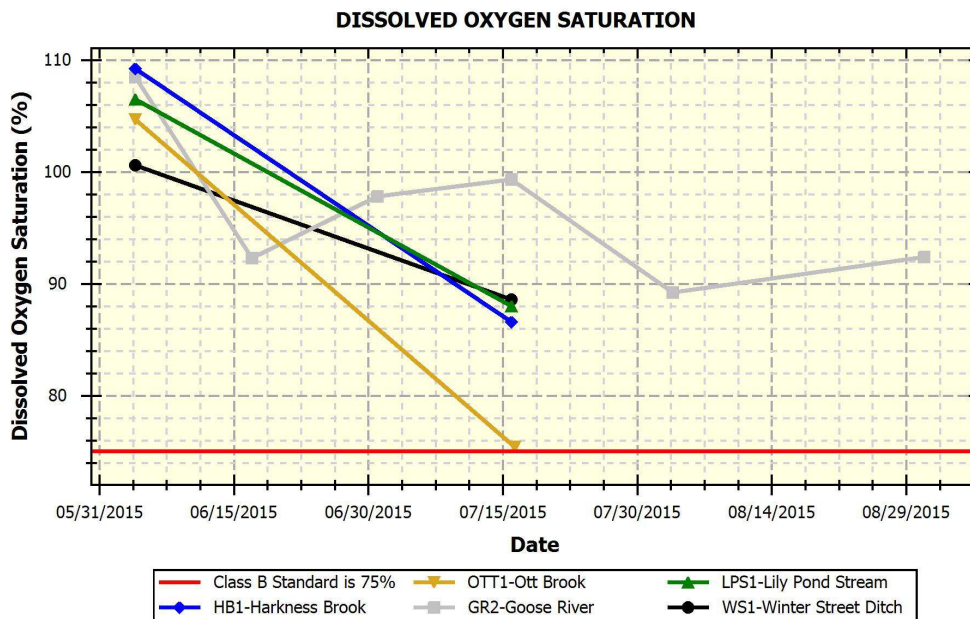


Figure 5-8-4: Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on June 4th.

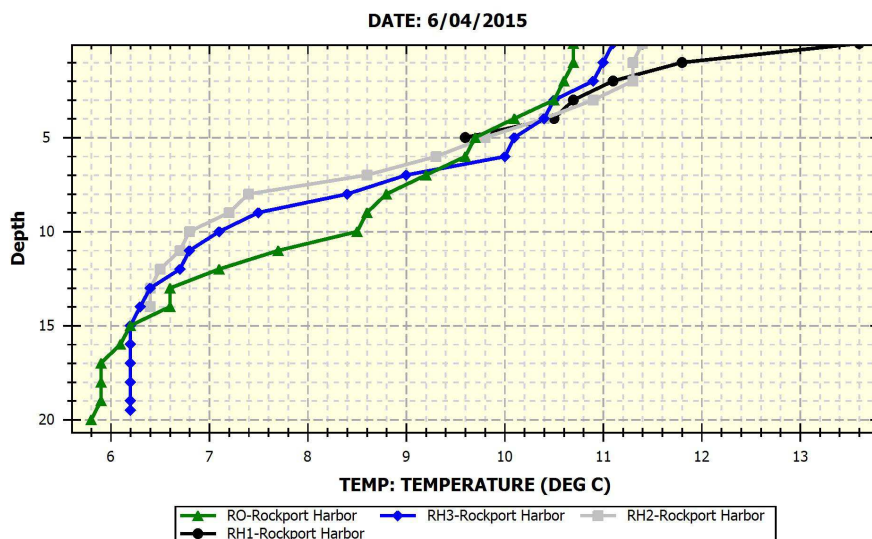
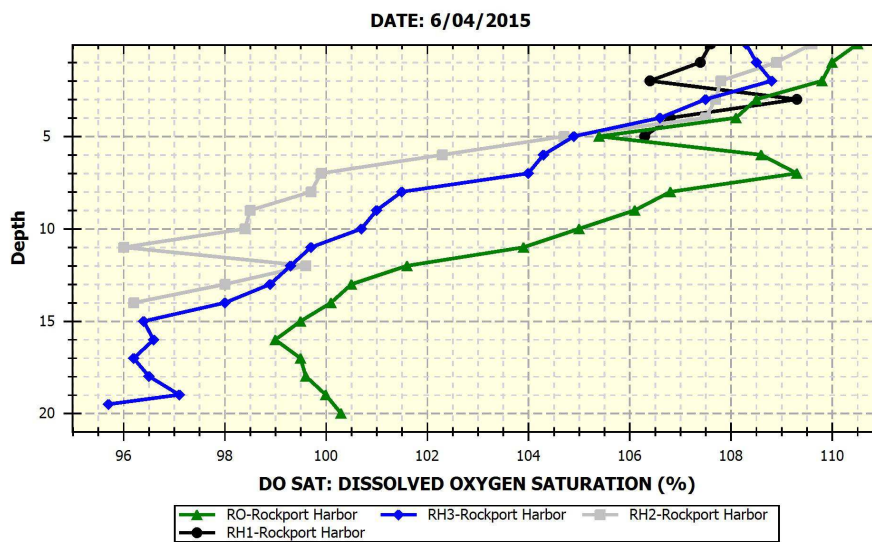
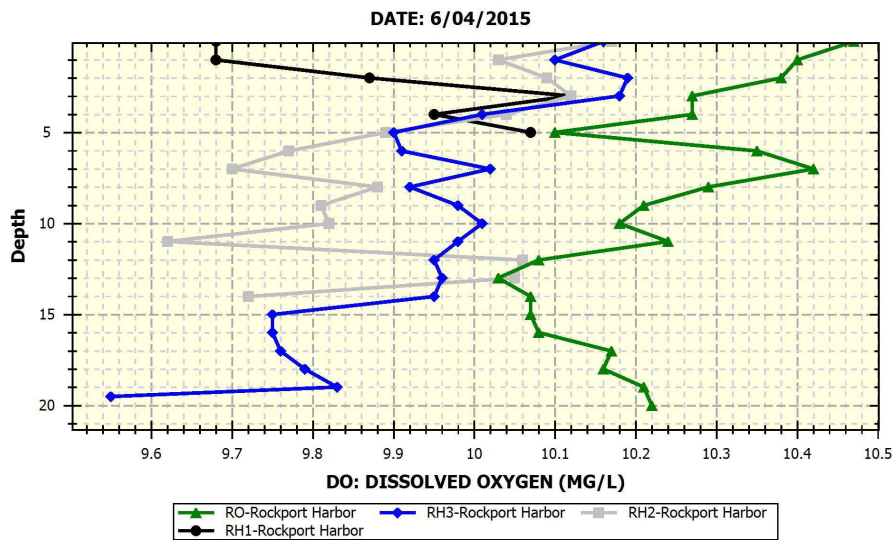


Figure 5-8-5: Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on July 16th.

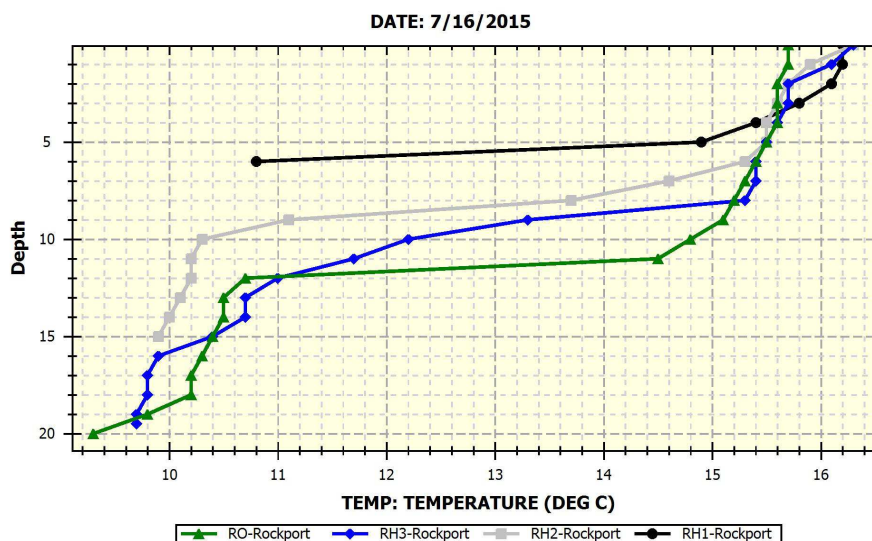
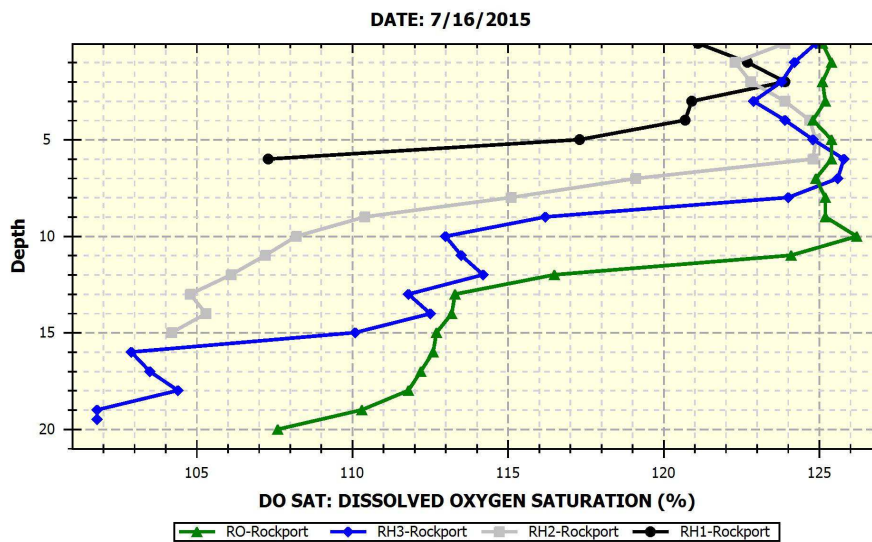
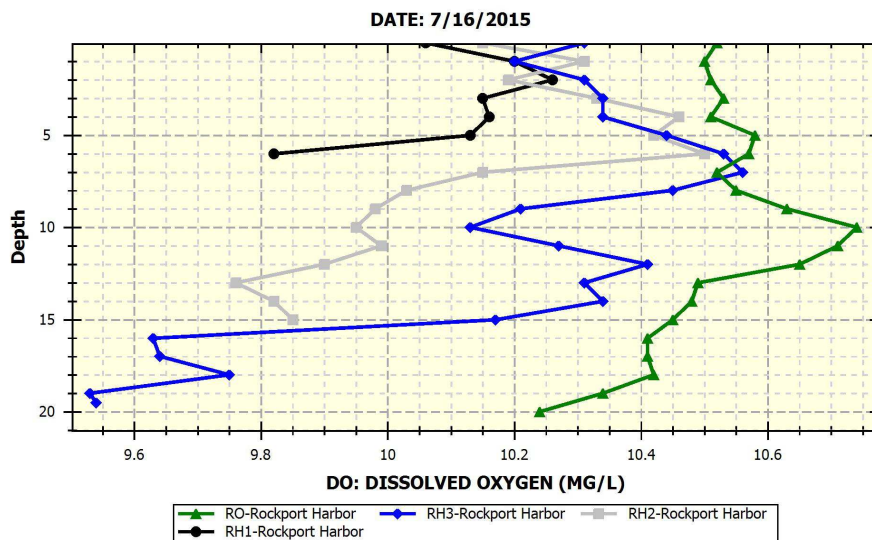


Figure 5-8-6: Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on August 3rd.

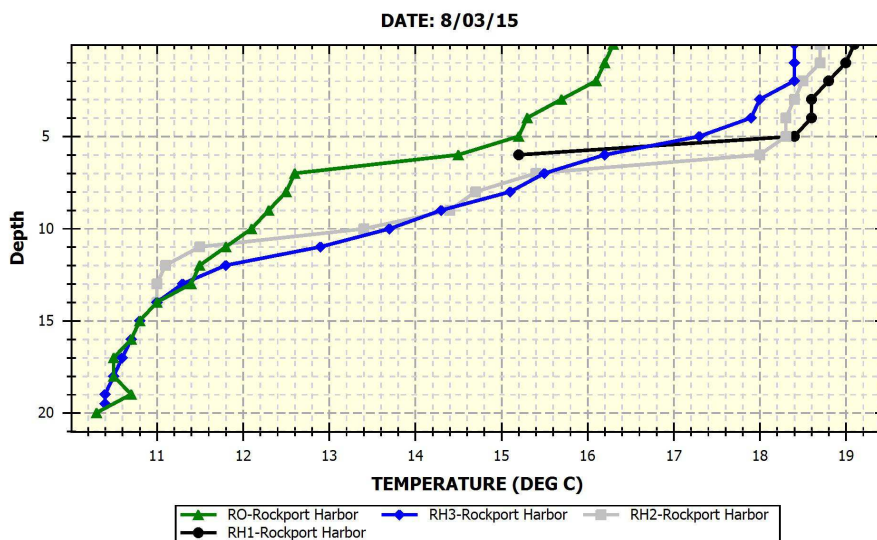
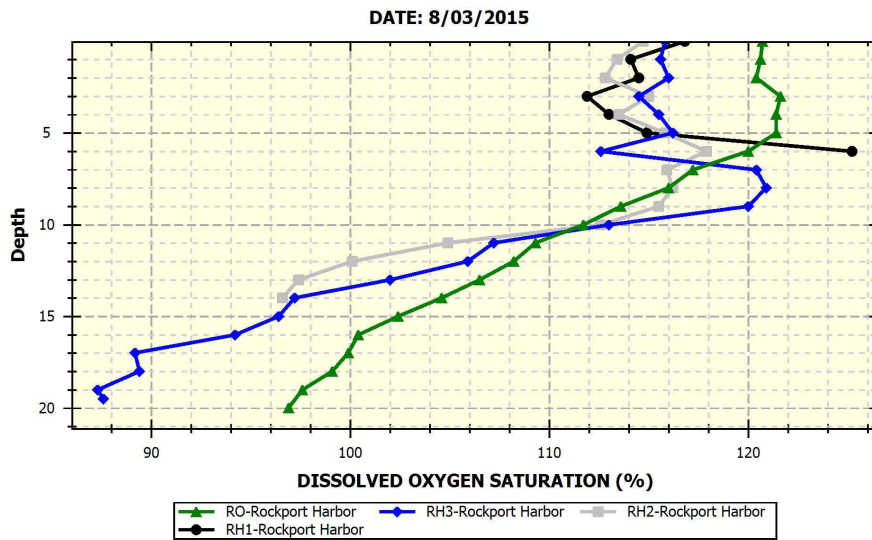
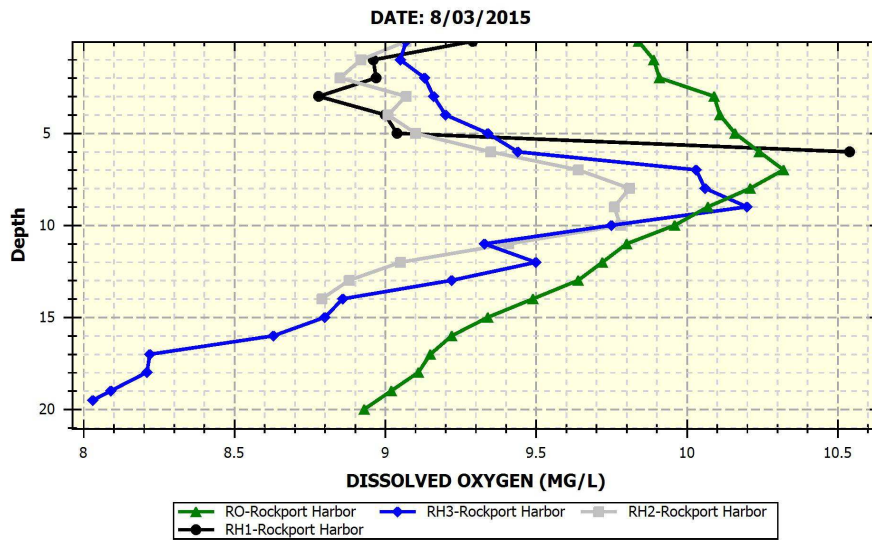


Figure 5-8-7: Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on August 31st.

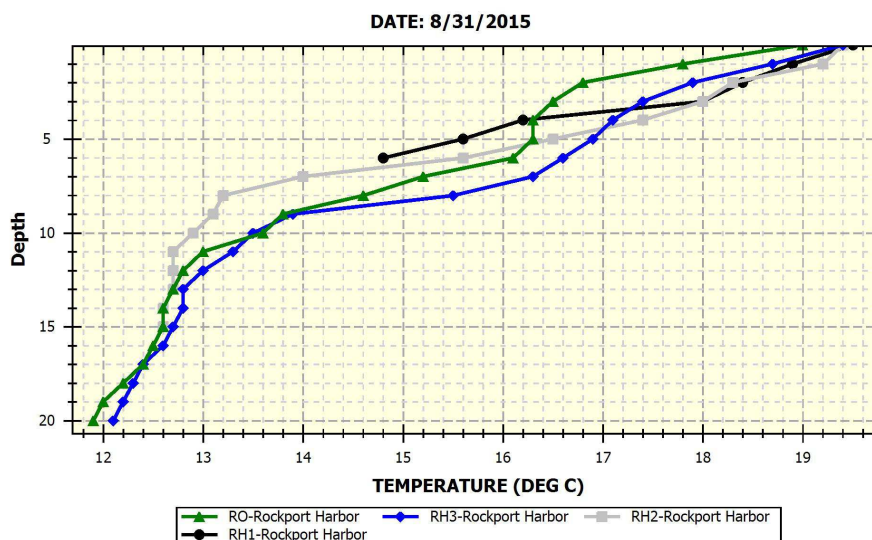
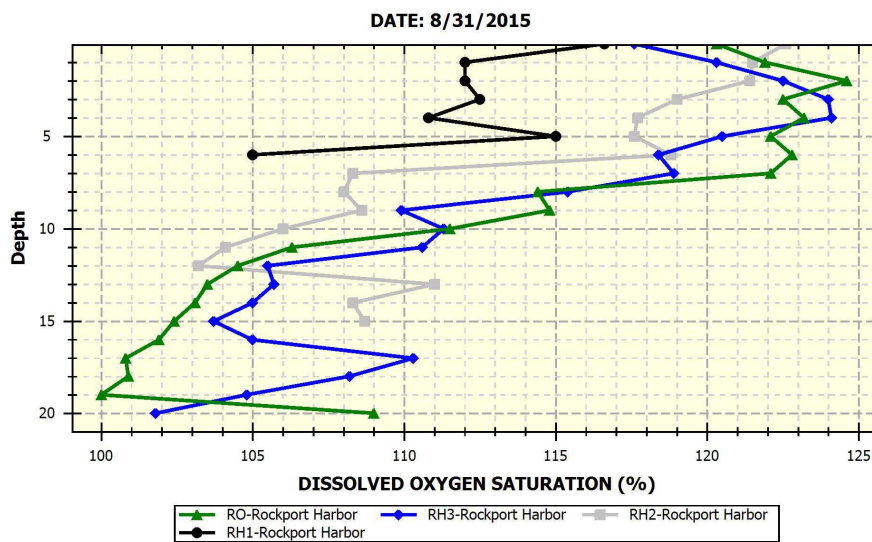
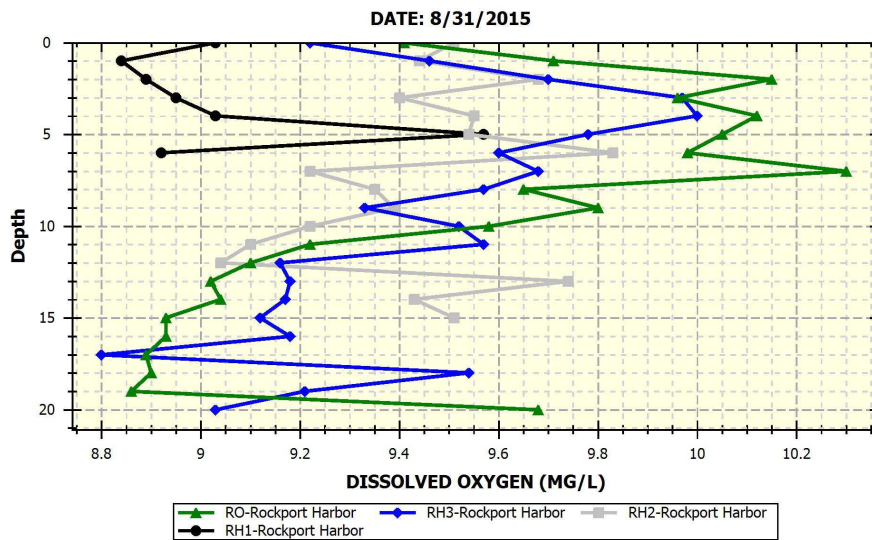
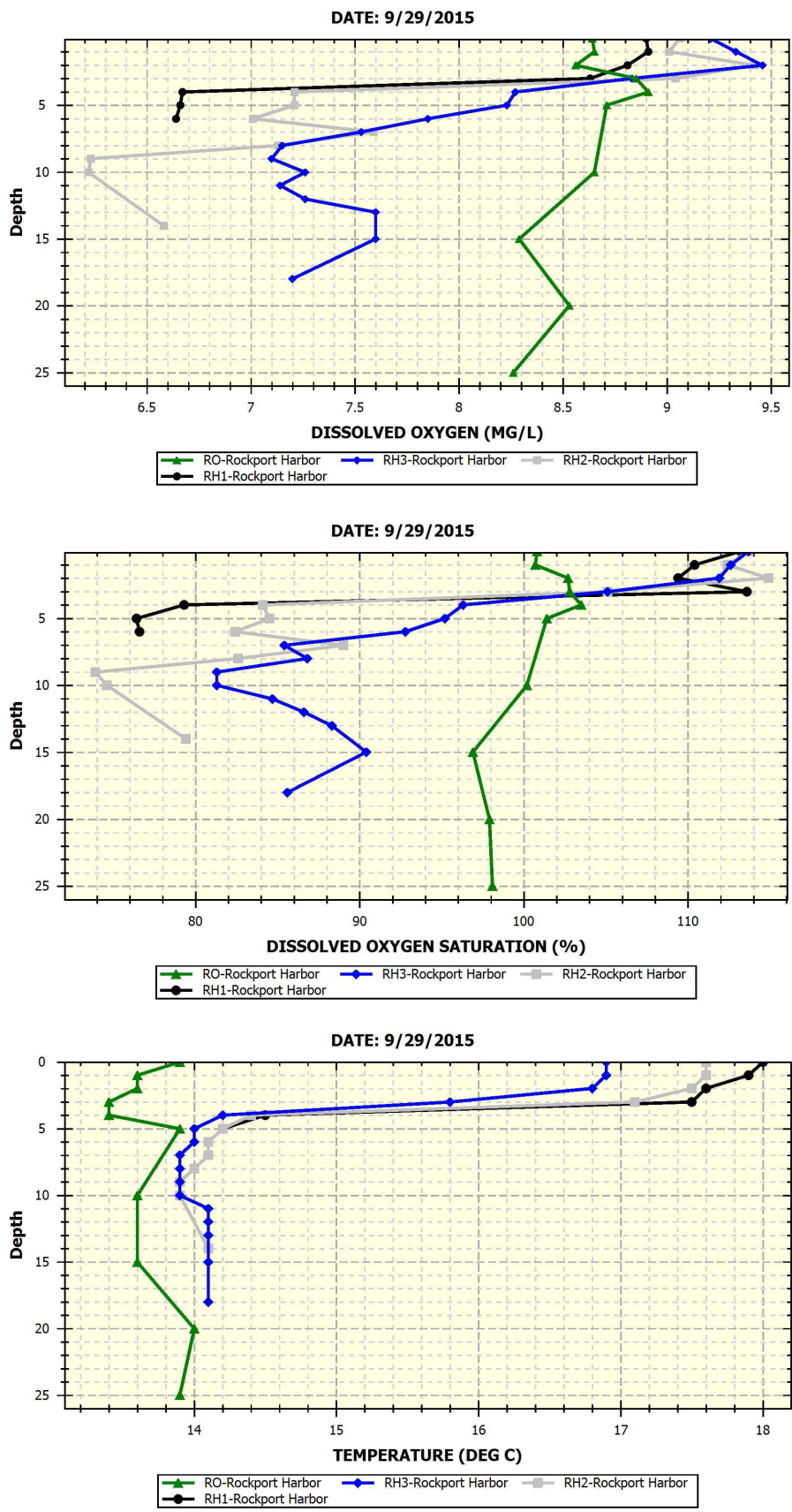


Figure 5-8-8: Depth profile graphs of dissolved oxygen concentration, dissolved oxygen saturation and water temperature at harbor sites on September 29th.



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.

2015 Results:

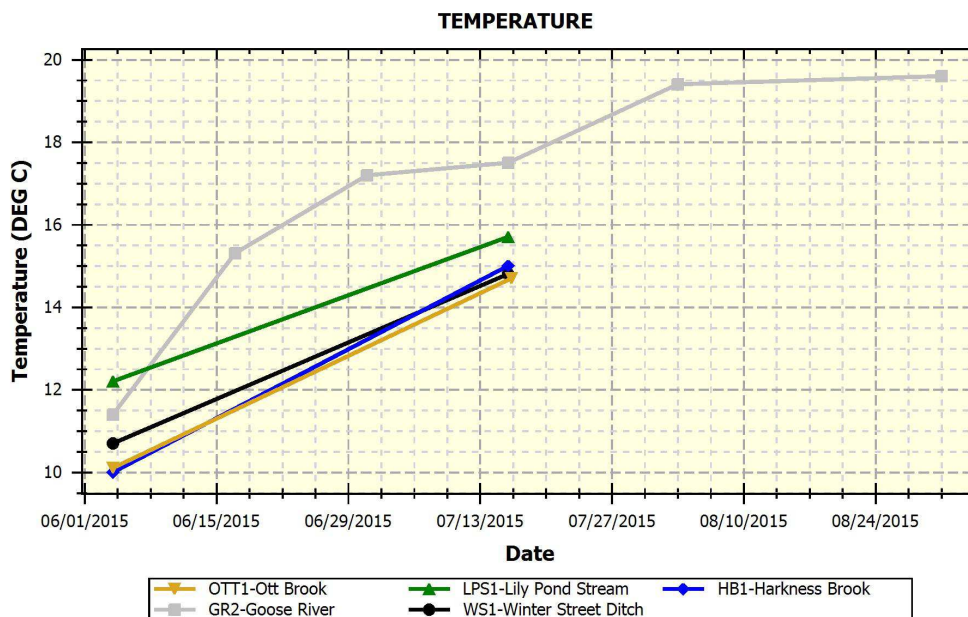
Freshwater sites: Temperature was measured 2-6 times at the freshwater sites. Harkness Brook, Lily Pond Stream, Ott Brook and Winter Street ditch were sampled 2 times early in the season. Temperature was low at these sites. Temperature at Goose River was somewhat higher and ranged from 11.4-19.6 °C. The Goose River is impounded prior to flowing under Route 1 toward sampling site GR-2 and is not shaded where measurements are made. Overall, temperature at Goose River was good.

Harbor sites: Surface temperature at the harbor sites ranged from 10.7-19.5 °C and mean temperatures ranged from 15.1-17.3 °C. Sites RH1, RH2, and RH3 were similar while RO was always colder.

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
GR-2	B	6	16.7	11.4	19.6	n/a	n/a
HB-1	B	2	12.5	10.0	15.0	n/a	n/a
LPS-1	B	2	14.0	12.2	15.7	n/a	n/a
OTT-1	B	2	12.4	10.1	14.7	n/a	n/a
WS-1	B	2	12.8	10.7	14.8	n/a	n/a
RH1	SB	5	17.3	13.6	19.5	n/a	n/a
RH2	SB	5	16.7	11.4	19.4	n/a	n/a
RH3	SB	5	16.4	11.1	19.4	n/a	n/a
RO	SB	5	15.1	10.7	19.0	n/a	n/a

Figure 5-8-9: Graph of water temperature at stream sites



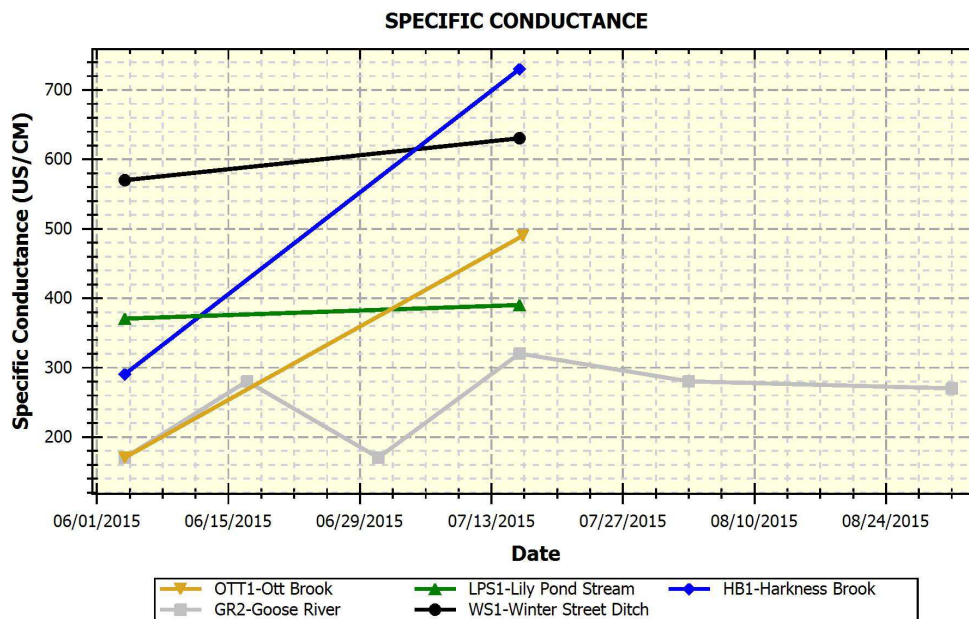
Specific Conductance

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.

2015 Results: Specific conductance was measured 2-6 times at the freshwater sites. The lowest overall values were at site GR-2 with all values ranging from 170-320 $\mu\text{S}/\text{cm}$. Specific conductance at this site was somewhat elevated and fair. The other freshwater sites were measured 2 times. Sites HB-1 and OTT-1 had 1 high value and WS-1 was high for both dates. Site LPS-1 values were elevated. Overall, specific conductance at these freshwater sites were fair to poor.

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
GR-2	B	6	248	170	320	n/a	n/a
HB-1	B	2	510	290	730	n/a	n/a
LPS-1	B	2	380	370	390	n/a	n/a
OTT-1	B	2	330	170	490	n/a	n/a
WS-1	B	2	600	570	630	n/a	n/a

Figure 5-8-10: 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 15th and Sept 30th, *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 15th and September 30th, 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.

2015 Results:

Freshwater sites: At the freshwater sites, *Escherichia coli* bacteria was sampled 2-6 times. Goose River-site GR2 was sampled 5-6 times for both *E.coli* and Enterococcus bacteria. It exceeded the instantaneous criterion for *E. coli* 1 time and also exceeded the geometric mean criterion. The other freshwater sites were sampled just 2 times each. Only site WS-1 had an exceedance of the instantaneous criterion-this sample was very high [914 MPN/100 ml]. Overall, Goose River bacteria was fair.

Harbor sites: The harbor sites were sampled 3-4 times. Site RH1 exceeded the instantaneous criterion on 1 date and site RH2 exceeded this criterion on 2 dates. Overall, the bacteria were somewhat high, particularly at sites RH1 and RH2 which are the inner harbor sites. 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.

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	# Sample Points	Geometric Mean	Minimum	Maximum	Criterion Inst/Geo	# Exceeding Criterion
GR-2	B	<i>E. coli</i>	5	88	21	248	236/64	1
GR-2	B	Entero	6	55	31	201	--	-
HB-1	B	<i>E. coli</i>	2	NA*	30	60	236/64	0
LPS-1	B	<i>E. coli</i>	2	NA*	72	90	236/64	0
OTT-1	B	<i>E. coli</i>	2	NA*	20	33	236/64	0
WS-1	B	<i>E. coli</i>	2	NA*	190	914	236/64	1
RH1	SB	Entero	3	NA*	39	190	54/5	1
RH2	SB	Entero	4	NA*	20	130	54/8	2
RH3	SB	Entero	4	NA*	19	44	54/8	0
RO	SB	Entero	4	NA*	12	43	54/8	0

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

Figure 5-8-11: Graph of *E. coli* (MPN/ml)

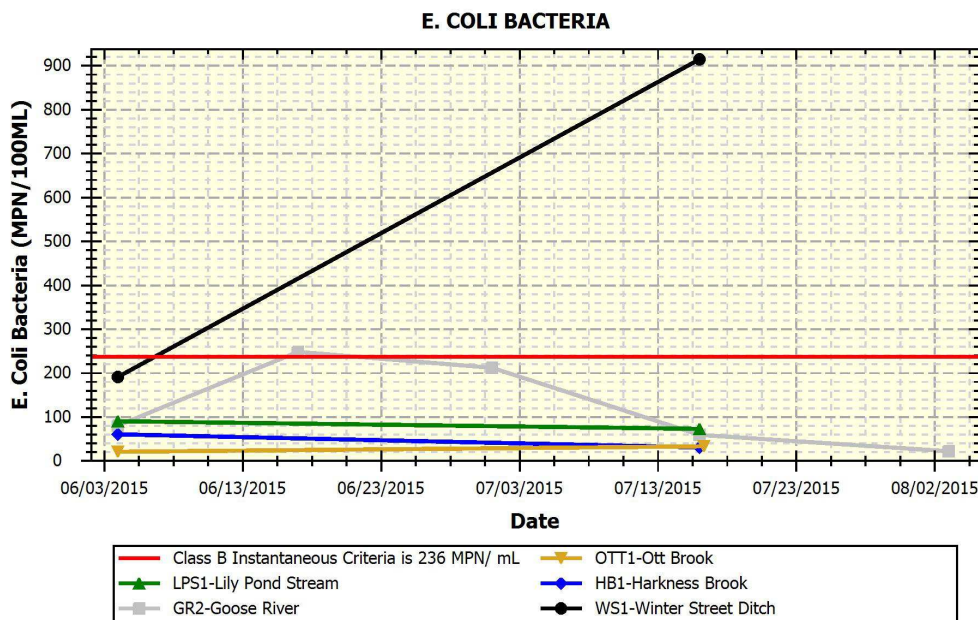


Figure 5-8-12: Graph of Enterococcus at Site GR1-Goose River (MPN/ml)

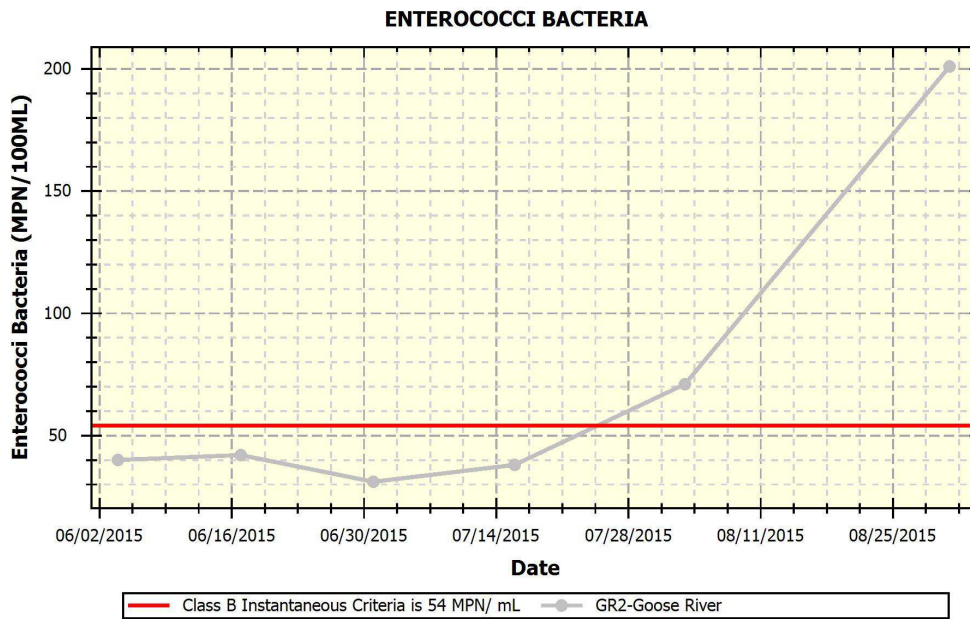
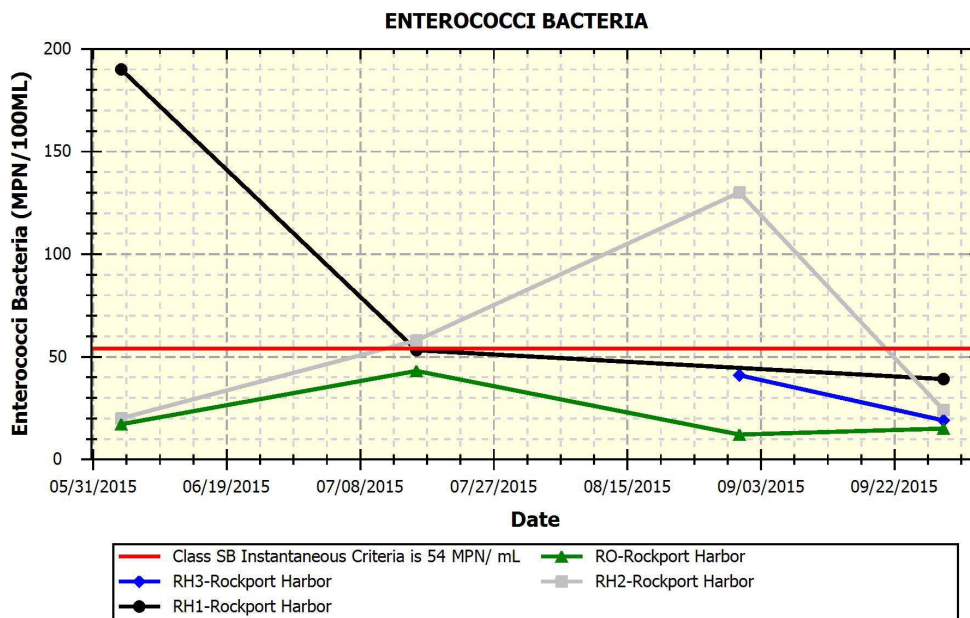


Figure 5-8-13: Graph of Enterococcus at Harbor sites (MPN/ml)



Nutrients and Chlorophyll a

Nutrient criterion for freshwaters have been developed, but not yet adopted. The draft criteria for Class B waters are ≤ 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.

2015 Results:

Freshwater sites: Total phosphorus and total nitrogen were measured 8 times at Goose River-GR2 and 2 times at the other freshwater sites. At Goose River, 2 samples were above 0.030 mg/l [30 µg/l] for total phosphorus and 1 sample was 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 0.6 mg/l for total nitrogen. Site LPS-1 had 1 value 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 1 samples taken at site WS-1 was above 0.6 mg/l. Overall, nutrients were moderate at the freshwater sites. Total phosphorus at the harbor sites were all similar. Total nitrogen at the harbor sites were all similar with the exception of 1 sample at RH3. At the harbor sites, the chlorophyll a are considered low (< 5 µg/l).

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
GR-2	B	8	0.0292	0.0120	0.0846	n/a	n/a
HB-1	B	2	0.0174	0.0150	0.0198	n/a	n/a
LPS-1	B	2	0.0359	0.0330	0.0388	n/a	n/a
OTT-1	B	2	0.0198	0.0140	0.0256	n/a	n/a
WS-1	B	2	0.0129	0.0100	0.0157	n/a	n/a
RH1	SB	2	0.0169	0.0159	0.0179	n/a	n/a
RH2	SB	2	0.0153	0.0124	0.0182	n/a	n/a
RH3	SB	2	0.0165	0.0149	0.0180	n/a	n/a
RO	SB	2	0.0177	0.0157	0.0196	n/a	n/a

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
GR-2	B	8	0.435	0.220	0.820	n/a	n/a
HB-1	B	2	0.710	0.480	0.940	n/a	n/a
LPS-1	B	2	0.460	0.440	0.480	n/a	n/a
OTT-1	B	2	0.585	0.520	0.650	n/a	n/a
WS-1	B	2	0.770	0.590	0.950	n/a	n/a
RH1	SB	2	0.175	0.140	0.210	n/a	n/a
RH2	SB	2	0.140	0.130	0.150	n/a	n/a
RH3	SB	2	0.470	0.150	0.790	n/a	n/a
RO	SB	2	0.175	0.170	0.180	n/a	n/a

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
RH1	SB	2	1.13	1.03	1.22	n/a	n/a
RH2	SB	2	1.31	0.81	1.80	n/a	n/a
RH3	SB	2	1.38	0.93	1.83	n/a	n/a
RO	SB	2	1.62	1.19	2.05	n/a	n/a

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
RH1	SB	2	0.49	0.41	0.56	n/a	n/a
RH2	SB	2	0.52	0.35	0.69	n/a	n/a
RH3	SB	2	0.60	0.40	0.79	n/a	n/a
RO	SB	2	0.61	0.44	0.77	n/a	n/a

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Exceeding Criterion
RH1	SB	2	0.86	0.72	1.00	n/a	n/a
RH2	SB	2	1.02	0.62	1.42	n/a	n/a
RH3	SB	2	1.05	0.71	1.39	n/a	n/a
RO	SB	2	1.28	0.94	1.62	n/a	n/a

Transparency

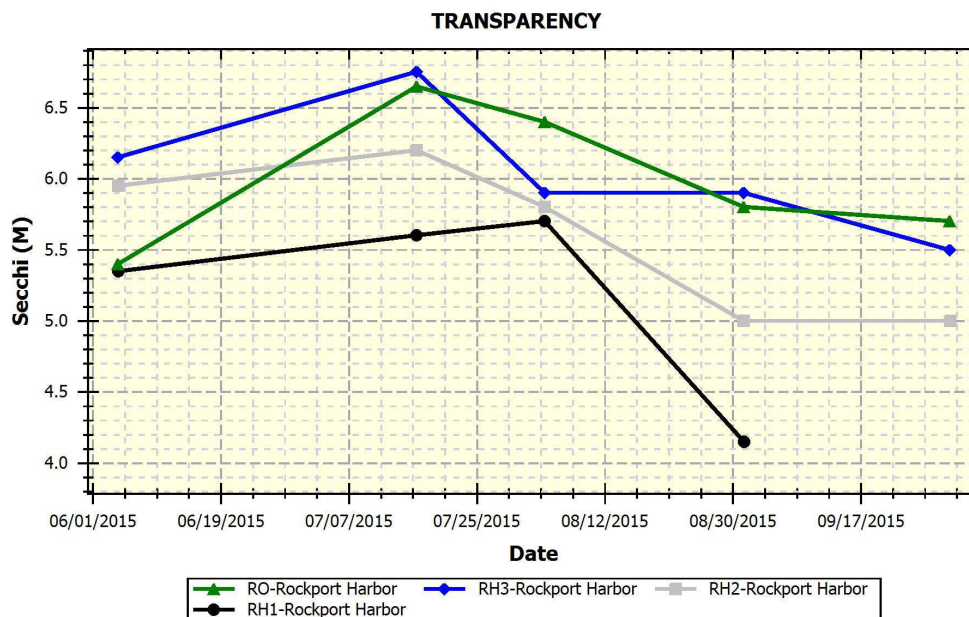
Transparency is a measure of the water clarity. Transparency is reduced by suspended materials in the water—primarily algae but may also include suspended sediments that are delivered to a water body during a storm event or stirred up from the bottom. It is measured by lowering a black and white disk 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.

2015 Results:

Mean transparency at the four harbor ranged from 5.1-6.0 meters. Site RH1 had the lowest transparency followed by Site RH2. The other two sites were similar.

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

Site	Class	# Sample Points	Mean	Minimum	Maximum	Criterion	# Not Meeting Criterion
RH1	SB	5	5.1	4.2	5.7	n/a	n/a
RH2	SB	5	5.6	5.0	6.2	n/a	n/a
RH3	SB	5	6.0	5.5	6.8	n/a	n/a
RO	SB	5	6.0	5.4	6.6	n/a	n/a

Figure 5-8-14: 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.**
- **Continue monitoring at all stations to develop a long term trend database.**

Appendix A-1. 2011 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/A" = normal environmental sample ; "D" = field duplicate; "D.O." = dissolved oxygen; "Spec. Cond" = specific conductance; "Turb" = turbidity; "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)	Secchi Depth (M)	
Rockport Harbor-Rockport Conservation Commission																		
GR-2	GOOSE RIVER - NGR01 - VRMP	4/21/2015		NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	5/7/2015		NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	5/20/2015		NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	6/4/2015	8:10 AM	NA			11.4	108.5	11.9	170					80	40		
GR-2	GOOSE RIVER - NGR01 - VRMP	6/4/2015	8:10 AM	NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	6/4/2015	8:10 AM	D			11.4	108.2	11.8	170						40		
GR-2	GOOSE RIVER - NGR01 - VRMP	6/4/2015	8:14 AM	D	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	6/17/2015	8:05 AM	NA			15.3	92.3	9.3	280					248	42		
GR-2	GOOSE RIVER - NGR01 - VRMP	6/17/2015	8:05 AM	NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	6/17/2015	8:05 AM	D			15.3	92.3	9.3	290						28		
GR-2	GOOSE RIVER - NGR01 - VRMP	6/17/2015	8:12 AM	D	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	6/21/2015	3:05 PM	NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	7/1/2015	8:36 AM	NA			17.2	97.8	9.4	170					212	31		
GR-2	GOOSE RIVER - NGR01 - VRMP	7/1/2015	8:36 AM	D			17.2	97.7	9.4	170					172			
GR-2	GOOSE RIVER - NGR01 - VRMP	7/1/2015	8:42 AM	NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	7/1/2015	8:42 AM	LCS	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	7/16/2015	10:30 AM	NA			17.5	99.3	9.5	320					59	38		
GR-2	GOOSE RIVER - NGR01 - VRMP	7/16/2015	10:30 AM	NA	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	7/16/2015	10:30 AM	D			17.6	100.0	9.6	320						46		
GR-2	GOOSE RIVER - NGR01 - VRMP	7/16/2015	10:35 AM	D	.1	M												
GR-2	GOOSE RIVER - NGR01 - VRMP	8/3/2015	9:10 AM	NA			19.4	89.2	8.2	280					21	71		
GR-2	GOOSE RIVER - NGR01 - VRMP	8/3/2015	9:10 AM	D			19.5	89.6	8.3	280					29			
GR-2	GOOSE RIVER - NGR01 - VRMP	8/31/2015	9:45 AM	NA			19.6	92.4	8.5	270						201		
GR-2	GOOSE RIVER - NGR01 - VRMP	8/31/2015	9:45 AM	D			19.6	92.4	8.5	280								
HB-1	HARKNESS BROOK - NHK00 - VRMP	6/4/2015	7:18 AM	NA			10.0	109.2	12.3	290					60			
HB-1	HARKNESS BROOK - NHK00 - VRMP	6/4/2015	7:18 AM	NA	.1	M												
HB-1	HARKNESS BROOK - NHK00 - VRMP	7/16/2015	8:25 AM	NA			15.0	86.6	8.8	730					30			
HB-1	HARKNESS BROOK - NHK00 - VRMP	7/16/2015	8:25 AM	NA	.1	M												
LPS-1	LILY POND STREAM - NLP00 - VRMP	6/4/2015	7:40 AM	NA	.1	M												
LPS-1	LILY POND STREAM - NLP00 - VRMP	6/4/2015	7:44 AM	NA			12.2	106.5	11.4	370					90			
LPS-1	LILY POND STREAM - NLP00 - VRMP	7/16/2015	8:40 AM	NA			15.7	88.0	8.8	390					72			
LPS-1	LILY POND STREAM - NLP00 - VRMP	7/16/2015	8:40 AM	NA	.1	M												
OTT-1	OTT BROOK - NOT02 - VRMP	6/4/2015	7:03 AM	NA			10.1	104.7	11.8	170					20			
OTT-1	OTT BROOK - NOT02 - VRMP	6/4/2015	7:03 AM	NA	.1	M												

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)	Secchi Depth (M)
OTT-1	OTT BROOK - NOT02 - VRMP	7/16/2015	8:11 AM	NA			14.7	75.4	7.7	490					33		
OTT-1	OTT BROOK - NOT02 - VRMP	7/16/2015	8:11 AM	NA	.1	M											
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	12:25 PM	NA	.1	M										190	5.35
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	.0	M	13.6	107.6	9.7		21.6						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	1.0	M	11.8	107.4	9.7		26.1						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	2.0	M	11.1	106.4	9.9		26.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	3.0	M	10.7	109.3	10.1		26.6						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	4.0	M	10.5	106.8	10.0		26.9						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	NA	5.0	M	9.6	106.3	10.1		28.2						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	D												201	5.4
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:22 PM	D	3.0	M	10.7	106.0	10.1		26.7						
RH-1	ROCKPORT HARBOR-RH1-VRMP	6/4/2015	1:36 PM	D	.1	M											
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA												53	5.6
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	.0	M	16.2	121.1	10.1		28.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	1.0	M	16.2	122.7	10.2		28.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	2.0	M	16.1	123.9	10.3		28.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	3.0	M	15.8	120.9	10.2		28.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	4.0	M	15.4	120.7	10.2		28.5						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	5.0	M	14.9	117.3	10.1		28.7						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	NA	6.0	M	10.8	107.3	9.8		30						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	D												50	5.75
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	12:27 PM	D	3.0	M	15.8	122.8	10.2		28.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	1:32 PM	NA	.1	M											
RH-1	ROCKPORT HARBOR-RH1-VRMP	7/16/2015	1:38 PM	D	.1	M											
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA													5.7
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	.0	M	19.1	116.8	9.3		29.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	1.0	M	19.0	114.1	9.0		29.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	2.0	M	18.8	114.5	9.0		29.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	3.0	M	18.6	111.9	8.8		29.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	4.0	M	18.6	113.0	9.0		29.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	5.0	M	18.4	114.9	9.0		29.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	NA	6.0	M	15.2	125.2	10.5		29.8						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	D													5.8
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/3/2015	1:05 PM	D	3.0	M	18.7	112.6	9.0		29.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA													4.15
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	.0	M	19.5	116.6	9.0		29						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	1.0	M	18.9	112.0	8.8		29						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	2.0	M	18.4	112.0	8.9		29						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	3.0	M	18.0	112.5	9.0		29						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	4.0	M	16.2	110.8	9.0		30						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	5.0	M	15.6	115.0	9.6		30						

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)	Entero-cocci (MPN/100ML)	Secchi Depth (M)
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	NA	6.0	M	14.8	105.0	8.9		30						
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	D													4
RH-1	ROCKPORT HARBOR-RH1-VRMP	8/31/2015	1:09 PM	D	3.0	M	17.5	113.0	9.2		29						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA												39	4.9
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	.0	M	18.0	113.2	8.9		28.8						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	1.0	M	17.9	110.4	8.9		28.9						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	2.0	M	17.6	109.4	8.8		28.8						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	3.0	M	17.5	113.6	8.6		28.8						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	4.0	M	14.5	79.3	6.7		30.3						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	5.0	M	14.2	76.4	6.7		30.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	NA	6.0	M	14.1	76.6	6.6		30.4						
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	D												29	4.9
RH-1	ROCKPORT HARBOR-RH1-VRMP	9/29/2015	1:07 PM	D	3.0	M	17.6	109.4	8.8		28.9						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA												20	5.95
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	.0	M	11.4	109.6	10.2		26.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	.1	M											
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	1.0	M	11.3	108.9	10.0		26.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	2.0	M	11.3	107.8	10.1		26.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	3.0	M	10.9	107.7	10.1		26.7						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	4.0	M	10.4	107.5	10.0		27.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	5.0	M	9.8	104.7	9.9		28.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	6.0	M	9.3	102.3	9.8		28.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	7.0	M	8.6	99.9	9.7		29.2						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	8.0	M	7.4	99.7	9.9		29.8						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	9.0	M	7.2	98.5	9.8		29.9						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	10.0	M	6.8	98.4	9.8		30.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	11.0	M	6.7	96.0	9.6		30.2						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	12.0	M	6.5	99.6	10.1		30.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	13.0	M	6.4	98.0	10.1		30.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	6/4/2015	1:06 PM	NA	14.0	M	6.4	96.2	9.7		30.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA												58	6.2
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	.0	M	16.3	123.9	10.2		28.2						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	1.0	M	15.9	122.3	10.3		28.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	2.0	M	15.7	122.8	10.2		28.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	3.0	M	15.6	123.9	10.3		28.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	4.0	M	15.5	124.7	10.5		28.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	5.0	M	15.5	124.9	10.4		28.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	6.0	M	15.3	124.8	10.5		28.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	7.0	M	14.6	119.1	10.2		28.7						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	8.0	M	13.7	115.1	10.0		29.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	9.0	M	11.1	110.4	10.0		29.8						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	10.0	M	10.3	108.2	10.0		30						

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)	Secchi Depth (M)
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	11.0	M	10.2	107.2	10.0		30						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	12.0	M	10.2	106.1	9.9		30						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	13.0	M	10.1	104.8	9.8		30						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	14.0	M	10.0	105.3	9.8		30						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	12:10 PM	NA	15.0	M	9.9	104.2	9.9		30.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	7/16/2015	1:06 PM	NA	.1	M											
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA													5.8
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	.0	M	18.7	114.7	9.1		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	1.0	M	18.7	113.4	8.9		29.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	2.0	M	18.5	112.8	8.9		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	3.0	M	18.4	115.0	9.1		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	4.0	M	18.3	113.5	9.0		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	5.0	M	18.3	115.8	9.1		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	6.0	M	18.0	117.9	9.4		29.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	7.0	M	15.4	115.9	9.6		29.7						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	8.0	M	14.7	116.2	9.8		29.9						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	9.0	M	14.4	115.5	9.8		29.9						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	10.0	M	13.4	112.6	9.8		30.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	11.0	M	11.5	104.9	9.4		30.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	12.0	M	11.1	100.1	9.1		30.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	13.0	M	11.0	97.4	8.9		30.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/3/2015	12:40 PM	NA	14.0	M	11.0	96.6	8.8		30.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA												130	5
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	.0	M	19.4	122.6	9.5		29.3						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	1.0	M	19.2	121.5	9.4		29.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	2.0	M	18.3	121.4	9.7		29.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	3.0	M	18.0	119.0	9.4		29.6						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	4.0	M	17.4	117.7	9.6		29.8						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	5.0	M	16.5	117.6	9.5		30.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	6.0	M	15.6	118.8	9.8		30.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	7.0	M	14.0	108.3	9.2		30.8						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	8.0	M	13.2	108.0	9.4		31						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	9.0	M	13.1	108.6	9.4		31						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	10.0	M	12.9	106.0	9.2		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	11.0	M	12.7	104.1	9.1		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	12.0	M	12.7	103.2	9.0		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	13.0	M	12.7	111.0	9.7		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	14.0	M	12.6	108.3	9.4		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	8/31/2015	12:50 PM	NA	15.0	M	12.6	108.7	9.5		31.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA												24	5
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	.0	M	17.6	113.7	9.1		29						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	1.0	M	17.6	112.4	9.0		29						

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)	Entero-cocci (MPN/100ML)	Secchi Depth (M)
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	2.0	M	17.5	114.9	9.4		29.1						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	3.0	M	17.1	105.1	9.0		29.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	4.0	M	14.4	84.1	7.2		30.4						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	5.0	M	14.2	84.5	7.2		30.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	6.0	M	14.1	82.4	7.0		30.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	7.0	M	14.1	89.0	7.6		30.6						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	8.0	M	14.0	82.6	7.1		30.6						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	9.0	M	13.9	73.9	6.2		30.6						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	10.0	M	13.9	74.6	6.2		30.6						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	NA	14.0	M	14.1	79.4	6.6		30.5						
RH-2	ROCKPORT HARBOR-RH2-VRMP	9/29/2015	12:50 PM	D	2.0	M	17.1	111.6	9.0								
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA												23	6.15
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	.0	M	11.1	108.3	10.2		26.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	.1	M											
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	1.0	M	11.0	108.5	10.1		26.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	2.0	M	10.9	108.8	10.2		26.6						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	3.0	M	10.5	107.5	10.2		26.7						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	4.0	M	10.4	106.6	10.0		26.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	5.0	M	10.1	104.9	9.9		27.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	6.0	M	10.0	104.3	9.9		27.7						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	7.0	M	9.0	104.0	10.0		28.8						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	8.0	M	8.4	101.5	9.9		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	9.0	M	7.5	101.0	10.0		29.7						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	10.0	M	7.1	100.7	10.0		30						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	11.0	M	6.8	99.7	10.0		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	12.0	M	6.7	99.3	10.0		30.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	13.0	M	6.4	98.9	10.0		30.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	14.0	M	6.3	98.0	10.0		30.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	15.0	M	6.2	96.4	9.8		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	16.0	M	6.2	96.6	9.8		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	17.0	M	6.2	96.2	9.8		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	18.0	M	6.2	96.5	9.8		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	19.0	M	6.2	97.1	9.8		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	6/4/2015	12:36 PM	NA	19.5	M	6.2	95.7	9.6		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA												44	6.75
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	.0	M	16.3	124.9	10.3		28.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	1.0	M	16.1	124.2	10.2		28.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	2.0	M	15.7	123.8	10.3		28.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	3.0	M	15.7	122.9	10.3		28.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	4.0	M	15.6	123.9	10.3		28.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	5.0	M	15.5	124.8	10.4		28.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	6.0	M	15.4	125.8	10.5		28.4						

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)	Entero-cocci (MPN/100ML)	Secchi Depth (M)
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	7.0	M	15.4	125.6	10.6		28.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	8.0	M	15.3	124.0	10.5		28.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	9.0	M	13.3	116.2	10.2		29.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	10.0	M	12.2	113.0	10.1		29.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	11.0	M	11.7	113.5	10.3		29.6						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	12.0	M	11.0	114.2	10.4		29.8						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	13.0	M	10.7	111.8	10.3		29.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	14.0	M	10.7	112.5	10.3		29.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	15.0	M	10.4	110.1	10.2		30						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	16.0	M	9.9	102.9	9.6		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	17.0	M	9.8	103.5	9.6		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	18.0	M	9.8	104.4	9.8		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	19.0	M	9.7	101.8	9.5		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	11:50 AM	NA	19.5	M	9.7	101.8	9.5		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	7/16/2015	12:36 PM	NA	.1	M											
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA													5.9
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	.0	M	18.4	115.8	9.1		29.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	1.0	M	18.4	115.6	9.1		29.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	2.0	M	18.4	116.0	9.1		29.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	3.0	M	18.0	114.5	9.2		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	4.0	M	17.9	115.5	9.2		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	5.0	M	17.3	116.2	9.3		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	6.0	M	16.2	112.6	9.4		29.7						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	7.0	M	15.5	120.4	10.0		29.7						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	8.0	M	15.1	120.9	10.1		29.8						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	9.0	M	14.3	120.0	10.2		29.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	10.0	M	13.7	113.0	9.8		30						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	11.0	M	12.9	107.2	9.3		30.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	12.0	M	11.8	105.9	9.5		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	13.0	M	11.3	102.0	9.2		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	14.0	M	11.0	97.2	8.9		20.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	15.0	M	10.8	96.4	8.8		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	16.0	M	10.7	94.2	8.6		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	17.0	M	10.6	89.2	8.2		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	18.0	M	10.5	89.4	8.2		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	19.0	M	10.4	87.3	8.1		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/3/2015	12:15 PM	NA	19.5	M	10.4	87.6	8.0		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA												41	5.9
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	.0	M	19.4	117.6	9.2		29.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	1.0	M	18.7	120.3	9.5		29.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	2.0	M	17.9	122.5	9.7		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	3.0	M	17.4	124.0	10.0		29.7						

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)	Entero-cocci (MPN/100ML)	Secchi Depth (M)
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	4.0	M	17.1	124.1	10.0		29.8						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	5.0	M	16.9	120.5	9.8		30						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	6.0	M	16.6	118.4	9.6		30.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	7.0	M	16.3	118.9	9.7		30.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	8.0	M	15.5	115.4	9.6		30.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	9.0	M	13.9	109.9	9.3		30.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	10.0	M	13.5	111.3	9.5		30.9						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	11.0	M	13.3	110.6	9.6		31						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	12.0	M	13.0	105.5	9.2		31						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	13.0	M	12.8	105.7	9.2		31.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	14.0	M	12.8	105.0	9.2		31.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	15.0	M	12.7	103.7	9.1		31.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	16.0	M	12.6	105.0	9.2		31.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	17.0	M	12.4	110.3	8.8		31.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	18.0	M	12.3	108.2	9.5		31.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	19.0	M	12.2	104.8	9.2		31.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	NA	20.0	M	12.1	101.8	9.0		31.2						
RH-3	ROCKPORT HARBOR-RH3-VRMP	8/31/2015	12:15 PM	D	15.0	M	12.7	108.6	9.5		31.1						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:15 PM	NA	18.0	M	14.1	85.6	7.2		30						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA												19	5.5
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	.0	M	16.9	113.7	9.2		29.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	1.0	M	16.9	112.6	9.3		29.4						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	2.0	M	16.8	111.9	9.5		29.3						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	3.0	M	15.8	105.1	8.8		29.8						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	4.0	M	14.2	96.3	8.3		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	5.0	M	14.0	95.2	8.2		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	6.0	M	14.0	92.8	7.9		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	7.0	M	13.9	85.4	7.5		30.6						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	8.0	M	13.9	86.8	7.2		30.6						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	9.0	M	13.9	81.3	7.1		30.6						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	10.0	M	13.9	81.3	7.3		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	11.0	M	14.1	84.7	7.1		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	12.0	M	14.1	86.6	7.3		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	13.0	M	14.1	88.3	7.6		30.5						
RH-3	ROCKPORT HARBOR-RH3-VRMP	9/29/2015	12:30 PM	NA	15.0	M	14.1	90.4	7.6		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA												17	5.4
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	.0	M	10.7	110.5	10.5		26.1						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	.1	M											
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	1.0	M	10.7	110.0	10.4		26.2						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	2.0	M	10.6	109.8	10.4		26.2						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	3.0	M	10.5	108.5	10.3		26.4						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	4.0	M	10.1	108.1	10.3		26.8						

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)	Entero-cocci (MPN/100ML)	Secchi Depth (M)
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	5.0	M	9.7	105.4	10.1		27.6						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	6.0	M	9.6	108.6	10.4		28						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	7.0	M	9.2	109.3	10.4		28.7						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	8.0	M	8.8	106.8	10.3		29						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	9.0	M	8.6	106.1	10.2		29.1						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	10.0	M	8.5	105.0	10.2		29.1						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	11.0	M	7.7	103.9	10.2		29.7						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	12.0	M	7.1	101.6	10.1		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	13.0	M	6.6	100.5	10.0		30.1						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	14.0	M	6.6	100.1	10.1		30.1						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:06 PM	NA	15.0	M	6.2	99.5	10.1		30.3						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:36 PM	NA	16.0	M	6.1	99.0	10.1		30.4						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:36 PM	NA	17.0	M	5.9	99.5	10.2		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:36 PM	NA	18.0	M	5.9	99.6	10.2		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:36 PM	NA	19.0	M	5.9	100.0	10.2		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	6/4/2015	12:36 PM	NA	20.0	M	5.8	100.3	10.2		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA												43	6.65
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	.0	M	15.7	125.1	10.5		27.8						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	1.0	M	15.7	125.4	10.5		27.8						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	2.0	M	15.6	125.1	10.5		27.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	3.0	M	15.6	125.2	10.5		27.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	4.0	M	15.6	124.8	10.5		28						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	5.0	M	15.5	125.4	10.6		28						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	6.0	M	15.4	125.4	10.6		28.1						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	7.0	M	15.3	124.9	10.5		28.2						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	8.0	M	15.2	125.2	10.6		28.2						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	9.0	M	15.1	125.2	10.6		28.3						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	10.0	M	14.8	126.2	10.7		28.4						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	11.0	M	14.5	124.1	10.7		28.5						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	12.0	M	10.7	116.5	10.7		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	13.0	M	10.5	113.3	10.5		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	14.0	M	10.5	113.2	10.5		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	11:22 AM	NA	15.0	M	10.4	112.7	10.5		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:06 PM	NA	.1	M											
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:36 PM	NA	16.0	M	10.3	112.6	10.4		30						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:36 PM	NA	17.0	M	10.2	112.2	10.4		30						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:36 PM	NA	18.0	M	10.2	111.8	10.4		30.1						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:36 PM	NA	19.0	M	9.8	110.3	10.3		30.2						
RO	ROCKPORT HARBOR-RO-VRMP	7/16/2015	12:36 PM	NA	20.0	M	9.3	107.6	10.2		30.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA													6.4
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	.0	M	16.3	120.7	9.8		29.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	1.0	M	16.2	120.6	9.9		29.6						

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)	Secchi Depth (M)
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	2.0	M	16.1	120.4	9.9		29.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	3.0	M	15.7	121.6	10.1		29.7						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	4.0	M	15.3	121.4	10.1		29.7						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	5.0	M	15.2	121.4	10.2		29.7						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	6.0	M	14.5	120.0	10.2		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	7.0	M	12.6	117.2	10.3		30.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	8.0	M	12.5	116.0	10.2		30.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	9.0	M	12.3	113.6	10.1		30.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	10.0	M	12.1	111.7	10.0		30.3						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	11.0	M	11.8	109.3	9.8		30.3						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	12.0	M	11.5	108.2	9.7		30.4						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	13.0	M	11.4	106.5	9.6		30.4						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	14.0	M	11.0	104.6	9.5		30.4						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	11:45 AM	NA	15.0	M	10.8	102.4	9.3		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	12:36 PM	NA	16.0	M	10.7	100.4	9.2		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	12:36 PM	NA	17.0	M	10.5	99.9	9.2		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	12:36 PM	NA	18.0	M	10.5	99.1	9.1		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	12:36 PM	NA	19.0	M	10.7	97.6	9.0		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/3/2015	12:36 PM	NA	20.0	M	10.3	96.9	8.9		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA												12	5.8
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	.0	M	19.0	120.3	9.4		29.1						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	1.0	M	17.8	121.9	9.7		29.6						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	2.0	M	16.8	124.6	10.2		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	3.0	M	16.5	122.5	10.0		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	4.0	M	16.3	123.2	10.1		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	5.0	M	16.3	122.1	10.1		29.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	6.0	M	16.1	122.8	10.0		30.4						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	7.0	M	15.2	122.1	10.3		30.5						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	8.0	M	14.6	114.4	9.7		30.9						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	9.0	M	13.8	114.8	9.8		31						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	10.0	M	13.6	111.5	9.6		31						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	11.0	M	13.0	106.3	9.2		31.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	12.0	M	12.8	104.5	9.1		31.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	13.0	M	12.7	103.5	9.0		31.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	14.0	M	12.6	103.1	9.0		31.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015		NA	15.0	M	12.6	102.4	8.9		31.2						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015	12:36 PM	NA	16.0	M	12.5	101.9	8.9		31.3						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015	12:36 PM	NA	17.0	M	12.4	100.8	8.9		31.3						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015	12:36 PM	NA	18.0	M	12.2	100.9	8.9		31.3						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015	12:36 PM	NA	19.0	M	12.0	100.0	8.9		31.4						
RO	ROCKPORT HARBOR-RO-VRMP	8/31/2015	12:36 PM	NA	20.0	M	11.9	109.0	9.7		31.4						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA												15	5.7

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)	Secchi Depth (M)
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	.0	M	13.9	100.8	8.6		30.8						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	1.0	M	13.6	100.7	8.7		31						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	2.0	M	13.6	102.7	8.6		31						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	3.0	M	13.4	102.8	8.9		31.1						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	4.0	M	13.4	103.5	8.9		31.3						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	5.0	M	13.9	101.4	8.7		31						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	10.0	M	13.6	100.2	8.7		31.1						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	NA	15.0	M	13.6	96.9	8.3		31						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	11:55 AM	D	10.0	M	14.4	102.1	8.8		30.6						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	12:36 PM	NA	20.0	M	14.0	97.9	8.5		31						
RO	ROCKPORT HARBOR-RO-VRMP	9/29/2015	12:36 PM	NA	25.0	M	13.9	98.1	8.3		30.9						
WS-1	WINTER STREET DITCH-N01	6/4/2015	7:30 AM	NA			10.7	100.6	11.2	570					190		
WS-1	WINTER STREET DITCH-N01	6/4/2015	7:30 AM	NA	.1	M											
WS-1	WINTER STREET DITCH-N01	7/16/2015	8:49 AM	NA			14.8	88.6	9.0	630					914		
WS-1	WINTER STREET DITCH-N01	7/16/2015	8:49 AM	NA	.1	M											