## Section 5-5 Kennebunk River (Mousam and Kennebunk Rivers Alliance)

Refer to Chapter 4 of this document for information about sampling methods, sampling sites, and quality assurance.

## **Overview**

The Mousam and Kennebunk Rivers Alliance (MKA) began in 2009 with assistance from the Wells National Estuarine Research Reserve (NERR) and Maine Rivers, for the purpose of monitoring the Kennebunk and Mousam rivers. The Kennebunk River is located in Southern Maine and originates in Kennebunk Pond in Lyman. The river is 15 miles long and flows from Lyman in York County to the Gulf of Maine in the town of Kennebunk. The primary impacts to the river come from development, recreational use, and agriculture. In recent years, the Kennebunk River has experienced high bacteria counts believed to be associated with faulty septic systems, livestock, and overboard discharges. In 2012, MKA partnered with the DEP TMDL Streams staff to monitor bacteria in Duck Brook-a major tributary to Kennebunk River.

The statutory water class of the Kennebunk River is Class B and below head of tide, the river is Class SB. In a 2005 DEP biomonitoring assessment, a macroinvertebrate monitoring location on the lower half of the river between Arundel and Kennebunk did not attain Class B standards, but did meet standards in 2010. Algae biomonitoring sampling at this same station did not meet class in either 2005 or 2010. Ward Brook was also sampled in 2010 and the results were indeterminate-the stream will be resampled when Southern Maine rivers and streams are sampled in the next rotation cycle.

The Department of Environmental Protection "2012 Integrated Water Quality Monitoring and Assessment Report" lists Kennebunk River in three categories:

-Category 2: Rivers and Streams Attaining Some Designated Uses- Insufficient Information for Other Uses: Kennebunk River and its tributaries

-Category 3: Rivers and Streams with Insufficient Data or Information to Determine if Designated Uses are Attained (One or More Uses may be Impaired):

Kennebunk River – Ward Brook to Kennebunk Landing; 5/23/2012-New Category 3 listing for aquatic life use: biomonitoring station S-270 showed algae (periphyton) Class C results in 2004 and 2010. Resampling needed to confirm whether impairment exists.

-Category 4A: Rivers and Streams with Impaired Use Other than Mercury, TMDL Completed:

9/28/2009-Recreational use impairments now Category 4-A due to approval of Statewide Bacteria TMDL.

The overall purpose of monitoring is to assess water quality data to determine whether the river is meeting water quality classification standards. The Kennebunk River Sampling and Analysis Plan states that the objectives of monitoring are to: (1) develop baseline data for expanded long-term water quality monitoring efforts; (2) provide information on current watershed conditions; and (3) identify areas with degraded water quality to focus best management practices.

## **Methods**

The volunteers monitored the Kennebunk River in 2013 at five stations on the main stem and at one station on Ward Brook (Table 5-5-1 and Figure 5-5-1). Two of the stations [KB-01 and KB-02] are below head of tide and four [KB-03, KB-04, KB-05 and KB-03A] are freshwater sites. All of the Kennebunk River sites are VRMP approved sites.

VRMP Site ID	Organization Site Code	Sample Location	Class
Kennebunk River-SKE11-VRMP	KB-01	Route 9 Bridge	SB
Kennebunk River-SKE35-VRMP	KB-02	Durrell's Bridge	SB
Kennebunk River-SKE66-VRMP	KB-03	Route 1 Bridge	В
Kennebunk River-SKE103-VRMP	KB-04	Downing Road	В
Kennebunk River-SKE148-VRMP	KB-05	Perkins Lane	В
Ward Brook-SKEWD04-VRMP	KB-03A	Emmons Road	В

Table 5-5-1: Mousam and Kennebunk Rivers Alliance sampling sites on the Kennebunk River.

Monitoring was conducted biweekly from June through September. At each site, the monitors made direct measurements of water temperature and dissolved oxygen using a handheld YSI 550A meter. Conductivity was directly measured at the freshwater sites using an Oakton EC 11+/11 Testr conductivity pen and salinity was measured at the tidal sites. Grab samples were collected for *E. coli* bacteria at the freshwater sites and Enterococcus bacteria at the sites below head of tide. Bacteria samples were transported to Nelson Labs for analysis.

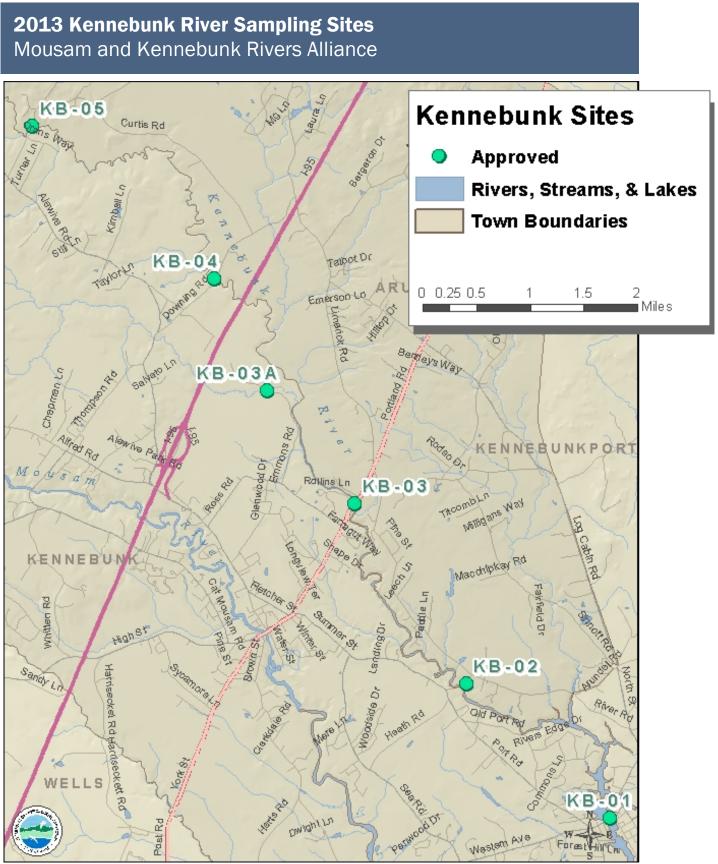


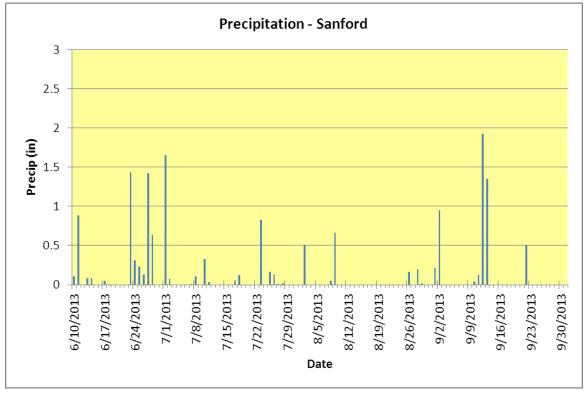
Figure 5-5-1: Map of Mousam and Kennebunk Rivers Alliance sampling sites on the Kennebunk River.

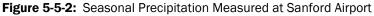
## Results

Refer to Appendices A-1 and A-2 in discussion of individual site data and trends, as well as graphed data (Figures 5-5-3 through 5-5-8).

### Precipitation

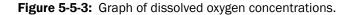
Figure 5-5-2 provides a graph of rainfall for the monitoring period. Rainfall data was obtained from Weather Underground (<u>http://www.wunderground.com</u>). Weather station choice (Sanford Airport-Station KSFM) was based on proximity and station with most complete records. If there was an airport station close by, this was chosen. This information provides an overview of rainfall events and can be useful in interpreting monitoring results for some parameters. Summer/early Fall 2013 was wet with significant rain events in late June-early July and September.

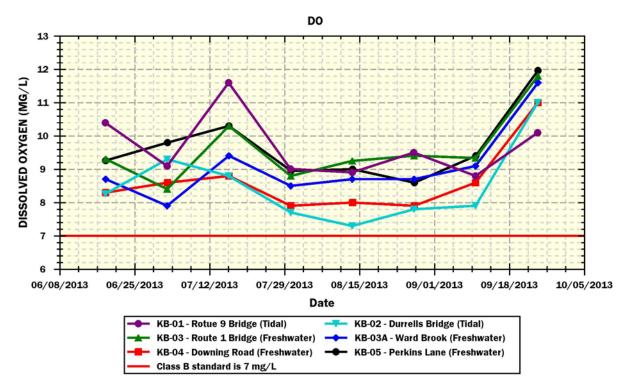




## **Dissolved Oxygen**

Dissolved oxygen was measured 8 times at each of the six sampling sites (Figure 5-5-3 and Figure 5-5-4; Tables 5-5-2 and Table 5-5-3). Monitoring occurred from June through September. 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.





**Table 5-5-2:** A summary of minimum, maximum, and average dissolved oxygen concentration (mg/l) values at Mousam and Kennebunk Rivers Alliance monitoring sites on the Kennebunk River and tributary.

Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
KB-01	Y	8	8.8	11.6	9.7
KB-02	Y	8	7.3	11.0	8.5
KB-03	Y	8	8.4	11.8	9.6
KB-03A	Y	8	7.9	11.6	9.1
KB-04	Y	8	7.9	11.0	8.6
KB-05	Y	8	8.6	12.0	9.7

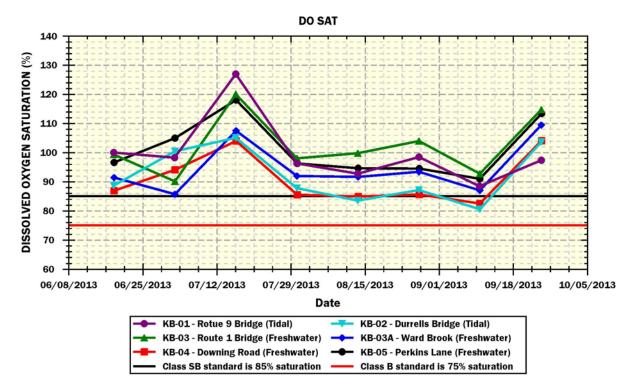


Figure 5-5-4: Graph of dissolved oxygen saturation

**Table 5-5-3:** A summary of minimum, maximum, and average dissolved oxygen saturation (%) values at Mousam and Kennebunk Rivers Alliance monitoring sites on the Kennebunk River and tributary.

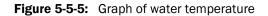
Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
KB-01	Y	8	88.5	127.0	99.8
KB-02	Y	8	80.5	105.1	92.1
КВ-03	Y	8	90.1	120.0	102.4
KB-03A	Y	8	85.7	109.5	94.8
КВ-04	Y	8	82.5	104.1	91.0
KB-05	Y	8	91.0	118.0	101.2

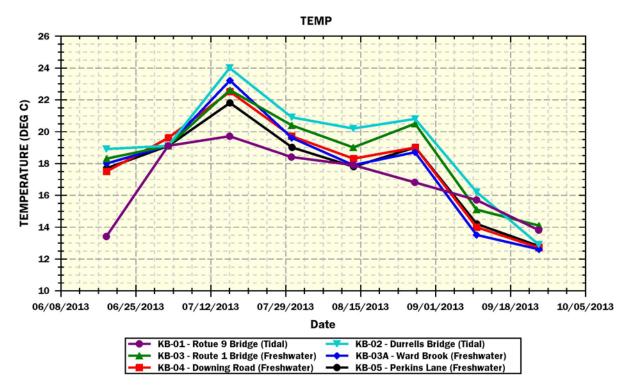
Dissolved oxygen concentrations measured at Kennebunk River sites ranged from 7.3 mg/l to 12.0 mg/l. At Site KB-02, dissolved oxygen saturation dropped slightly below the Class SB standard of 85% saturation on two dates (8/13/13 and 9/10/13). Overall, the tidal Sites KB-01 and KB-02 were better than in 2012. All of the freshwater sites were above the Class B standard for both concentration (7.0 mg/l) and saturation (75%). For the freshwater sites, Sites KB-03 and KB-05 were similar with the exception of one date, Site KB-04 had lower values and Site KB-03A was in-between with the exception of one date.

The monitors improved on getting out to the sites earlier in the morning. With the exception of Site KB-04 and Site KB-05, monitoring generally occurred before 9:00am. Since one monitoring team does all the sites, it is difficult to get to all the sites early. Dissolved oxygen levels are generally lowest early in the morning and then increase during the day, peaking mid-late afternoon. Dissolved oxygen is also affected by flow conditions. During high flow conditions, more oxygen is added to the river from the atmosphere, as the water is moving faster and there is more opportunity for mixing. If flow during the summer months is higher or lower than generally normal, then this will affect the dissolved oxygen.

#### Water Temperature

Temperature was measured 8 times at each of the six sampling sites (Figure 5-5-5 and Table 5-5-4). Monitoring occurred from June through September. 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  $0.3^{\circ}$ C ( $0.5^{\circ}$ 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 of any tidal waters to exceed 85°F ( $29^{\circ}$ C) at any point outside a mixing zone established by the Board of Environmental Protection.





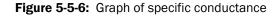
Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
KB-01	Y	8	13.4	19.7	16.9
КВ-02	Y	8	12.9	24.0	19.1
КВ-03	Y	8	14.1	22.6	18.6
KB-03A	Y	8	12.6	23.2	17.8
КВ-04	Y	8	12.7	22.5	17.9
KB-05	Y	8	12.8	21.8	17.7

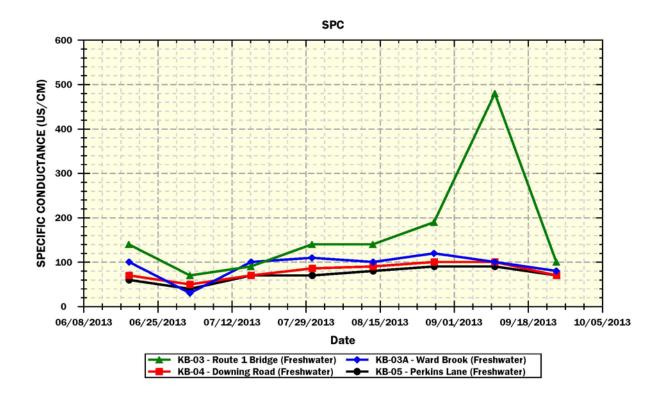
**Table 5-5-4:** A summary of minimum, maximum, and water temperature (°C) values at Mousam and Kennebunk Rivers Alliance monitoring sites on the Kennebunk River and tributary.

Temperatures measured at the Kennebunk River sites ranged from 12.6° to 24.0°C (Celsius). For the two tidal sites, site KB-01 was always generally quite a bit colder by several degrees than site KB-02, which was the warmest site overall. The four freshwater sites were similar with Site KB-03 being generally a bit warmer. The highest temperatures for all these sites occurred in mid-July. For Site KB-03, temperatures during July-August ranged from 19.0°C to 22.6 °C, Site KB-03A ranged from 17.9°C to 23.2 °C, Site KB-04 ranged from 18.3°C to 22.5, and Site KB-05 ranged from 17.8°C to 21.8 °C. Overall, temperatures were somewhat high during the summer months, particularly in July. It was a wet summer with good flows, but warm temperature which influenced water temperatures through the summer.

## **Specific Conductance**

Specific conductance was measured 8 times at each of the four freshwater sampling sites (Figure 5-5-6 and Table 5-5-5). Monitoring occurred from June through September. 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.





**Table 5-5-5:** A summary of minimum, maximum, and specific conductance (µS/cm) values at Mousam and Kennebunk Rivers Alliance monitoring sites on the Kennebunk River and tributary.

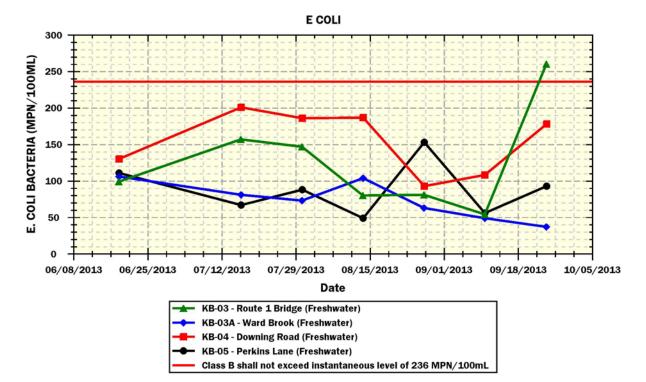
Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
KB-01	Y				NA-Tidal
KB-02	Y				NA-Tidal
КВ-03	Y	8	70	480	169
KB-03A	Y	8	30	120	93
КВ-04	Y	8	50	100	80
KB-05	Y	8	40	90	71

Specific conductance at the main stem sites KB-04 and KB-05 as well as the tributary site-KB-03A were very similar. Values for these three sites ranged from 30-120  $\mu$ S/cm and are overall low to moderate. At Site KB-03, specific conductance was overall higher than at the other three freshwater sites. One value was high (480  $\mu$ S/cm) and the rest of the values were moderate to moderately high ranging from 40-190  $\mu$ S/cm.

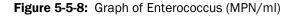
#### Bacteria

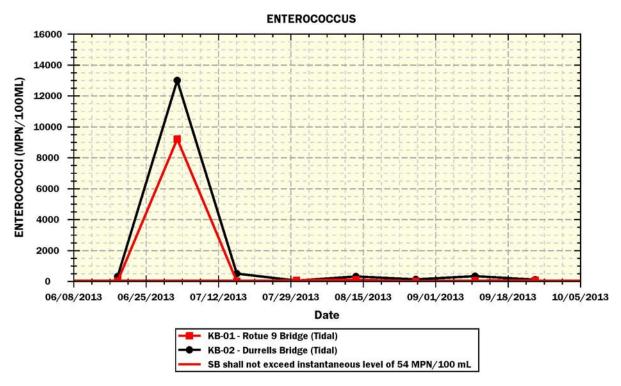
Enterococcus bacteria were sampled 8 times at sites KB-01 and KB-02 (Figure 5-5-8 and Table 5-5-6). *Escherichia coli* bacteria were measured 8 times at sampling sites KB-03, KB-04, KB-05 and KB-03A (Figure 5-5-7 and Table 5-5-6). Monitoring occurred from June through September. Most of the samples were taken during baseflow conditions and one significant stormflow (over 1.5" rain previous day) was sampled. 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 something like bacteria where there may be one or more very high or low values that can skew the mean.









**Table 5-5-6:** A summary of minimum, maximum, and geometric means for bacteria (MPN/100 mL) values at Mousam and Kennebunk Rivers Alliance monitoring sites on the Kennebunk River and tributary.

Site	Bacteria Type	# of Samples	Minimum Value	Maximum Value	Geometric Mean
KB-01	Enterococcus	8	10	9208	68
KB-02	Enterococcus	8	41	12997	323
KB-03	E. coli	8	54	>2420	163
KB-03A	E. coli	8	37	>2420	108
KB-04	E. coli	8	93	>2420	211
KB-05	E. coli	8	49	>2420	126

Site KB-01 exceeded the geometric mean criterion of 8 MPN/100ml and the instantaneous criterion of 54 MPN/100ml on 4 out of 8 sampling events. Site KB-02 values were always higher than Site KB-01. It exceeded the geometric mean criterion and the instantaneous criterion on 7 out of 8 sampling events. The highest value for both sites occurred on 7/2/3013 after a significant storm event.

Site KB-03 exceeded the geometric mean criterion of 64 MPN/100 ml, and exceeded the instantaneous criterion of 236 MPN/100 ml two times. Site KB-03A, Site KB-04 and Site KB-05 exceeded the

geometric mean criterion and the instantaneous criterion on 1 out of 8 sampling events. The exceedance occurred on 7/2/2013 following a significant storm event.

Most of the bacteria samples were taken during baseflow conditions, but also included one significant storm event. Bacteria sampling over the season should include a mix of sampling during both dry and runoff conditions. The fact that all sites exceeded the geometric mean criterion (with or without the one storm event values included in the calculation) suggests that there may be sources that are not runoff related. This would include wildlife and/or human sources. However, overall bacteria was worse in 2013 which was an overall wetter summer and fall.

## **Discussion and Recommendations**

There are numerous sources of pollution and other stresses to the Kennebunk River sites monitored by the Mousam and Kennebunk Rivers Alliance that could potentially have an 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:

- The monitors should continue to include early morning measurements for dissolved oxygen. It is important to get some values early in the morning (before 8:00 am), particularly during the warmer summer months. Over a 24 hour period, the lowest readings occur in the early morning and highest readings in mid to late afternoon. This occurs because oxygen is used up during the night due to plant respiration and during the day, plant life is photosynthesizing.
- The VRMP, Healthy Beaches Program staff, DEP monitoring staff, Wells NERR staff and volunteers should continue to work on bacteria monitoring. Efforts should continue on tracking down potential sources. Healthy Beaches should perhaps continue with bacteria sampling at the sites below head of tide to provide some continuity there.
- Continue monitoring at all stations to develop a long term trend database.

Appendix A-1. 2013 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.

				**						**			Total		E Coli	Entero-
				Sample	*			**	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization Site Code	VRMP Site ID	Date	Time	Type Qualifier	Sample Depth	Depth Unit	Water Temp (DEG C)	D.O. Sat. (%)	D.O. (MG/L)	Cond. (US/CM)	Salinity (PPTH)	idity (NTU)	Solids (MG/L)	TSS	(MPN/ 100ML)	(MPN/ 100ML)
Site Code		Date	Time	Quaimer	Deptil	Unit	(DEG C)	Sdl. (%)			(PPIN)	(110)			TOOIVIL	TOOIVIL)
Kennebunk R	iver, Mousam & Kennebunk Rivers Allia	ance - Approv	ed Sites:													
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	6/18/2013	9:45 AM	N			17.5	86.9	8.3	70					130	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/2/2013	9:30 AM	N			19.6	94.1	8.6	50					>2420	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/16/2013	9:35 AM	N			22.5	104	8.8	70					201	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/30/2013	10:20 AM	N			19.7	85.5	7.9	86					186	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/13/2013	9:25 AM	Ν			18.3	84.9	8	90					187	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	Ν			19	85.6	7.9	100					93	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	D			19	85.3	7.9	110					104	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/10/2013	8:30 AM	Ν			14	82.5	8.6	100					108	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/24/2013	11:45 AM	Ν			12.7	104.1	11	70					178	
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	6/18/2013	7:35 AM	Ν			13.4	100	10.4		30					20
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/2/2013	7:50 AM	Ν			19.1	98.3	9.1		3					9208
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:25 AM	Ν												10
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:45 AM	Ν			19.7	127	11.6		26					
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/30/2013	8:20 AM	Ν			18.4	96.3	9.01		28					73
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	Ν			17.9	92.7	8.9		27					109
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	D			17.2	92.1	8.9							156
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:05 AM	Ν			16.8	98.5	9.5		32					
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:10 AM	Ν												10
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/10/2013	7:00 AM	Ν			15.7	88.5	8.8							41
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	Ν			13.8	97.4	10.1							75
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	L												74
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	6/18/2013	10:05 AM	Ν			17.7	96.6	9.26	60					111	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/2/2013	9:45 AM	Ν			19.1	105	9.8	40					>2420	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/16/2013	9:55 AM	Ν			21.8	118	10.3	70					67	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/30/2013	10:35 AM	Ν			19	96.3	8.95	70					88	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/13/2013	9:40 AM	Ν			17.8	94.6	9	80					49	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	Ν			19	94.5	8.6	90					153	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	D						110						
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/10/2013	8:50 AM	Ν			14.2	91	9.4	90					56	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/24/2013	12:05 PM	Ν			12.8	113.4	11.96	70					93	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	6/18/2013	8:20 AM	Ν			18.9	88.7	8.26		2					305
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/2/2013	8:15 AM	Ν			19.1	100.5	9.3							12997
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	Ν			24	105.1	8.8		2					504

				**						**			Total		E Coli	Entero-
				Sample	*			**	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization				Туре	Sample	Depth	Water Temp	D.O.	D.O.	Cond.	Salinity	idity	Solids	TSS	(MPN/	(MPN/
Site Code	VRMP Site ID	Date	Time	Qualifier	Depth	Unit	(DEG C)	Sat. (%)	(MG/L)	(US/CM)	(PPTH)	(NTU)	(MG/L)	(MG/L)	100ML)	100ML)
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	L												393
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	N			20.9	87.8	7.7		2					41
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	L												52
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	Ν			20.2	83.5	7.3		2					323
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	L												345
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	Ν			20.8	87.1	7.8		11					132
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	L												108
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	Ν			16.2	80.5	7.9							344
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	L												226
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/24/2013	10:35 AM	N			12.9	103.6	11							98
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	6/18/2013	9:00 AM	Ν			18.3	99.3	9.31	140					99	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/2/2013	8:55 AM	Ν			19.1	90.1	8.4	70					>2420	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/16/2013	8:45 AM	Ν			22.6	120	10.3	90					157	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/30/2013	9:35 AM	N			20.4	98	8.8	140					147	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	8/13/2013	8:50 AM	N			19	99.8	9.25	140					80	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	8/27/2013	9:20 AM	N			20.5	104	9.4	190					81	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/10/2013	7:45 AM	N			15.1	92.8	9.34	480					54	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	N			14.1	114.8	11.8	100					260	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	D			14.1	114.3	11.7	100						
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:05 AM	D											228	
KB-03A	WARD BROOK-SKEWD04-VRMP	6/18/2013	9:20 AM	N			18	91.4	8.7	100					106	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM	N			19.1	85.7	7.9	30					>2420	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM	D			19	85.5	7.9	30					>2420	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	N			23.2	107.5	9.4	100					81	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	D			22.3	107.2	9.2	100					85	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/30/2013	9:50 AM	N			19.6	92	8.5	110					73	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/13/2013	9:05 AM	N			17.9	91.7	8.7	100					104	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM	N											63	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM	L											60	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:40 AM	N			18.7	93.4	8.7	120						
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	N			13.5	87	9.1	100					49	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	L											57	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	N			12.6	109.5	11.6	80					37	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	L											25	

Appendix A-2. 2013 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

				** Sample			Air								
Organization Site Code	VRMP Site ID	Date	Time	Type Qualifier	Flow	Stage	Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Tide Stage	Water Appearance	Comments
	iver, Mousam & Kennebunk Rivers Alli	iance - Annro	wed Sites:									1			
Kennebunkt			veu sites.												
									LIGHT						
									RAIN,		CLEAR,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	6/18/2013	9:45 AM	N	BASE FLOW	MED	10.0	CULVERT	PARTLY	CALM	CLOUDY, SHOWERS	DUN		MEDIUM STAINED	NON-WADEABLE/3 FT BELOW SURFACE
KD-04		0/10/2013	J.45 AW		1000	IVILD	10.5	COLVENT	FOGGY,		CLOUDY,	NON		STAINED	
					STORMF				MOSTLY		HEAVY			MEDIUM	
KB-04	KENNEBUNK RIVER - SKE103 - VRMP	7/2/2013	9:30 AM	N	LOW	HIGH	20.2	CULVERT	CLOUDY	CALM	RAIN	RUN	-	STAINED	NON-WADEABLE/3 FT BELOW SURFACE
					BASE						CLEAR, PARTLY				
KB-04	KENNEBUNK RIVER - SKE103 - VRMP	7/16/2013	9:35 AM	N		MED	24	CULVERT	CLEAR	CALM	CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
											FOGGY,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/20/2012	10:20 AM	N	BASE FLOW	MED	10	CULVERT	PARTLY		MOSTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
KB-04	KLINIEDONK NIVER - SKEIOS - VNWF	7/30/2013	10.20 AIVI		FLOW	IVILD	10	COLVERT			CLEAR,	NIFFLL		CLLAN	
											MOSTLY				
											CLOUDY,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/13/2013	9:25 AM	N	BASE FLOW	MED	31 11	CULVERT		CALM	PARTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
		0/13/2013	5.25744			IVIED	51.11	COLVENT		CALINI				CLE/III	
											MOSTLY				
											CLOUDY, PARTLY				
					BASE						CLOUDY,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	N	FLOW	LOW	22	CULVERT		CALM	SHOWERS	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	D				CULVERT							NON-WADEABLE/MID-DEPTH
		0/2//2013	10.05744					COLVENT	MOSTLY						
									CLOUDY,		CLEAR,				
KD 04		0/10/2012	0.20 414	N	BASE		15 50	CULVEDT	PARTLY	CALMA	PARTLY			CLEAD	
KB-04	KENNEBUNK RIVER - SKE103 - VRMP	9/10/2013	8:30 AM	N	FLOW	INED	15.50	CULVERT	CLEAR,	CALM	CLOUDY CLEAR,	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
					BASE				PARTLY		PARTLY				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/24/2013	11:45 AM	N	FLOW	MED		CULVERT		BREEZE	CLOUDY	RUN		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
									LIGHT RAIN,		CLEAR,				
					BASE				PARTLY		CLOUDY,		HIGH		
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	6/18/2013	7:35 AM	N	FLOW	HIGH	18.9	BRIDGE	CLOUDY	CALM	SHOWERS	RUN		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
									FOCCY		HEAVY				
					STORMF				FOGGY, MOSTLY		RAIN, MOSTLY			MEDIUM	
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/2/2013	7:50 AM	N		HIGH	20.2	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE	HIGH	STAINED	NON-WADEABLE/3 FT BELOW SURFACE
KD 04		7/46/2015													
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	//16/2013	7:25 AM	N			<u> </u>				CLEAR,				
					BASE						PARTLY		HIGH		
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:45 AM	N	FLOW	MED	24	BRIDGE	CLEAR	CALM	CLOUDY	RIFFLE	EBB	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
					DACE				DADTLY		FOGGY,				
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/30/2013	8:20 AM	N	BASE FLOW	MED	18	BRIDGE	PARTLY CLOUDY		MOSTLY CLOUDY	RUN	HIGH	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
		.,,2010	1 0.207.00							1			1-2-0	· · ·	

				** Sample			Air								
Organization				Туре			Temp		Current	Air	Past 24HR		Tide	Water	
Site Code	VRMP Site ID	Date	Time	Qualifier	Flow	Stage	(°C)	Location	Weather	Condition	Weather CLEAR,	Habitat	Stage	Appearance	Comments
											MOSTLY				
											CLOUDY,				
					BASE				PARTLY		PARTLY				
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	N	FLOW	MED	31.11	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	D				BRIDGE							NON-WADEABLE/3 FT BELOW SURFACE
											MOSTLY				
											CLOUDY,				
					DACE						PARTLY				
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:05 AM	N	BASE FLOW	MED	22	BRIDGE		CALM	CLOUDY, SHOWERS	RUN	LOW EBB	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
		-, ,										-		-	
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:10 AM	Ν		L	L					ļ	ļ		
									MOSTLY		CLEAD				
					BASE				CLOUDY, PARTLY		CLEAR, PARTLY		LOW		
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/10/2013	7:00 AM	N	FLOW	LOW	15.56	BRIDGE	CLOUDY	CALM	CLOUDY	RUN		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
									CLEAR,		CLEAR,			-	
					BASE				PARTLY		PARTLY				
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	N	FLOW	LOW		BRIDGE	CLOUDY	BREEZE	CLOUDY	RIFFLE	LOW	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	L											
		5/24/2015	5.557111	-					LIGHT						
									RAIN,		CLEAR,				
					BASE				PARTLY		CLOUDY,			MEDIUM	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	6/18/2013	10:05 AM	N	FLOW	HIGH	18.9	WADING	CLOUDY FOGGY,	CALM	SHOWERS	RUN	EBB	STAINED	WADEABLE/1.5 FT BELOW SURFACE
					STORMF				MOSTLY		CLOUDY, HEAVY			MEDIUM	
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	7/2/2013	9:45 AM	N	LOW	HIGH	20.2	WADING		CALM	RAIN	RUN		STAINED	WADEABLE/MID-DEPTH
											CLEAR,				
		= (1 5 / 2 5 4 5			BASE						PARTLY				WADEABLE/1.5 FT BELOW SURFACE SAMPLE LOCATION FROM BANK AND NOT "CENTER
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/16/2013	9:55 AM	N	FLOW	MED	24	BANK	CLEAR		CLOUDY FOGGY,	RIFFLE		CLEAR	OF FLOW" - SHOULD BE BY WADING OR WITH EXTENSION POLE.
					BASE				PARTLY		MOSTLY				
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/30/2013	10:35 AM	Ν	FLOW	MED	18	WADING		CALM	CLOUDY	RIFFLE		CLEAR	WADEABLE/1.5 FT BELOW SURFACE
											CLEAR,				
											MOSTLY				
					BASE				PARTLY		CLOUDY, PARTLY				WADEABLE/1.5 FT BELOW SURFACE SAMPLE LOCATION FROM BANK AND NOT "CENTER
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/13/2013	9:40 AM	N	FLOW	HIGH	31.11	BANK	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	OF FLOW"- SHOULD BE BY WADING OR WITH EXTENSION POLE.
											MOSTLY				
											CLOUDY,				
					BASE						PARTLY CLOUDY,				
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	N	FLOW	LOW	22	WADING		CALM	SHOWERS	RIFFLE		CLEAR	WADEABLE/MID-DEPTH
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	D				WADING	MOSTIN						WADEABLE/MID-DEPTH
									MOSTLY CLOUDY,		CLEAR,				
					BASE				PARTLY		PARTLY				
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	9/10/2013	8:50 AM	N	1	HIGH	15.56	WADING		CALM	CLOUDY	RIFFLE		CLEAR	WADEABLE/1.5 FT BELOW SURFACE
									CLEAR,		CLEAR,				
100.05		0/04/004-	42.05.01		BASE				PARTLY	0055775	PARTLY	0.55.5		0.545	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/24/2013	12:05 PM	N	FLOW	HIGH		WADING	CLOUDY	BREEZE	CLOUDY	RIFFLE		CLEAR	WADEABLE/MID-DEPTH

				**											
Organization				Sample Type			Air Temp	Sample	Current	Air	Past 24HR		Tide	Water	
Site Code	VRMP Site ID	Date	Time	Qualifier	Flow	Stage		Location	Weather	Condition		Habitat		Appearance	Comments
									LIGHT RAIN,		CLEAR,				
					BASE				PARTLY		CLOUDY,		HIGH	MEDIUM	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	6/18/2013	8:20 AM	N	FLOW	HIGH	18.9	BRIDGE	CLOUDY	CALM	SHOWERS	RUN		STAINED	NON-WADEABLE/3 FT BELOW SURFACE
									FOGGY,		CLOUDY,				
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/2/2013	8:15 AM	N	STORMF LOW	нідн	20.2	BRIDGE	MOSTLY CLOUDY	CALM	HEAVY RAIN	RIFFLE		MEDIUM STAINED	NON-WADEABLE/3 FT BELOW SURFACE
		.,_,									CLEAR,				
					BASE						PARTLY			MEDIUM	
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	N	FLOW	MED	24	BRIDGE	CLEAR	CALM	CLOUDY	RIFFLE	EBB	STAINED	NON-WADEABLE/3 FT BELOW SURFACE
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	L											
											FOGGY,				
KR 02	KENNEBUNK RIVER - SKE35 - VRMP	7/20/2012	0.00 4 14	N	BASE FLOW	MED	10	PRIDCE	PARTLY	CALM	MOSTLY	DIFFIE		MEDIUM	
KB-02	KENNEBUNK RIVER - SKE35 - VRIVIP	7/30/2013	9:00 AM	N	FLOW	IVIED	18	BRIDGE	CLOUDY		CLOUDY	RIFFLE	EBB	STAINED	NON-WADEABLE/3 FT BELOW SURFACE
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	L											
											CLEAR,				
											MOSTLY CLOUDY,				
					BASE				PARTLY		PARTLY				
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	N	FLOW	MED	31.11	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM												
KD-02		0/15/2015	0.10 AW												
											MOSTLY				
											CLOUDY, PARTLY				
					BASE						CLOUDY,		LOW		
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	N	FLOW	LOW	22	BRIDGE		CALM	SHOWERS	RUN	EBB	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
KD 03		0/27/2012	0.25 414												
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	L					MOSTLY						
									CLOUDY,		CLEAR,				
					BASE				PARTLY		PARTLY		LOW		
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	N	FLOW	HIGH	15.56	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE	FBR	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
кв-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	L											
									CLEAR,		CLEAR,				
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	9/24/2013	10.25 AM	N	BASE FLOW	LOW		BRIDGE	PARTLY CLOUDY	BREEZE	PARTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
10-02	NEWNEDOWN NIVEN - SKESS - VNIVIP	5/24/2015	10.33 AIVI	IN	1.000	1000		DIGE	LIGHT	DILLEL		NI FLE	1000	SELAN	
									RAIN,		CLEAR,				
WB 00		c/10/2010			BASE				PARTLY		CLOUDY,	CASCA		MEDIUM	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	6/18/2013	9:00 AM	N	FLOW	HIGH	18.9	WADING	CLOUDY FOGGY,	CALM	SHOWERS CLOUDY,	DE	EBB	STAINED	WADEABLE/1.5 FT BELOW SURFACE
					STORMF				MOSTLY		HEAVY	CASCA		MEDIUM	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	7/2/2013	8:55 AM	N	LOW	HIGH	20.2	WADING	CLOUDY	CALM	RAIN	DE		STAINED	WADEABLE/MID-DEPTH
					BASE						CLEAR, PARTLY	CASCA			WADEABLE/1.5 FT BELOW SURFACE SAMPLING LOCATION FROM BANK AND NOT
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	7/16/2013	8:45 AM	N	FLOW	MED	24	BANK	CLEAR	CALM	CLOUDY	DE		CLEAR	"CENTER OF FLOW"- SHOULD BE BY WADING OR WITH EXTENSION POLE.
		,									FOGGY,				
KD 02		7/20/2017	0.05.00		BASE				PARTLY		MOSTLY	DIFFIC	HIGH	CLEAR	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/30/2013	9:35 AM	N	FLOW	HIGH	18	WADING	CLOUDY	CALM	CLOUDY	RIFFLE	EBB	CLEAR	WADEABLE/MID-DEPTH

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		Tide	Water Appearance	Comments
				quanner		otage					CLEAR, MOSTLY CLOUDY,		otage	Tippediance	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	8/13/2013	8:50 AM	N	BASE FLOW	MED	31.11	BANK	PARTLY CLOUDY		PARTLY CLOUDY	CASCA DE		CLEAR	WADEABLE/MID-DEPTH SAMPLE LOCATION FROM BANK AND NOT "CENTER OF FLOW". PREVIOUSLY SAMPLED BY WADING.
					BASE						MOSTLY CLOUDY, PARTLY CLOUDY,	CASCA			
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	8/27/2013	9:20 AM	N	FLOW	MED	22	WADING	MOSTLY CLOUDY,	CALM	SHOWERS CLEAR,			CLEAR	WADEABLE/MID-DEPTH
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/10/2013	7:45 AM	N	BASE FLOW	нібн	15.56	WADING	PARTLY CLOUDY	CALM	PARTLY CLOUDY	CASCA DE		CLEAR	WADEABLE/MID-DEPTH
					BASE				CLEAR, PARTLY	-	CLEAR, PARTLY	CASCA		-	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	N	FLOW	MED		WADING	CLOUDY	BREEZE	CLOUDY	DE		CLEAR	WADEABLE/MID-DEPTH
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	D	ļ			WADING							WADEABLE/MID-DEPTH
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:05 AM	D											
					BASE				LIGHT RAIN, PARTLY		CLEAR, CLOUDY,		нісн	MEDIUM	
KB-03A	WARD BROOK-SKEWD04-VRMP	6/18/2013	9:20 AM	N		MED	18.9	BRIDGE	CLOUDY		SHOWERS	RUN		STAINED	NON-WADEABLE/MID-DEPTH
					STORMF	1			FOGGY, MOSTLY		CLOUDY, HEAVY			MEDIUM	
KB-03A KB-03A	WARD BROOK-SKEWD04-VRMP WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM 9:05 AM	N D	LOW	HIGH	20.2	BRIDGE	CLOUDY	CALM	RAIN	RUN		STAINED	NON-WADEABLE/3 FT BELOW SURFACE NON-WADEABLE/3 FT BELOW SURFACE
					BASE						CLEAR, PARTLY				
KB-03A	WARD BROOK-SKEWD04-VRMP	7/16/2013			FLOW	MED	24	BRIDGE	CLEAR		CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
КВ-03А	WARD BROOK-SKEWD04-VRMP	7/16/2013			BASE FLOW	LOW	18	BRIDGE	PARTLY	CALM	FOGGY, MOSTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
KB-03A	WARD BROOK-SKEWD04-VRMP	8/13/2013			BASE			BRIDGE	PARTLY		CLEAR, MOSTLY CLOUDY, PARTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
KB-03A	WARD BROOK-SKEWD04-VRMP	8/13/2013	9:20 AM		FLOW	IVIED	51.11	BRIDGE	CLOUDT		CLOODT	NIFFLE		CLEAR	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM	L											
					BASE						MOSTLY CLOUDY, PARTLY CLOUDY,				
КВ-03А	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:40 AM	N	FLOW	LOW	22	BRIDGE	MOSTLY CLOUDY, PARTLY	CALM	SHOWERS CLEAR, PARTLY	KIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	N	FLOW	HIGH	15.56	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013									CLEAD				
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	N	BASE FLOW	MED		BRIDGE	CLEAR, PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY	RIFFLE		CLEAR	NON-WADEABLE/MID-DEPTH

				**											
				Sample			Air								
Organization				Туре			Temp	Sample	Current	Air	Past 24HR		Tide	Water	
Site Code	VRMP Site ID	Date	Time	Qualifier	Flow	Stage	(°C)	Location	Weather	Condition	Weather	Habitat	Stage	Appearance	Comments
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	L											

Appendix A-1. 2013 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.

				**						**			Total		E Coli	Entero-
				Sample	*			**	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization Site Code	VRMP Site ID	Date	Time	Type Qualifier	Sample Depth	Depth Unit	Water Temp (DEG C)	D.O. Sat. (%)	D.O. (MG/L)	Cond. (US/CM)	Salinity (PPTH)	idity (NTU)	Solids (MG/L)	TSS	(MPN/ 100ML)	(MPN/ 100ML)
Site Code		Date	Time	Quaimer	Deptil	Unit		Sat. (%)		(03/CIVI)	(PPIN)	(110)			TOOIVIL	TOOIVIL)
Kennebunk R	iver, Mousam & Kennebunk Rivers Allia	ance - Approv	ed Sites:													
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	6/18/2013	9:45 AM	Ν			17.5	86.9	8.3	70					130	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/2/2013	9:30 AM	N			19.6	94.1	8.6	50					>2420	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/16/2013	9:35 AM	N			22.5	104	8.8	70					201	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/30/2013	10:20 AM	N			19.7	85.5	7.9	86					186	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/13/2013	9:25 AM	Ν			18.3	84.9	8	90					187	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	Ν			19	85.6	7.9	100					93	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	D			19	85.3	7.9	110					104	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/10/2013	8:30 AM	Ν			14	82.5	8.6	100					108	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/24/2013	11:45 AM	Ν			12.7	104.1	11	70					178	
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	6/18/2013	7:35 AM	Ν			13.4	100	10.4		30					20
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/2/2013	7:50 AM	Ν			19.1	98.3	9.1		3					9208
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:25 AM	Ν												10
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:45 AM	Ν			19.7	127	11.6		26					
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/30/2013	8:20 AM	Ν			18.4	96.3	9.01		28					73
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	Ν			17.9	92.7	8.9		27					109
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	D			17.2	92.1	8.9							156
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:05 AM	Ν			16.8	98.5	9.5		32					
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:10 AM	Ν												10
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/10/2013	7:00 AM	Ν			15.7	88.5	8.8							41
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	Ν			13.8	97.4	10.1							75
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	L												74
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	6/18/2013	10:05 AM	Ν			17.7	96.6	9.26	60					111	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/2/2013	9:45 AM	Ν			19.1	105	9.8	40					>2420	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/16/2013	9:55 AM	Ν			21.8	118	10.3	70					67	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/30/2013	10:35 AM	Ν			19	96.3	8.95	70					88	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/13/2013	9:40 AM	Ν			17.8	94.6	9	80					49	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	Ν			19	94.5	8.6	90					153	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	D						110						
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/10/2013	8:50 AM	Ν			14.2	91	9.4	90					56	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/24/2013	12:05 PM	Ν			12.8	113.4	11.96	70					93	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	6/18/2013	8:20 AM	Ν			18.9	88.7	8.26		2					305
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/2/2013	8:15 AM	Ν			19.1	100.5	9.3							12997
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	Ν			24	105.1	8.8		2					504

				**						**			Total		E Coli	Entero-
				Sample	*			**	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization				Туре	Sample	Depth	Water Temp	D.O.	D.O.	Cond.	Salinity	idity	Solids	TSS	(MPN/	(MPN/
Site Code	VRMP Site ID	Date	Time	Qualifier	Depth	Unit	(DEG C)	Sat. (%)	(MG/L)	(US/CM)	(PPTH)	(NTU)	(MG/L)	(MG/L)	100ML)	100ML)
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	L												393
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	N			20.9	87.8	7.7		2					41
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	L												52
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	Ν			20.2	83.5	7.3		2					323
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	L												345
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	Ν			20.8	87.1	7.8		11					132
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	L												108
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	Ν			16.2	80.5	7.9							344
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	L												226
KB-02	KENNEBUNK RIVER - SKE35 - VRMP	9/24/2013	10:35 AM	Ν			12.9	103.6	11							98
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	6/18/2013	9:00 AM	Ν			18.3	99.3	9.31	140					99	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/2/2013	8:55 AM	Ν			19.1	90.1	8.4	70					>2420	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/16/2013	8:45 AM	Ν			22.6	120	10.3	90					157	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	7/30/2013	9:35 AM	Ν			20.4	98	8.8	140					147	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	8/13/2013	8:50 AM	Ν			19	99.8	9.25	140					80	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	8/27/2013	9:20 AM	N			20.5	104	9.4	190					81	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/10/2013	7:45 AM	N			15.1	92.8	9.34	480					54	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	N			14.1	114.8	11.8	100					260	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	D			14.1	114.3	11.7	100						
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:05 AM	D											228	
KB-03A	WARD BROOK-SKEWD04-VRMP	6/18/2013	9:20 AM	N			18	91.4	8.7	100					106	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM	N			19.1	85.7	7.9	30					>2420	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM	D			19	85.5	7.9	30					>2420	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	N			23.2	107.5	9.4	100					81	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	D			22.3	107.2	9.2	100					85	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/30/2013	9:50 AM	N			19.6	92	8.5	110					73	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/13/2013	9:05 AM	N			17.9	91.7	8.7	100					104	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM	N											63	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM	L											60	
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:40 AM	N			18.7	93.4	8.7	120						
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	N			13.5	87	9.1	100					49	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	L		İ		İ					ĺ	İ	57	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	N		İ	12.6	109.5	11.6	80			ĺ	İ	37	
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	L											25	

# Appendix A-2. 2013 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	Tide Stage	Water Appearance	
Konnohunk	River, Mousam & Kennebunk Rivers A	llianco Annr	oved Sites												
Kennebunk R	River, Mousam & Kennebunk Rivers A	lliance - Appr	oved Sites:												
									LIGHT						
									RAIN,		CLEAR,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	6/18/2013	9:45 AM	N	BASE FLOW	MED	10 0	CULVERT	PARTLY CLOUDY	CALM	CLOUDY, SHOWERS			MEDIUM STAINED	NON-\
ND-04	KENNEDUNK RIVER - SKETUS - VRIVIP	0/10/2015	9.45 AIVI		FLOW		10.9	COLVERT	FOGGY,		CLOUDY,	KUN			
					STORM				MOSTLY		HEAVY			MEDIUM	
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/2/2013	9:30 AM	N	FLOW	HIGH	20.2	CULVERT	CLOUDY	CALM	RAIN	RUN		STAINED	NON-\
					BASE						CLEAR, PARTLY				
KB-04	KENNEBUNK RIVER - SKE103 - VRMP	7/16/2013	9:35 AM	N	FLOW	MED	24	CULVERT	CLEAR	CALM	CLOUDY	RIFFLE		CLEAR	NON-\
											FOGGY,				
					BASE				PARTLY		MOSTLY				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	7/30/2013	10:20 AM	N	FLOW	MED	18	CULVERT	CLOUDY		CLOUDY CLEAR,	RIFFLE		CLEAR	NON-\
											MOSTLY				
											CLOUDY,				
		0/10/2012	0.05.444		BASE		24.4		PARTLY		PARTLY				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/13/2013	9:25 AM	N	FLOW	MED	31.1	CULVERT	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-\
											MOSTLY				
											CLOUDY,				
					DACE						PARTLY				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	N	BASE FLOW	LOW	22	CULVERT		CALM	CLOUDY, SHOWERS	RIFFLF		CLEAR	NON-V
KB-04	KENNEBUNK RIVER - SKE103 - VRMP	8/27/2013	10:05 AM	D				CULVERT							NON-V
									MOSTLY CLOUDY,		CLEAR,				
					BASE				PARTLY		PARTLY				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/10/2013	8:30 AM	N	FLOW	MED	15.6	CULVERT	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-V
					DAGE				CLEAR,		CLEAR,				
КВ-04	KENNEBUNK RIVER - SKE103 - VRMP	9/24/2013	11·45 AM	N	BASE FLOW	MED		CULVERT	PARTLY CLOUDY	BREEZE	PARTLY CLOUDY	RUN		CLEAR	NON-V
		5, 24, 2015						COLVENT	LIGHT		520001				
									RAIN,		CLEAR,				
		C /10 /2012	7.25 414		BASE		10.0		PARTLY	CALNA	CLOUDY,		HIGH	CLEAD	
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	6/18/2013	7:35 AM	N	FLOW	HIGH	18.9	BRIDGE	CLOUDY	CALM	SHOWERS HEAVY	RUN	EBB	CLEAR	NON-V
									FOGGY,		RAIN,				
					STORM				MOSTLY		MOSTLY			MEDIUM	
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	7/2/2013	7:50 AM	N	FLOW	HIGH	20.2	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE	HIGH	STAINED	NON-V
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:25 AM	N											
		,,									CLEAR,				
					BASE						PARTLY		HIGH		
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	7/16/2013	7:45 AM	N	FLOW	MED	24	BRIDGE	CLEAR	CALM	CLOUDY	RIFFLE	EBB	CLEAR	NON-V
					BASE				PARTLY		FOGGY, MOSTLY		HIGH		
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	7/30/2013	8:20 AM	N	FLOW	MED	18	BRIDGE	CLOUDY			RUN		CLEAR	NON-V

Comments
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/MID-DEPTH
WADEABLE/MID-DEPTH
WADEABLE/MID-DEPTH
WADEABLE/MID-DEPTH
WADEABLE/MID-DEPTH
WADEABLE/3 FT BELOW SURFACE
WADEABLE/S FT BELOW SORFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE

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	Tide Stage	Water Appearance	
											CLEAR,				
											MOSTLY CLOUDY,				
					BASE				PARTLY		PARTLY				
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	N	FLOW	MED	31.1	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	NON-W
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/13/2013	7:45 AM	D				BRIDGE							NON-W
											MOSTLY CLOUDY,				
											PARTLY				
					BASE						CLOUDY,		LOW		
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:05 AM	N	FLOW	MED	22	BRIDGE		CALM	SHOWERS	RUN	EBB	CLEAR	NON-W
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	8/27/2013	8:10 AM	N											
									MOSTLY						
					DACE				CLOUDY, PARTLY		CLEAR, PARTLY		LOW		
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/10/2013	7:00 AM	N	BASE FLOW	LOW	15.6	BRIDGE	CLOUDY	CALM	CLOUDY	RUN	EBB	CLEAR	NON-WA
									CLEAR,		CLEAR,				
					BASE				PARTLY		PARTLY				
КВ-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	N	FLOW	LOW		BRIDGE	CLOUDY	BREEZE	CLOUDY	RIFFLE	LOW	CLEAR	NON-WA
KB-01	KENNEBUNK RIVER - SKE11 - VRMP	9/24/2013	9:55 AM	L											
									LIGHT						
					DACE				RAIN,		CLEAR,				
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	6/18/2013	10:05 AM	N	BASE FLOW	HIGH	18.9	WADING	PARTLY CLOUDY	CALM	CLOUDY, SHOWERS	RUN		MEDIUM STAINED	WADEA
									FOGGY,		CLOUDY,				
		_ /= /=			STORM				MOSTLY		HEAVY			MEDIUM	
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/2/2013	9:45 AM	N	FLOW	HIGH	20.2	WADING	CLOUDY	CALM	RAIN CLEAR,	RUN		STAINED	WADEA
					BASE						PARTLY				WADEAE
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	7/16/2013	9:55 AM	N	FLOW	MED	24	BANK	CLEAR		CLOUDY	RIFFLE		CLEAR	"CENTER
					DACE				DADTIV		FOGGY,				
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	7/30/2013	10:35 AM	N	BASE FLOW	MED	18	WADING	PARTLY CLOUDY	CALM	MOSTLY CLOUDY	RIFFLE		CLEAR	WADEAE
											CLEAR,				
											MOSTLY				
					BASE				PARTLY		CLOUDY, PARTLY				WADEAE
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/13/2013	9:40 AM	N	FLOW	HIGH	31.1	BANK	CLOUDY	CALM	CLOUDY	RIFFLE		CLEAR	CENTER
											MOSTLY				
											CLOUDY, PARTLY				
					BASE						CLOUDY,				
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	N	FLOW	LOW	22	WADING		CALM	SHOWERS	RIFFLE		CLEAR	WADEAE
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	8/27/2013	10:25 AM	D				WADING							WADEAE
		, ,=====							MOSTLY						
									CLOUDY,		CLEAR,				
КВ-05	KENNEBUNK RIVER - SKE148 - VRMP	9/10/2013	8:50 AM	N	BASE FLOW	HIGH	15.6	WADING	PARTLY	CALM	PARTLY CLOUDY	RIFFLE		CLEAR	WADEAE
	NEITHEBOTHK HIVEN - SKET40 - VHIVIP	5/ 10/ 2013	0.50 AIVI	I V		non	15.0		CLEAR,		CLEAR,				
					BASE				PARTLY		PARTLY				
KB-05	KENNEBUNK RIVER - SKE148 - VRMP	9/24/2013	12:05 PM	N	FLOW	HIGH		WADING	CLOUDY	BREEZE	CLOUDY	RIFFLE		CLEAR	WADEAE

Comments
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
WADEABLE/3 FT BELOW SURFACE
ABLE/1.5 FT BELOW SURFACE
ABLE/MID-DEPTH
EABLE/1.5 FT BELOW SURFACE SAMPLE LOCATION FROM BANK AND NOT FER OF FLOW" - SHOULD BE BY WADING OR WITH EXTENSION POLE.
ABLE/1.5 FT BELOW SURFACE
ABLE/1.5 FT BELOW SURFACE SAMPLE LOCATION FROM BANK AND NOT FER OF FLOW"- SHOULD BE BY WADING OR WITH EXTENSION POLE.
ABLE/MID-DEPTH
ABLE/MID-DEPTH
EABLE/1.5 FT BELOW SURFACE
ABLE/MID-DEPTH

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	Tide Stage	Water Appearance	
									LIGHT RAIN,		CLEAR,				
					BASE				PARTLY		CLOUDY,		HIGH	MEDIUM	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	6/18/2013	8:20 AM	N	FLOW	HIGH	18.9	BRIDGE	CLOUDY	CALM	SHOWERS	RUN	EBB	STAINED	NON-WA
					STORM				FOGGY, MOSTLY		CLOUDY, HEAVY		нісн	MEDIUM	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/2/2013	8:15 AM	N	FLOW	HIGH	20.2	BRIDGE	CLOUDY	CALM	RAIN	RIFFLE	EBB	STAINED	NON-W
											CLEAR,				
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	N	BASE FLOW	MED	24	BRIDGE	CLEAR	CALM	PARTLY CLOUDY	RIFFLE	EBB	MEDIUM STAINED	NON-WA
		., 10, 2010													
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/16/2013	8:05 AM	L							FOCOV				
					BASE				PARTLY		FOGGY, MOSTLY		нідн	MEDIUM	
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	N	FLOW	MED	18	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE	EBB	STAINED	NON-WA
KD 02		7/20/2012													
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	7/30/2013	9:00 AM	L							CLEAR,				
											MOSTLY				
					DACE				DADTIX		CLOUDY,				
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	N	BASE FLOW	MED	31.1	BRIDGE	PARTLY CLOUDY	CALM	PARTLY CLOUDY	RIFFLE		CLEAR	NON-WA
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/13/2013	8:10 AM	L											
											MOSTLY				
											CLOUDY,				
					BASE						PARTLY CLOUDY,		LOW		
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	N	FLOW	LOW	22	BRIDGE		CALM	SHOWERS	RUN	EBB	CLEAR	NON-WA
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	8/27/2013	8:35 AM	L					MOSTLY						
									CLOUDY,		CLEAR,				
					BASE				PARTLY		PARTLY		LOW		
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	N	FLOW	HIGH	15.6	BRIDGE	CLOUDY	CALM	CLOUDY	RIFFLE	EBB	CLEAR	NON-WA
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	9/10/2013	7:20 AM	L											
									CLEAR,		CLEAR,				
КВ-02	KENNEBUNK RIVER - SKE35 - VRMP	9/24/2013	10:35 AM	N	BASE FLOW	LOW		BRIDGE	PARTLY CLOUDY	BREEZE	PARTLY CLOUDY	RIFFLE	LOW	CLEAR	NON-WA
		572172015	10100 / 111					DINDUL	LIGHT						
					DAGE				RAIN,		CLEAR,	CASCA.			
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	6/18/2013	9:00 AM	N	BASE FLOW	HIGH	18.9	WADING	PARTLY CLOUDY	CALM	CLOUDY, SHOWERS	CASCA DE	EBB	MEDIUM STAINED	WADEAB
									FOGGY,		CLOUDY,				
KD 02		7/2/2012	0.55 444	N	STORM		20.2		MOSTLY	CALNA	HEAVY	CASCA		MEDIUM	
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	7/2/2013	8:55 AM	N	FLOW	HIGH	20.2	WADING	CLOUDY	CALM	RAIN CLEAR,	DE		STAINED	WADEAB
					BASE						PARTLY	CASCA			WADEAB
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	7/16/2013	8:45 AM	N	FLOW	MED	24	BANK	CLEAR	CALM	CLOUDY	DE		CLEAR	"CENTER
					BASE				PARTLY		FOGGY, MOSTLY		HIGH		
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	7/30/2013	9:35 AM	N	FLOW	HIGH	18	WADING	CLOUDY	CALM	CLOUDY	RIFFLE	EBB	CLEAR	WADEAB
											CLEAR,				
											MOSTLY CLOUDY,				
					BASE				PARTLY		PARTLY	CASCA			WADEAB
KB-03	KENNEBUNK RIVER - SKE66 - VRMP	8/13/2013	8:50 AM	N	FLOW	MED	31.1	BANK	CLOUDY		CLOUDY	DE		CLEAR	FLOW".

Comments
N-WADEABLE/3 FT BELOW SURFACE
N-WADEABLE/3 FT BELOW SURFACE
N-WADEABLE/3 FT BELOW SURFACE
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N-WADEABLE/3 FT BELOW SURFACE
N-WADEABLE/3 FT BELOW SURFACE
N-WADEABLE/3 FT BELOW SURFACE
DEABLE/1.5 FT BELOW SURFACE
DEABLE/MID-DEPTH
DEABLE/1.5 FT BELOW SURFACE SAMPLING LOCATION FROM BANK AND NOT NTER OF FLOW"- SHOULD BE BY WADING OR WITH EXTENSION POLE.
DEABLE/MID-DEPTH
DEABLE/MID-DEPTH SAMPLE LOCATION FROM BANK AND NOT "CENTER OF DW". PREVIOUSLY SAMPLED BY WADING.

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	Tide Stage	Water Appearance	
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	8/27/2013	9:20 AM	N	BASE FLOW	MED	22	WADING		CALM	MOSTLY CLOUDY, PARTLY CLOUDY, SHOWERS	CASCA DE		CLEAR	WADE
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/10/2013	7:45 AM	N	BASE FLOW	HIGH	15.6	WADING	MOSTLY CLOUDY, PARTLY CLOUDY	CALM	CLEAR, PARTLY CLOUDY	CASCA DE		CLEAR	WADE
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	N	BASE FLOW	MED		WADING	CLEAR, PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY	CASCA DE		CLEAR	WADE
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:00 AM	D				WADING							WADE
КВ-03	KENNEBUNK RIVER - SKE66 - VRMP	9/24/2013	11:05 AM	D											
КВ-03А	WARD BROOK-SKEWD04-VRMP	6/18/2013			BASE FLOW	MED	18.9	BRIDGE	LIGHT RAIN, PARTLY CLOUDY		CLEAR, CLOUDY, SHOWERS	RUN	HIGH EBB	MEDIUM STAINED	NON-V
					STORM				FOGGY, MOSTLY		CLOUDY, HEAVY			MEDIUM	
KB-03A	WARD BROOK-SKEWD04-VRMP	7/2/2013			FLOW	HIGH	20.2	BRIDGE	CLOUDY	CALM	RAIN	RUN		STAINED	NON-\
КВ-03А	WARD BROOK-SKEWD04-VRMP	7/2/2013	9:05 AM	D				BRIDGE							NON-\
КВ-03А	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	N	BASE FLOW	MED	24	BRIDGE	CLEAR		CLEAR, PARTLY CLOUDY	RIFFLE		CLEAR	NON-V
КВ-03А	WARD BROOK-SKEWD04-VRMP	7/16/2013	9:05 AM	D				BRIDGE							NON-\
КВ-03А	WARD BROOK-SKEWD04-VRMP	7/30/2013	9:50 AM	N	BASE FLOW	LOW	18	BRIDGE	PARTLY CLOUDY	CALM	FOGGY, MOSTLY CLOUDY	RIFFLE		CLEAR	NON-\
КВ-03А	WARD BROOK-SKEWD04-VRMP	8/13/2013			BASE FLOW	MED	31.1	BRIDGE	PARTLY CLOUDY		CLEAR, MOSTLY CLOUDY, PARTLY CLOUDY	RIFFLE		CLEAR	NON-V
KB-03A	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM												<u> </u>
КВ-03А	WARD BROOK-SKEWD04-VRMP	8/27/2013	9:20 AM 9:40 AM		BASE FLOW	LOW	22	BRIDGE		CALM	MOSTLY CLOUDY, PARTLY CLOUDY, SHOWERS	RIFFLE		CLEAR	NON-V
КВ-03А	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM	N	BASE FLOW	HIGH	15.6	BRIDGE	MOSTLY CLOUDY, PARTLY CLOUDY	CALM	CLEAR, PARTLY CLOUDY	RIFFLE		CLEAR	NON-V
KB-03A	WARD BROOK-SKEWD04-VRMP	9/10/2013	8:05 AM												
КВ-03А	WARD BROOK-SKEWD04-VRMP	9/24/2013	11:20 AM	N	BASE FLOW	MED		BRIDGE	CLEAR, PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY	RIFFLE		CLEAR	NON-V
KB-03A	WARD BROOK-SKEWD04-VRMP	9/24/2013			1					1					

Comments
EABLE/MID-DEPTH
EABLE/MID-DEPTH
EABLE/MID-DEPTH
EABLE/MID-DEPTH
WADEABLE/MID-DEPTH
WADEABLE/3 FT BELOW SURFACE
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WADEABLE/MID-DEPTH WADEABLE/MID-DEPTH
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