

Section 5-1 Androscoggin River (Friends of Merrymeeting Bay)

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

Overview

The lower Androscoggin River is monitored by the Friends of Merrymeeting Bay (FOMB). Friends of Merrymeeting Bay has been in existence since 1975 and focuses on protecting the Merrymeeting Bay watershed through research, education, advocacy and land conservation. They have been monitoring the lower part of the Androscoggin River, tributaries to Merrymeeting Bay and the Bay since 1999. During this time their monitoring has extended up the Androscoggin at times (depending on volunteers) to Livermore Falls. They joined the VRMP in 2009 with an interest in bringing about water classification upgrades when possible. The Androscoggin River is the third largest river in the state. It has a length of 177 miles and drainage area of 3,450 square miles (2,730 miles in Maine).¹ The headwaters are Umbagog Lake in New Hampshire. From there it flows into New Hampshire and then back into Maine through the towns of Gilead and Bethel. It continues flowing through the towns and cities of Bethel, Rumford, Mexico, Dixfield, Jay, Livermore Falls, Lewiston, Auburn, Lisbon, Lisbon Falls, Durham, Brunswick and Topsham where it joins the Kennebec River at Merrymeeting Bay.

The Androscoggin River is assigned Class B from the Maine/New Hampshire boundary to its confluence with the Ellis River. It is assigned Class C from the confluence with the Ellis River to Merrymeeting Bay. The “DEP 2010 [pending approval] Integrated Water Quality Monitoring and Assessment Report” lists segments of the main stem in 3 categories:

- The main stem, upstream of Gulf Island Pond is listed in Category 4-A (Rivers and Streams with Impaired Use, TMDL completed). Causes of impairment are phosphorus, dissolved oxygen, total suspended solids, biological oxygen demand, and algal blooms. Also Category 4-A is Lewiston-Auburn variable mileage, CSO affected. Cause of impairment is E.Coli.
- A number of segments are listed in Category 4-B (Rivers and Streams Impaired by Pollutants-Pollution Control Requirements Expected to Result in Attainment). The cause of non-attainment is dioxin.
- A number of segments are listed in Category 5-D (Rivers and Streams Impaired by Legacy Pollutants). The cause of non-attainment is Polychlorinated biphenyls (PCBs).

The Androscoggin River has a long history of industrial and municipal use over the last 200 years.¹ Beginning in the early 1800s, many dams were constructed for mills in primarily the lower part of the river. By the late 1800s, many textile and lumber mills were in operation from primarily Lewiston to Brunswick. Pulp and paper mills that are still in operation today were established in the late 1800s in New Hampshire, Rumford and Jay. Beginning in the late 1920s, Central Maine Power built hydroelectric dams that impounded much of the river from Lewiston

¹ Maine Rivers Website- Androscoggin River Profile

to Livermore Falls. Some of these uses continue today. “Along its course to the sea, the river is repeatedly dammed. It receives discharges from industrial and municipal sources, as well as polluted runoff from a variety of sources.”² Specific problems include mill discharges, combined sewer overflows (CSOs), dam impacts (28 dams exist) and historical sediment toxics.

The primary purpose of monitoring performed by FOMB done under the Volunteer River Monitoring Program is to acquire data that will facilitate the water quality classification upgrade of the lower portion of the Androscoggin River. FOMB currently monitors at numerous sites from Merrymeeting Bay upstream to Lewiston. FOMB will continue to gather data from sample stations and through methods not accepted by DEP and for a subset of stations acceptable to DEP. For 2010, three stations met VRMP requirements for sample location and methods. Due to interest in classification upgrade, these stations also met requirements for VRMP “Tier 1” data. Tier 1 has higher level requirements for vertical sampling depth and dissolved oxygen equipment checks. This report provides the data and analysis for the three approved Tier 1 sites. Five additional sites are reported here also. For these sites, both the monitor and equipment were certified by VRMP in 2010. These additional five sites however do not meet the requirements for being approved sites and some methods may not be approved.

Methods

The volunteers monitored the Androscoggin River in 2010 at three Tier 1 approved stations [BBB, WSM, BCM] and five non-approved stations [DBL, BIL, FBD, FPU, PBL] on the main stem. Table 1 provides a list of the sites and Figures 1A-1C are maps of sampling site locations.

Table 1: Sampling Sites

VRMP Site ID	Organization Site Code	Sample Location	Class
Androscoggin River-A231-VRMP	BBB	Bay Bridge Jetty	C
Androscoggin River-A281-VRMP	WSM	Water Street Mooring	C
Androscoggin River-A299-VRMP	BCM	Brunswick Canoe Mooring	C
Androscoggin River-A158-FOMB	DBL	Durham Boat Launch	C
Androscoggin River- A24-FOMB	BIL	Brunswick Interstate Ledges	C
Androscoggin River-A45-FOMB	FBD	Fish Park Down	C
Androscoggin River-A47-FOMB	FPU	Fish Park Up	C
Androscoggin River-A71-FOMB	PBL	Pejepscot Boat Launch	C

² Androscoggin River Alliance Website-Androscoggin River slideshow

Figure 1A: Map of All Sampling Sites

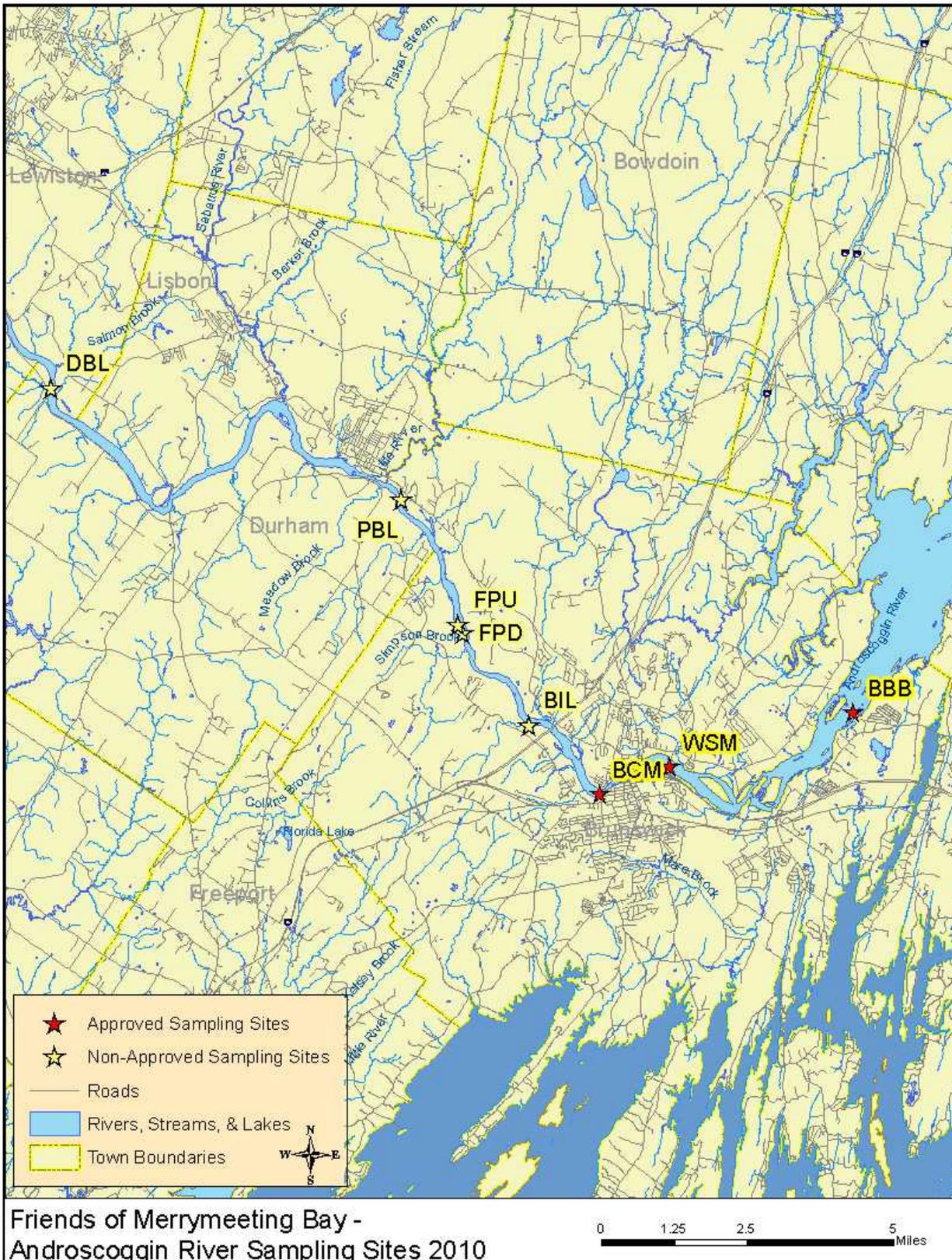
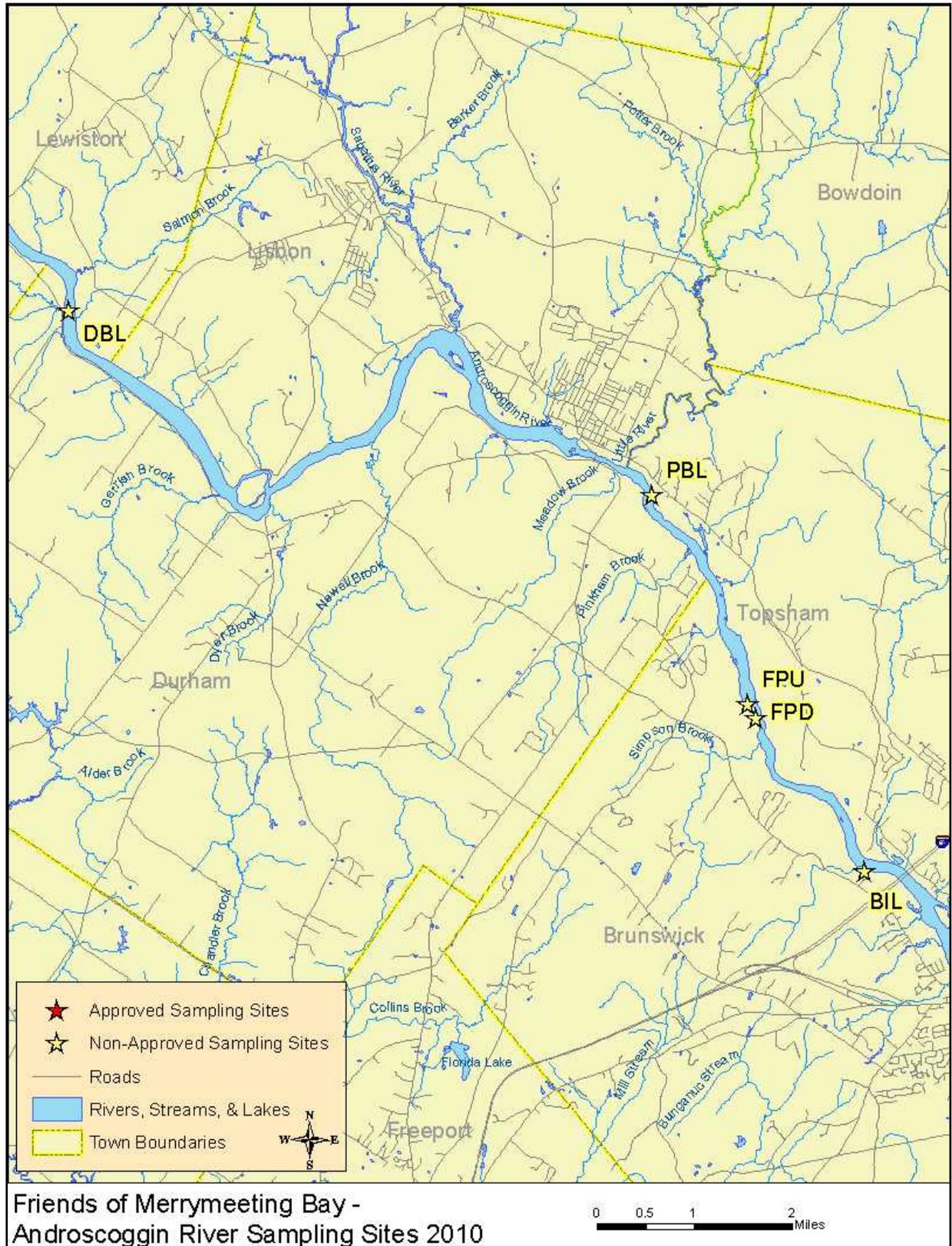


Figure 1B: Map of Approved Sampling Sites



Figure 1C: Map of Non-Approved Sampling Sites



Monitoring was conducted from May through September once per month. At each site, the monitors made direct measurements of water temperature, dissolved oxygen, and specific conductance using a handheld YSI 85 meter. Samples were also collected for E. Coli bacteria. The approved sites used a DEP designed bacteria sampling device (which uses sterile whirl-paks for water collection). Bacteria samples were delivered to Bowdoin College for analysis by FOMB volunteers.

The approved sites met VRMP requirements for sampling laterally and vertically in the river to obtain well-mixed representative samples. Two of the sites were sampled from a boat attached to a mooring and one site from a jetty allowing for representative, well-mixed areas of the river to be monitored. Tier 1 requirements also require that rivers/streams that are ≥ 3 meters in depth sample at 1 meter increments to obtain vertical profiles for dissolved oxygen and temperature.

Results

Dissolved Oxygen

Dissolved oxygen was measured 1-5 times at each of the eight sampling sites. Monitoring occurred from May through September. Class C criteria for dissolved oxygen are a minimum of 5.0 mg/l (milligrams/liter) or 60% saturation. To meet water quality criteria, both concentration and saturation standards must be met. Table 2 and Table 3 provide a summary of dissolved oxygen concentration and percent saturation for each site including minimum, maximum and average values.

Table 2: Dissolved Oxygen Concentration (mg/l) Summary

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	5	6.4	10.7	8.2
WSM	Y	5	6.9	11.0	8.6
BCM	Y	5	7.0	11.3	8.3
DBL	N	1	7.0	7.0	7.0
BIL	N	5	7.3	10.6	8.3
FPD	N	5	7.2	10.6	8.3
FPU	N	5	7.2	10.6	8.3
PBL	N	5	7.3	10.5	8.4

Table 3: Dissolved Oxygen Saturation (%) Summary

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	5	78	99	88
WSM	Y	5	81	103	92
BCM	Y	3	75	88	83
DBL	N	1	82	82	82
BIL	N	5	85	99	89
FPD	N	5	85	99	89
FPU	N	5	85	99	89
PBL	N	5	86	97	90

Dissolved oxygen concentrations measured at Androscoggin River approved sites ranged from 6.4 milligrams/liter to 11.3 mg/l. At Site BBB, the lowest readings occurred in mid-July (6.4 mg/l) and mid-August (7.2 mg/l). Site WSM was similar with lowest readings in mid-July (7.2 mg/l) and mid-August (6.9 mg/l). Site BCM also had its lowest readings in mid-July and mid-August (both 7.0 mg/l). Dissolved oxygen profiles were done at Site WSM at depths from 0-4 meters and at Site BCM at depths from 1-3 meters. Readings were the same or very similar throughout the profile. Dissolved oxygen never dropped below the Class C standard of 5.0 milligrams/liter. Dissolved oxygen percent saturation ranged from 78%-103% and did not go below the Class C standard of 60%.

Dissolved oxygen concentrations measured at Androscoggin River non-approved sites ranged from 7.0 mg/l -10.6 mg/l. Site DBL was sampled only once in mid-August and had the lowest reading for these sites at 7.0 mg/l. Sites BIL, FPU, FPD and PBl were all very similar. The lowest readings all around 7.2-7.3 mg/l occurred during mid-July and mid-August sampling events. Dissolved oxygen never dropped below the Class C standard of 5.0 milligrams/liter. Dissolved oxygen percent saturation ranged from 78%-103%. It did not go below the Class C standard of 60%.

Friends of Merrymeeting Bay volunteers do a good job of getting out early in the morning to sample. All sampling occurred by 8:15 am or earlier. This is the recommended time to sample because dissolved oxygen is lowest at this time of day. 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 more turbulent and there is more opportunity for reaeration. If flow during the summer months is higher or lower than generally normal, then this will affect the dissolved oxygen.

Water Temperature

Temperature was also measured 1-5 times at each of the eight sampling sites. Monitoring occurred from May 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°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.

Table 4 provides a summary of temperature values for each site including minimum, maximum and average values.

Table 4: Temperature (° Celsius) Summary

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	5	12.7	25.1	19.8
WSM	Y	5	12.2	25.3	19.8
BCM	Y	5	12.4	25.3	19.8
DBL	N	1	22.6	22.6	22.6
BIL	N	5	12.4	25.1	19.8
FPD	N	5	12.2	25.1	19.8
FPU	N	5	12.3	25.2	19.6
PBL	N	5	11.9	24.4	19.4

Temperatures measured at all the Androscoggin River sites ranged from 11.9°-25.3° C (Celsius). All of the sites were very similar. The lowest values occurred in May with temperatures around 12°. In June, temperatures ranged from 18-19° at all the sites. Temperatures became high in July and August ranging from 23-25°. In September, temperatures dropped back down to 18-19°. Temperature profiles were done at Site WSM at depths from 0-4 meters and at Site BCM at depths from 1-3 meters. Readings were the same or very similar throughout the profile.

Specific Conductance

Specific conductance was measured 1-5 times at each of the eight sampling sites as well. 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. Also, discharges from pulp and paper mills upstream measurably increase the conductivity of the river. Table 5 provides a summary of specific conductance values for each site including minimum, maximum and average values.

Table 5: Specific Conductance (micro-ohms/centimeter) Summary

Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
BBB	Y	4	54	115	87
WSM	Y	4	54	112	103
BCM	Y	3	41	115	75
DBL	N	1	95	95	95
BIL	N	5	55	119	89
FPD	N	4	78	118	97
FPU	N	5	55	118	89
PBL	N	5	58	116	87

Specific conductance at all the sites ranged from 54-115 $\mu\text{S}/\text{cm}$, which are elevated from natural background values, reflecting upstream point and non-point source discharges. The sites were all very similar with minimum ranging from 41-78 (exclusive of Site DBL which was only sampled once) and maximum ranging from 112-118 $\mu\text{S}/\text{cm}$, which shows that sources are farther upstream.

Bacteria

E. Coli bacteria was also measured 1-5 times at each of the eight sampling sites. Monitoring occurred from May through September. Most if not all samples were taken during baseflow conditions. 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 C criteria for bacteria are as follows: “Between May 15th and September 30th, the number of Escherichia Coli of human and domestic origin shall not exceed a geometric mean of 126/100 ml (milliliters) or an instantaneous level of 236/100 ml.”

Table 6 provides a summary of bacteria values for each site including minimum, maximum and geometric means. Geometric means are calculated instead of averages because measures like bacteria often have a few very large values that strongly influence the mean and make it a poor predictor.

Table 6: Bacteria Most Probable Number (MPN) Summary

Site	Bacteria Type	# of Samples	Minimum Value	Maximum Value	Geometric Mean
BBB	E. Coli	5	8	90	26
WSM	E. Coli	5	9	86	26
BCM	E. Coli	4	20	123	38
DBL	E. Coli	1	22	22	22
BIL	E. Coli	5	7	148	28
FPD	E. Coli	4	5	160	38
FPU	E. Coli	5	5	152	27
PBL	E. Coli	5	6	225	35

None of the sampling sites exceeded the instantaneous criterion or geometric mean criterion. The non-approved sites generally had higher individual values. This may be due to a difference in method used by volunteers at the approved sites versus the non-approved sites.

Discussion and Recommendations

There are numerous sources of pollution and other stresses to the Androscoggin River sites monitored by the Friends of Merrymeeting Bay that could potentially have an impact on water quality. Some of those sources of pollution and stress may include:

- Point source pollution (pollution originating from a direct discharge including wastewater treatment plant discharge, combined sewer overflows and overboard discharges).
- Nonpoint source pollution (e.g., eroded soil, fertilizers, pesticides, heavy metals, petroleum residues, road salt, septic systems, wildlife and pet feces) and polluted stormwater originating from urban impervious surfaces (e.g., streets, parking lots, driveways, rooftops), 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:

- Most if not all the sampling events were done during baseflow conditions. If possible, it might be worthwhile trying to capture 1 or 2 stormflow events to see how bacteria levels compare to baseflow. This might be difficult however, since the volunteers sample once a month on a set schedule in order to coordinate with the bacteria lab analysis.
- Continue monitoring at all stations (or at least a subset of sites) to develop a long term trend database.

Appendix A-1. 2010 water quality data for "Approved" and "Non-Approved" sites. Non-Approved sites do not yet meet official VRMP sample location criteria and/or require further inspection and review.

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

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

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

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	* Sample Depth	Depth Unit	Water Temp. (DEG C)	D.O. % Sat.	D.O. (MG/L)	Spec. Cond. (US/CM)	Salinity(PPTH)	Turbidity (NTU)	E Coli Bacteria (MPN/ 100ML)
Androscoggin River - Friends of Merrymeeting Bay (Approved Sites)													
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	5/15/2010	8:00 AM	N						54			13.4
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	5/15/2010	8:00 AM	N	2.0	M	12.7	99.5	10.66				
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	6/13/2010	7:15 AM	N						84.9			110.6
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	6/13/2010	7:15 AM	N	1.0	M	18.7	87.8	8.23				
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	6/13/2010	7:15 AM	D									69.7
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	7/11/2010	7:00 AM	N						95			72.4
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	7/11/2010	7:00 AM	N	2.0	M	25.1	77.9	6.45				
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	8/14/2010	7:10 AM	N									8.4
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	8/14/2010	7:10 AM	N	1.0	M	23.8	85	7.2				
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	9/19/2010	7:55 AM	N						114.6			17.5
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	9/19/2010	7:55 AM	N	1.0	M	18.6	92	8.48				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N						53.6			8.6
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N	1.0	M	12.2	102.7	11				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N	2.0	M	12.3	102.7	11				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N	3.0	M	12.2	102.5	11.01				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N	4.0	M	12.2	102.5	11.03				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N						79.8			28.8
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N	.0	M	19	100.1	9.3				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N	1.0	M	18.9	100.1	9.3				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N	2.0	M	18.9	100.1	9.3				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N	3.0	M	18.9	100.1	9.3				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	6/13/2010	8:00 AM	N	4.0	M	18.9	100.1	9.28				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N						93.4			52.9
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N	.0	M	25.3	87	7.2				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N	1.0	M	25.3	87.3	7.17				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N	2.0	M	25.3	87	7.19				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N	3.0	M	25.3	87	7.2				
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	7/11/2010	8:00 AM	N	4.0	M	25.3	87	7.19				

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)	E Coli Bacteria (MPN/100ML)
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N									9.7
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N	.0	M	23.8	82.1	7				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N	1.0	M	23.7	81.5	6.9				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N	2.0	M	23.7	81.5	6.9				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N	3.0	M	23.7	82	7				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	8/14/2010	8:00 AM	N	4.0	M	23.7	81.5	6.9				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N						112.3			86
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N	.0	M	18.7	90.4	8.4				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N	1.0	M	18.7	89.8	8.4				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N	2.0	M	18.7	89.8	8.4				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N	3.0	M	18.7	89.8	8.4				
WATER STREET	ANDROSCOGGIN RIVER - A281 - VRMP	9/19/2010	7:10 AM	N	4.0	M	18.7	89.8	8.4				
BRUNSWICK CANOE MOORING (BCM)	ANDROSCOGGIN RIVER - A299 - VRMP	5/16/2010	8:00 AM	N						40.9			8.5
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	5/16/2010	8:00 AM	N	1.0	M	12.4		11.28				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	5/16/2010	8:00 AM	N	2.0	M	12.4		11.24				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	5/16/2010	8:00 AM	N	3.0	M	12.4		11.22				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	6/13/2010	8:00 AM	N						70.5			20.1
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	6/13/2010	8:00 AM	N	1.0	M	19	88.5	8.25				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	6/13/2010	8:00 AM	N	2.0	M	19	88.5	8.25				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	7/11/2010	8:00 AM	N									41.7
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	7/11/2010	8:00 AM	N	1.0	M	25.3	85	7				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	7/11/2010	8:00 AM	N	2.0	M	25.3	85	7				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	7/11/2010	8:00 AM	D	1.0	M	25.3	85	7				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	8/15/2010	8:15 AM	N									19.7
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	8/15/2010	8:15 AM	N	1.0	M	23.8	75.4	7.04				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	8/15/2010	8:15 AM	N	2.0	M	23.8	75.5	7.05				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	8/15/2010	8:15 AM	N	3.0	M	23.8	75.5	7.05				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	9/19/2010	8:00 AM	N						114.6			143.9
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	9/19/2010	8:00 AM	N	1.0	M	18.6		8.1				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	9/19/2010	8:00 AM	N	2.0	M	18.6		8.1				
BRUNSWICK CA	ANDROSCOGGIN RIVER - A299 - VRMP	9/19/2010	8:00 AM	D									101.7
Androscoggin River - Friends of Merrymeeting Bay (Non-Approved Sites)													
Durham Boat Launch (DBL)	ANDROSCOGGIN RIVER - A158 - FOMB	8/15/2010	7:10 AM	N						95.5			19.7
DBL	ANDROSCOGGIN RIVER - A158 - FOMB	8/15/2010	7:10 AM	N	1.0	M	22.6	81.6	7				
DBL	ANDROSCOGGIN RIVER - A158 - FOMB	8/15/2010	7:10 AM	D						95.5			24.6

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)	E Coli Bacteria (MPN/100ML)
DBL	ANDROSCOGGIN RIVER - A158 - FOMB	8/15/2010	7:10 AM	D	1.0	M	22.6	81.6	7				
Brunswick Interstate Ledges (BIL)	ANDROSCOGGIN RIVER - A24 - FOMB	5/16/2010	8:15 AM	N						55.3			8.5
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	5/16/2010	8:15 AM	N	1.0	M	12.4	99.4	10.6				
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	6/13/2010	8:10 AM	N						79.8			16.9
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	6/13/2010	8:10 AM	N	1.0	M	18.9	89.3	8.3				
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	7/11/2010	8:10 AM	N						94.1			81.6
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	7/11/2010	8:10 AM	N	1.0	M	25.1	88.3	7.3				
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	7/11/2010	8:10 AM	D						94.1			159.7
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	7/11/2010	8:10 AM	D	1.0	M	25.1	88.3	7.3				
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	8/15/2010	8:15 AM	N						99.5			7.3
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	8/15/2010	8:15 AM	N	1.0	M	23.9	85.3	7.3				
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	9/19/2010	7:45 AM	N						118.6			148.3
BIL	ANDROSCOGGIN RIVER - A24 - FOMB	9/19/2010	7:45 AM	N	1.0	M	18.7	84.6	7.9				
Fish Park Down (FPD)	ANDROSCOGGIN RIVER - A45 - FOMB	5/16/2010	7:55 AM	N						55.8			5.2
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	5/16/2010	7:55 AM	N	1.0	M	12.2	98.8	10.6				
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	5/16/2010	7:55 AM	D									5.2
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	6/13/2010	7:50 AM	N						78.4			17.5
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	6/13/2010	7:50 AM	N	1.0	M	19	89.4	8.3				
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	7/11/2010	7:40 AM	N						93.8			160.7
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	7/11/2010	7:40 AM	N	1.0	M	25.1	89.5	7.4				
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	8/15/2010	7:55 AM	N						99.8			8.6
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	8/15/2010	7:55 AM	N	1.0	M	24	85	7.2				
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	9/19/2010	7:17 AM	N						117.8			133.3
FPD	ANDROSCOGGIN RIVER - A45 - FOMB	9/19/2010	7:17 AM	N	1.0	M	18.7	85	7.9				
Fish Park Up (FBU)	ANDROSCOGGIN RIVER - A47 - FOMB	5/16/2010	7:45 AM	N						54.8			5.2
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	5/16/2010	7:45 AM	N	1.0	M	12.3	98.6	10.6				
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	6/13/2010	7:35 AM	N						78.4			18.5
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	6/13/2010	7:35 AM	N	1.0	M	18.9	89.3	8.3				
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	6/13/2010	7:35 AM	D						78.4			16.1
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	6/13/2010	7:35 AM	D	1.0	M		89.3	8.3				
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	7/11/2010	7:20 AM	N						93.3			91
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	7/11/2010	7:20 AM	N	1.0	M	25.2	89	7.3				
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	8/15/2010	7:45 AM	N						99.6			12.1
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	8/15/2010	7:45 AM	N	1.0	M	22.9	85	7.2				
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	9/19/2010	7:05 AM	N						118.3			152.9
FBU	ANDROSCOGGIN RIVER - A47 - FOMB	9/19/2010	7:05 AM	N	1.0	M	18.7	85	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)	E Coli Bacteria (MPN/100ML)
Pejepscot Boat Launch (PBL)	ANDROSCOGGIN RIVER - A71 - FOMB	5/16/2010	7:20 AM	N						58.5			6.3
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	5/16/2010	7:20 AM	N	1.0	M	11.9	97.4	10.5				
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	6/13/2010	6:55 AM	N						72.6			36.9
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	6/13/2010	6:55 AM	N	1.0	M	18.3	88.4	8.3				
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	7/11/2010	7:00 AM	N						91.1			224.7
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	7/11/2010	7:00 AM	N	1.0	M	24.4	89.2	7.4				
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	8/15/2010	6:50 AM	N						99.2			18.7
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	8/15/2010	6:50 AM	N	1.0	M	23.9	86.3	7.3				
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	9/19/2010	6:15 AM	N						115.8			42.8
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	9/19/2010	6:15 AM	N	1.0	M	18.5	89.3	8.3				
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	9/19/2010	6:15 AM	D									74.3
PBL	ANDROSCOGGIN RIVER - A71 - FOMB	9/19/2010	6:15 AM	D	1.0	M	18.5	89.3	8.3				

Appendix A-2. 2010 observational data and quality assurance/quality control (QA/QC) notes for "approved" and "non-approved" sites.
** "N" = normal environmental sample; "D" = field duplicate; "D.O." = dissolved oxygen; "Spec. Cond" = specific conductance; "TSS" = total suspended solids
Refer to Appendix A-1 for water quality data

Organization Site Code	VRMP Site ID	Date	Time	Sample Type Qualifier	Flow	Stage	Air Temp. (DEG C)	Sample Location	Current Weather	Air Condi- tion	Past 24HR Weather	Habitat	Tide Stage	Water Appear- ance	Comments
Androscoggin River - Friends of Merrymeeting Bay (Approved Sites)															
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER - A231 - VRMP	5/15/2010	8:00 AM	N	BASEF	MEDIUM	14	BRIDGE	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	5/15/2010	8:00 AM	N	BASEF	MEDIUM		BRIDGE	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	6/13/2010	7:15 AM	N			18.3	WADING	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	6/13/2010	7:15 AM	N				WADING	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	6/13/2010	7:15 AM	D				WADING							WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	7/11/2010	7:00 AM	N	BASEFLOW		22.7	WADING	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	7/11/2010	7:00 AM	N	BASEFLOW			WADING	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	8/14/2010	7:10 AM	N	BASEFLOW		18.2	WADING	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	8/14/2010	7:10 AM	N	BASEFLOW			WADING	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	9/19/2010	7:55 AM	N			13.1	WADING	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	WADEABLE/MID-DEPTH
BAY BRIDGE JETTY (BBB)	ANDROSCOGGIN RIVER	9/19/2010	7:55 AM	N				WADING	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER - A281 - VRMP	5/15/2010	7:20 AM	N	BASEF	MEDIUM	14	BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	5/15/2010	7:20 AM	N	BASEF	MEDIUM		BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	5/15/2010	7:20 AM	N	BASEF	MEDIUM		BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	5/15/2010	7:20 AM	N	BASEF	MEDIUM		BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	5/15/2010	7:20 AM	N	BASEF	MEDIUM		BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N			18.3	BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N				BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N				BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N				BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N				BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	6/13/2010	8:00 AM	N				BOAT	CLOUDY	CALM	PARTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	7/11/2010	8:00 AM	N	BASEFLOW		22.7	BOAT	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	7/11/2010	8:00 AM	N	BASEFLOW			BOAT	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	7/11/2010	8:00 AM	N	BASEFLOW			BOAT	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	7/11/2010	8:00 AM	N	BASEFLOW			BOAT	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	7/11/2010	8:00 AM	N	BASEFLOW			BOAT	CLOUDY	BREEZE	MOSTLY CLOUDY	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW		18.2	BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW			BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW			BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW			BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW			BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	8/14/2010	8:00 AM	N	BASEFLOW			BOAT	CLEAR	STRONG	CLEAR	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	9/19/2010	7:10 AM	N			13.1	BOAT	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	9/19/2010	7:10 AM	N				BOAT	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	9/19/2010	7:10 AM	N				BOAT	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	9/19/2010	7:10 AM	N				BOAT	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
WATER STREET MOORING (WSM)	ANDROSCOGGIN RIVER	9/19/2010	7:10 AM	N				BOAT	LIGHT RAIN	CALM	LIGHT RAIN	RUN		MEDIUM	NON-WADEABLE/MID-DEPTH
BRUNSWICK CANOE MOORING (BCM)	ANDROSCOGGIN RIVER - A299 - VRMP	5/16/2010	8:00 AM	N			15.9	BOAT		CALM	CLEAR				CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.

Organization Site Code	VRMP Site ID	Date	Time	Sample Type Qualifier	Flow	Stage	Air Temp. (DEG C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Tide Stage	Water Appearance	Comments
BRUNSWICK C	ANDROSCOGGIN RIV	5/16/2010	8:00 AM	N				BOAT		CALM	CLEAR				CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	5/16/2010	8:00 AM	N				BOAT		CALM	CLEAR				CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	5/16/2010	8:00 AM	N				BOAT		CALM	CLEAR				CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	6/13/2010	8:00 AM	N		LOW	18	BOAT	CLOUDY, PARTLY C		CLEAR, PARTLY CL	RUN		DARKLY	DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	6/13/2010	8:00 AM	N		LOW		BOAT	CLOUDY, PARTLY C		CLEAR, PARTLY CL	RUN		DARKLY	DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	6/13/2010	8:00 AM	N		LOW		BOAT	CLOUDY, PARTLY C		CLEAR, PARTLY CL	RUN		DARKLY	DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	7/11/2010	8:00 AM	N	BASEF	LOW	23.8	BOAT	PARTLY C	BREEZE	MOSTLY CLOUDY, F	RUN			DARKLY STAINED
BRUNSWICK C	ANDROSCOGGIN RIV	7/11/2010	8:00 AM	N	BASEF	LOW		BOAT	PARTLY C	BREEZE	MOSTLY CLOUDY, F	RUN			DARKLY STAINED
BRUNSWICK C	ANDROSCOGGIN RIV	7/11/2010	8:00 AM	N	BASEF	LOW		BOAT	PARTLY C	BREEZE	MOSTLY CLOUDY, F	RUN			DARKLY STAINED
BRUNSWICK C	ANDROSCOGGIN RIV	7/11/2010	8:00 AM	D				BOAT							
BRUNSWICK C	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N	BASEF	LOW	18.8	BOAT	CLEAR		CLEAR	RUN			
BRUNSWICK C	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N	BASEF	LOW		BOAT	CLEAR		CLEAR	RUN			
BRUNSWICK C	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N	BASEF	LOW		BOAT	CLEAR		CLEAR	RUN			
BRUNSWICK C	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N	BASEF	LOW		BOAT	CLEAR		CLEAR	RUN			
BRUNSWICK C	ANDROSCOGGIN RIV	9/19/2010	8:00 AM	N	BASEF	LOW	17.9	BOAT	CLEAR	CALM	CLEAR	RUN		DARKLY	DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	9/19/2010	8:00 AM	N	BASEF	LOW		BOAT	CLEAR	CALM	CLEAR	RUN		DARKLY	DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	9/19/2010	8:00 AM	N	BASEF	LOW		BOAT	CLEAR	CALM	CLEAR	RUN		DARKLY	SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
BRUNSWICK C	ANDROSCOGGIN RIV	9/19/2010	8:00 AM	D				BOAT							DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE (ANALYST PORTION). NO VALUE FOR D.O. IN % SATURATION. NO VERTICAL DEPTH DESCRIPTION FOR CONDUCTIVITY.
Androscoggin River - Friends of Merrymeeting Bay (Non-Approved Sites)															
Durham Boat Launch (DBL)	ANDROSCOGGIN RIVER - A158 - FOMB	8/15/2010	7:10 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
DBL	ANDROSCOGGIN RIV	8/15/2010	7:10 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
DBL	ANDROSCOGGIN RIV	8/15/2010	7:10 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE

Organization Site Code	VRMP Site ID	Date	Time	Sample Type Qualifier	Flow	Stage	Air Temp. (DEG C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Tide Stage	Water Appearance	Comments
DBL	ANDROSCOGGIN RIV	8/15/2010	7:10 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
Brunswick Interstate Ledges (BIL)	ANDROSCOGGIN RIVER - A24 - FOMB	5/16/2010	8:15 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	5/16/2010	8:15 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	6/13/2010	8:10 AM	N			17.7	BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	6/13/2010	8:10 AM	N				BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	7/11/2010	8:10 AM	N				BANK	CLOUDY, F	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
BIL	ANDROSCOGGIN RIV	7/11/2010	8:10 AM	N				BANK	CLOUDY, F	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
BIL	ANDROSCOGGIN RIV	7/11/2010	8:10 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
BIL	ANDROSCOGGIN RIV	7/11/2010	8:10 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
BIL	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	8/15/2010	8:15 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
BIL	ANDROSCOGGIN RIV	9/19/2010	7:45 AM	N			7	BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
BIL	ANDROSCOGGIN RIV	9/19/2010	7:45 AM	N				BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NOT APPROVED SITE. NON-WADEABLE/3 FT BELOW
Fish Park Down (FPD)	ANDROSCOGGIN RIVER - A45 - FOMB	5/16/2010	7:55 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	5/16/2010	7:55 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	5/16/2010	7:55 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	6/13/2010	7:50 AM	N			17.7	BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	6/13/2010	7:50 AM	N				BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	7/11/2010	7:40 AM	N				BANK	CLOUDY, F	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	7/11/2010	7:40 AM	N				BANK	CLOUDY, F	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	8/15/2010	7:55 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	8/15/2010	7:55 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	9/19/2010	7:17 AM	N			7	BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FPD	ANDROSCOGGIN RIV	9/19/2010	7:17 AM	N				BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
Fish Park Up (FBU)	ANDROSCOGGIN RIVER - A47 - FOMB	5/16/2010	7:45 AM	N				BANK	CLEAR	CALM	CLOUDY, MOSTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	5/16/2010	7:45 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	6/13/2010	7:35 AM	N			17.7	BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. SLIGHT OILY SHEEN. NON-WADEABLE/3 FT BELOW

Organization Site Code	VRMP Site ID	Date	Time	Sample Type Qualifier	Flow	Stage	Air Temp. (DEG C)	Sample Location	Current Weather	Air Condi-tion	Past 24HR Weather	Habitat	Tide Stage	Water Appearance	Comments
FBU	ANDROSCOGGIN RIV	6/13/2010	7:35 AM	N				BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. SLIGHT OILY SHEEN. NON-WADEABLE/3 FT BELOW
FBU	ANDROSCOGGIN RIV	6/13/2010	7:35 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. SLIGHT OILY SHEEN. NON-WADEABLE/3 FT BELOW
FBU	ANDROSCOGGIN RIV	6/13/2010	7:35 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. SLIGHT OILY SHEEN. NON-WADEABLE/3 FT BELOW
FBU	ANDROSCOGGIN RIV	7/11/2010	7:20 AM	N				BANK	CLOUDY, #	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	7/11/2010	7:20 AM	N				BANK	CLOUDY, #	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	8/15/2010	7:45 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	8/15/2010	7:45 AM	N				BANK			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	9/19/2010	7:05 AM	N			7	BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLING FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
FBU	ANDROSCOGGIN RIV	9/19/2010	7:05 AM	N				BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLING FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
Pejepscot Boat Launch (PBL)	ANDROSCOGGIN RIVER - A71 - FOMB	5/16/2010	7:20 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	5/16/2010	7:20 AM	N				BANK	CLEAR	CALM	CLEAR, PARTLY CLOUDY, MOSTLY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	6/13/2010	6:55 AM	N			17.7	BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	6/13/2010	6:55 AM	N				BANK	PARTLY C	CALM	PARTLY CLOUDY, SHOWERS, LIGHT				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	7/11/2010	7:00 AM	N				BANK	CLOUDY, #	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	7/11/2010	7:00 AM	N				BANK	CLOUDY, #	CALM	MOSTLY CLOUDY, LIGHT RAIN				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	8/15/2010	6:50 AM	N				WADING			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	8/15/2010	6:50 AM	N				WADING			CLEAR, PARTLY CLOUDY				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	9/19/2010	6:15 AM	N			7	BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	9/19/2010	6:15 AM	N				BANK			CLEAR				NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	9/19/2010	6:15 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE
PBL	ANDROSCOGGIN RIV	9/19/2010	6:15 AM	D				BANK							NO OBSERVATIONAL DATA. SAMPLED FROM BANK. NON-WADEABLE/3 FT BELOW SURFACE