

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). FOMB 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. Their monitoring has extended up the Androscoggin at times (depending on volunteers) to Livermore Falls. FOMB 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 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. In addition, 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, primarily in the lower part of the river. By the late 1800s, many textile and lumber mills were in operation, mostly from 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,

¹ Maine Rivers Website- Androscoggin River Profile

Central Maine Power built hydroelectric dams that impounded much of the river from Lewiston 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 VRMP, 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 using methods not accepted by DEP, as well as for a subset of stations acceptable to DEP. For 2011, three stations met VRMP requirements for sample location and methods. This report provides the data and analysis for the three approved sites. Five additional sites are reported here also. For these sites, both the monitor and equipment were certified by VRMP in 2011. These additional five sites, however, do not meet the requirements for being approved sites, and some methods may not be approved.

In 2011, FOMB requested that two of the three approved sites (Water Street Mooring, WSM and Brunswick Canoe Mooring, BCM) be moved from mid-channel to shore. They submitted monitoring data from mid-channel and shore to demonstrate similarity. The Department approved relocation of these approved sites. FOMB renamed these sites Brunswick Water Street (BWS) and Brunswick Canoe Portage (BCP), respectively.

Methods

The volunteers monitored the Androscoggin River in 2011 at three approved stations [BBB, BWS, BCP] and five non-approved stations [DBL, BIL, FPD, FPU, PBL] on the main stem (Table 5-1-1 and Figures 5-1-1 through 5-1-3).

Table 5-1-1: Friends of Merrymeeting Bay sampling sites at Androscoggin River.

VRMP Site ID	Organization Site Code	Sample Location	Class
Androscoggin River-A231-VRMP	BBB	Bay Bridge Jetty	C
Androscoggin River-A281BK-VRMP	BWS	Brunswick Water Street	C
Androscoggin River-A299BK-VRMP	BCP	Brunswick Canoe Portage	C
Androscoggin River-A158-FOMB	DBL	Durham Boat Launch	C
Androscoggin River- A24-FOMB	BIL	Brunswick Interstate Ledges	C
Androscoggin River-A45-FOMB	FPD	Fish Park Downstream	C
Androscoggin River-A47-FOMB	FPU	Fish Park Upstream	C
Androscoggin River-A71-FOMB	PBL	Pejepscot Boat Launch	C

² Androscoggin River Alliance Website-Androscoggin River slideshow

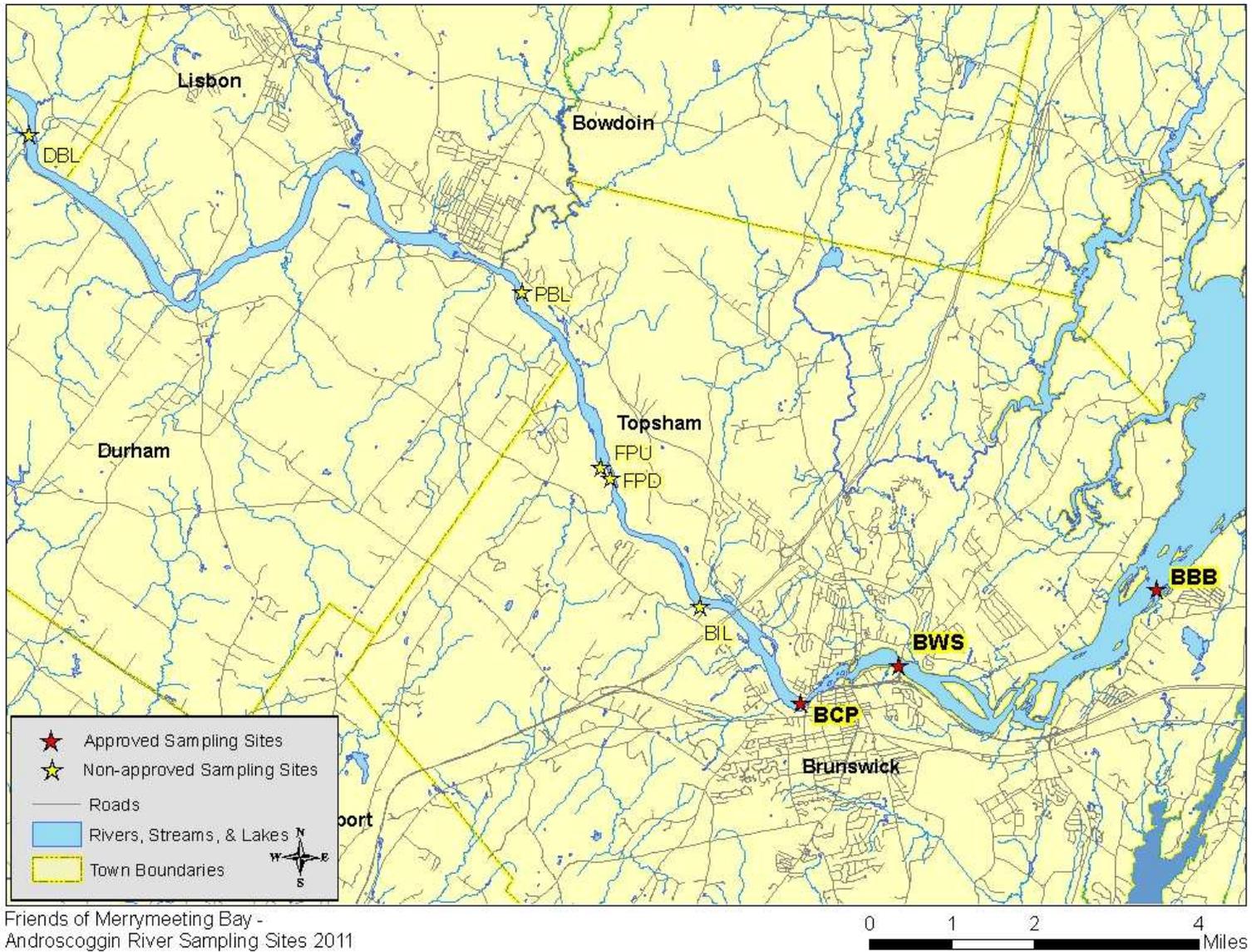


Figure 5-1-1: Map of all Friends of Merrymeeting Bay sampling sites on the Androscoggin River.

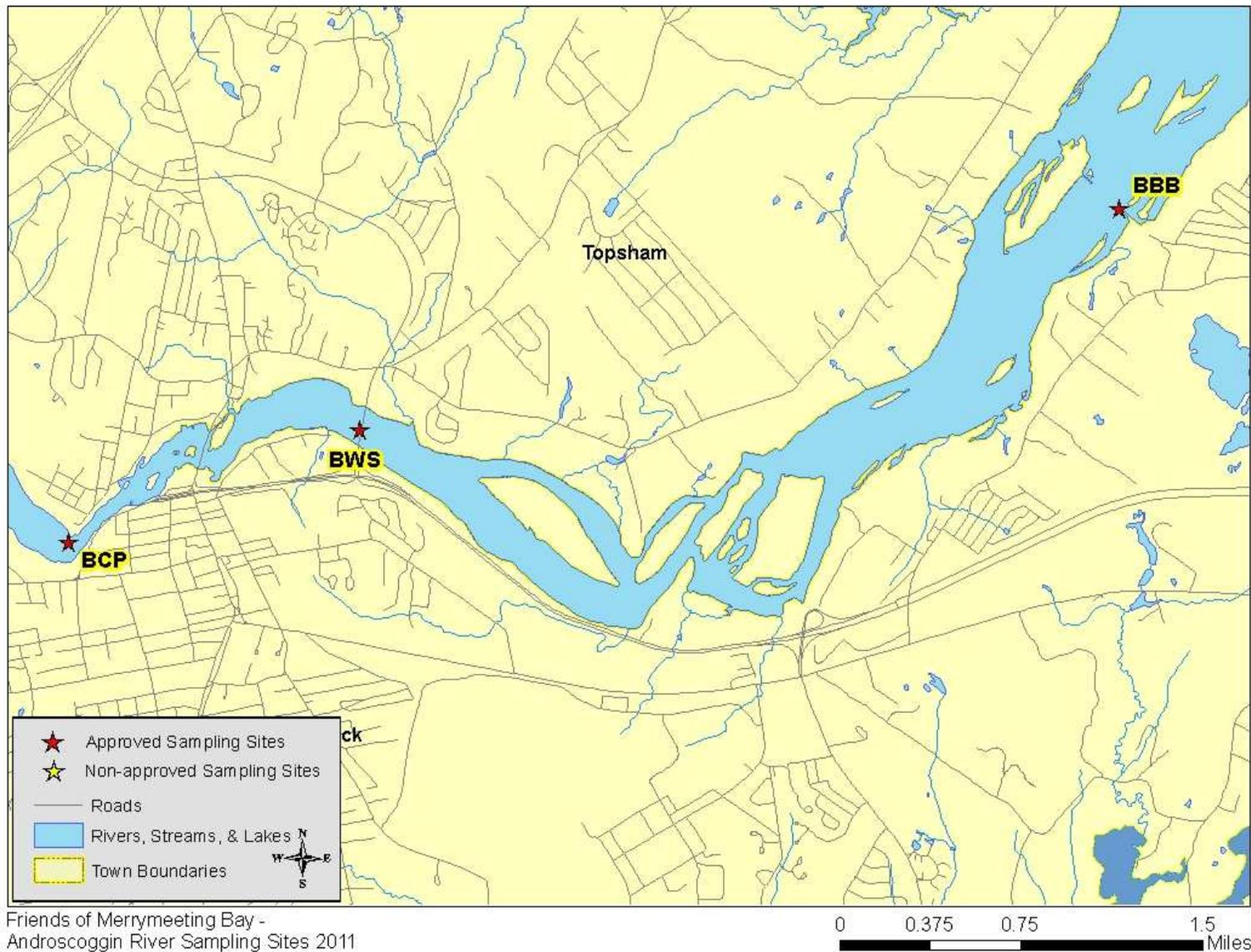


Figure 5-1-2: Map of approved Friends of Merrymeeting Bay sampling sites on the Androscoggin River.

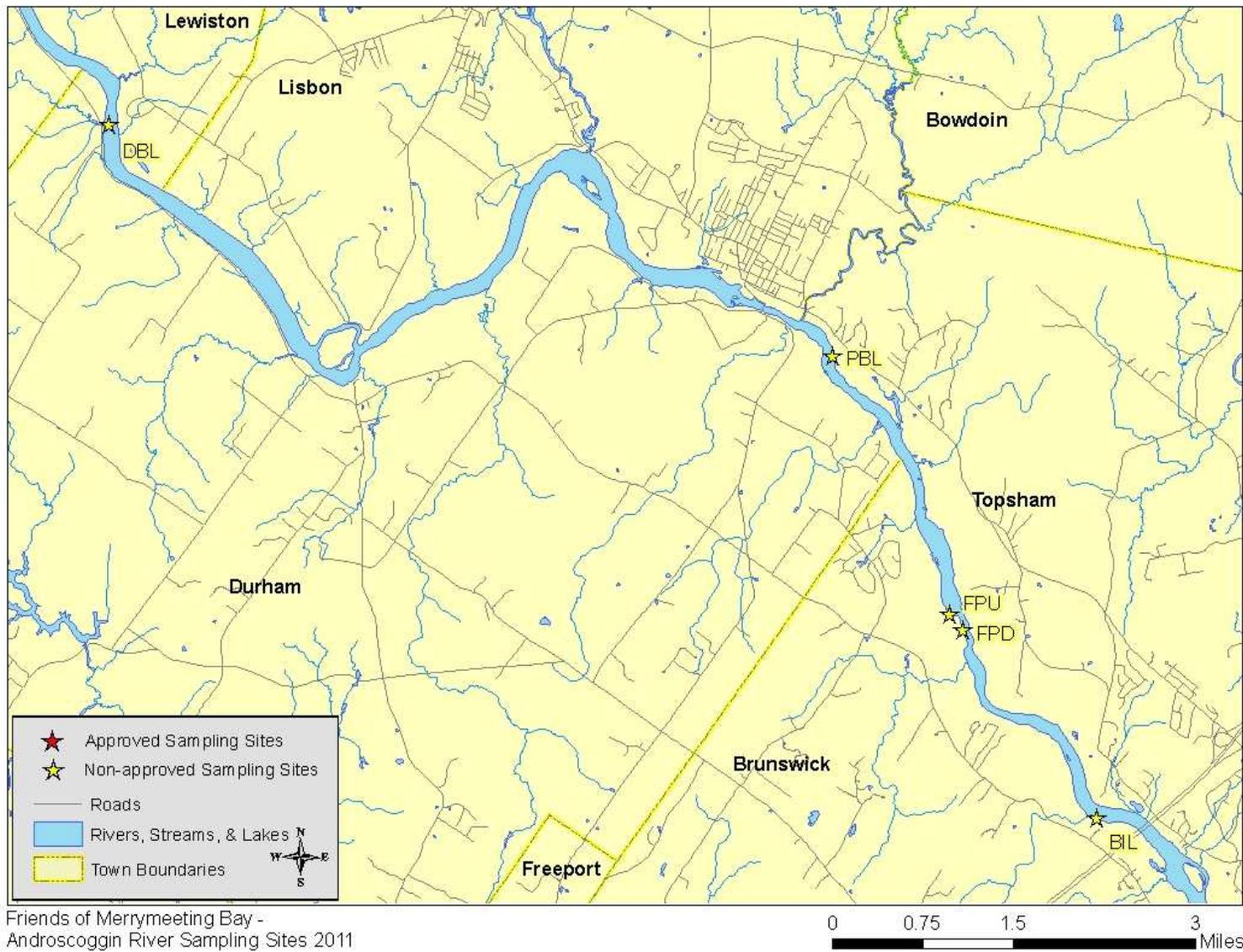


Figure 5-1-3: Map of non-approved Friends of Merrymeeting Bay sampling sites on the Androscoggin River.

Monitoring was conducted from April through October, 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 at the three approved sites with a DEP designed bacteria sampling device or extension pole (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. As noted in the previous section, two of the approved sites were sampled from shore. The third was sampled from a jetty allowing for representative, well-mixed areas of the river to be monitored.

Results

Refer to Appendices A-1 and A-2 in discussion of individual site data and trends, as well as graphed data (Figures 5-1-5 through 5-1-14), at the end of this section of the report.

Dissolved Oxygen

Dissolved oxygen (DO) was measured 2-7 times at each of the eight sampling sites (Table 5-1-2 and Table 5-1-3). Monitoring occurred from April through October. Class C criteria for DO are a minimum of 5.0 mg/l (milligrams/liter) or 60% saturation, whichever is higher. To meet water quality criteria, both concentration and saturation standards must be met.

Table 5-1-2: A summary of minimum, maximum, and average dissolved oxygen concentration values (mg/l) at Friends of Merrymeeting Bay monitoring sites on the Androscoggin River.

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	7	7.1	13.5	9.4
BWS	Y	7	7.7	13.7	9.8
BCP	Y	6	7.2	15.3	8.8
DBL	N	2	7.8	14.5	11.2
BIL	N	7	7.0	14.7	9.6
FPD	N	7	7.0	14.9	9.6
FPU	N	7	7.1	14.4	9.4
PBL	N	7	7.2	14.2	9.5

Table 5-1-3: A summary of minimum, maximum, and average dissolved oxygen saturation (%) values at Friends of Merrymeeting Bay monitoring sites on the Androscoggin River.

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	7	84.9	107.4	94.0
BWS	Y	7	91.0	107.1	97.8
BCP	Y	5	82.8	115.0	94.6
DBL	N	2	84.0	112.8	98.4
BIL	N	7	84.5	115.2	95.0
FPD	N	7	85.5	114.5	95.7
FPU	N	7	85.3	111.6	94.6
PBL	N	7	85.2	111.5	94.8

Dissolved oxygen concentrations measured at Androscoggin River approved sites ranged from 7.0 mg/l to 15.3 mg/l. At site BBB, the lowest readings occurred in mid-July (7.1 mg/l) and mid-August (7.2 mg/l). Site BWS was similar with lowest readings in mid-July (8.3 mg/l) and mid-August (7.7 mg/l). Site BCP had its lowest readings in mid-June (8.0 mg/l) and mid-July (7.2 mg/l). Dissolved oxygen never dropped below the Class C standard of 5.0 mg/l. Dissolved oxygen percent saturation ranged from 82.8%-115% 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 -14.9 mg/l. Site DBL was sampled only two times (once in mid-April and once in mid-June) and was not included in this analysis. The remaining sites BIL, FPU, FPD, and PBL were all very similar. The lowest readings, all around 7.0-7.2 mg/l occurred during mid-July sampling events. Dissolved oxygen never dropped below the Class C standard of 5.0 mg/l. Dissolved oxygen percent saturation ranged from 84.5%-115.2% and 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 but five of the forty-five samples sampling occurred by 8:15 am or earlier. This is the recommended time to sample because DO is lowest at this time of day. Dissolved oxygen is also affected by flow conditions and temperature. During high flow conditions, more oxygen enters the river from the atmosphere as the water is more turbulent and there is more opportunity for re-aeration. Cooler water holds more oxygen. If the intent is to assess low DO concentrations for water quality classification, including early or late season measurements will skew the results. For example, the average water temperature for all sampling sites (sans DBL) from April through October is 16.3°C; for June through September it is 21.1 °C. The corresponding average DO concentrations are 9.4 mg/l and 8.0 mg/l respectively.

Water Temperature

Temperature was also measured 2-7 times at each of the eight sampling sites (Table 5-1-4). Monitoring occurred from April through October. 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 5-1-4: A summary of minimum, maximum, and average water temperature (°C) values at Friends of Merrymeeting Bay monitoring sites on the Androscoggin River.

Site	Approved Site	# of Sampling Events	Minimum Value	Maximum Value	Average Value
BBB	Y	7	5.0	24.3	16.5
BWS	Y	7	4.9	24.7	16.4
BCP	Y	4	4.9	19.2	11.8
DBL	N	2	4.8	18.9	11.9
BIL	N	7	4.9	25.1	16.7
FPD	N	7	4.8	25.5	16.8
FPU	N	7	4.7	25.3	16.8
PBL	N	7	5.1	25.5	16.8

Temperatures measured at all the Androscoggin River sites ranged from 4.7°-25.5°C (Celsius). All of the sites were very similar, except BCP, which lacked mid-summer readings – this skewed maximum and average values. The lowest values occurred in April with temperatures around just below 5.0°C. In June, temperatures ranged from 18.9-19.5°C at all the sites. Temperatures became high in July and August ranging from 23.6-25.5°C. In October, temperatures dropped back down to 13.5-13.7°C.

Specific Conductance

Specific conductance was measured 2-7 times at each of the eight sampling sites as well (Table 5-1-5). Monitoring occurred from April through October. 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 5-1-5: A summary of minimum, maximum, and average specific conductance values (micro-ohms/cm, $\mu\text{S}/\text{cm}$) at Friends of Merrymeeting Bay monitoring sites on the Androscoggin River.

Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
BBB	Y	7	35	125	67
BWS	Y	7	58	136	86
BCP	Y	5	53	131	80
DBL	N	2	35	69	52
BIL	N	7	39	137	75
FPD	N	7	38	138	74
FPU	N	7	38	137	74
PBL	N	7	38	140	75

Specific conductance at all the sites ranged from 35-140 $\mu\text{S}/\text{cm}$, which are elevated from natural background values, reflecting upstream point and non-point source discharges. The sites were all very similar with minimum values ranging from 35-58 (exclusive of Site DBL, which was only sampled twice) and maximum ranging from 69-140 $\mu\text{S}/\text{cm}$, which shows that sources are farther upstream.

Bacteria

Escherichia coli bacteria was also measured 7 times at each of the three approved sampling sites (Table 5-1-6). Monitoring occurred from April through October. 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.”

Results for the non-approved sites were not included, since non-approved methods are used for collection at those sites. 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 5-1-6: A summary of minimum, maximum, and geometric mean values (MPN/100mL) for bacteria at Friends of Merrymeeting Bay monitoring sites on the Androscoggin River.

Site	Bacteria Type	# of Samples	Minimum Value	Maximum Value	Geometric Mean
BBB	<i>E. coli</i>	7	22	816	81
BWS	<i>E. coli</i>	7	24	457	73
BCP	<i>E. coli</i>	7	10	687	58

Each one of these sites have maximum values exceeding the instantaneous criterion (see Appendix A-1 and Figure 5-1-14 at the end of this report). All of these exceedances occurred on

the same sampling date (10/16/11). Typically, observed high bacterial levels are associated with stormwater runoff and/or combined sewer overflows. Rainfall totals at the weather station at Highland Green in Topsham included 1.22 inches of rain during the period from 10/13 to 10/14 (Figure 5-1-4). Stormwater travel times from the Brunswick/Topsham urban area to the first two upstream sample stations is shorter than 24 hours, however, and there are no combined sewer overflows or waste water discharges directly upstream.

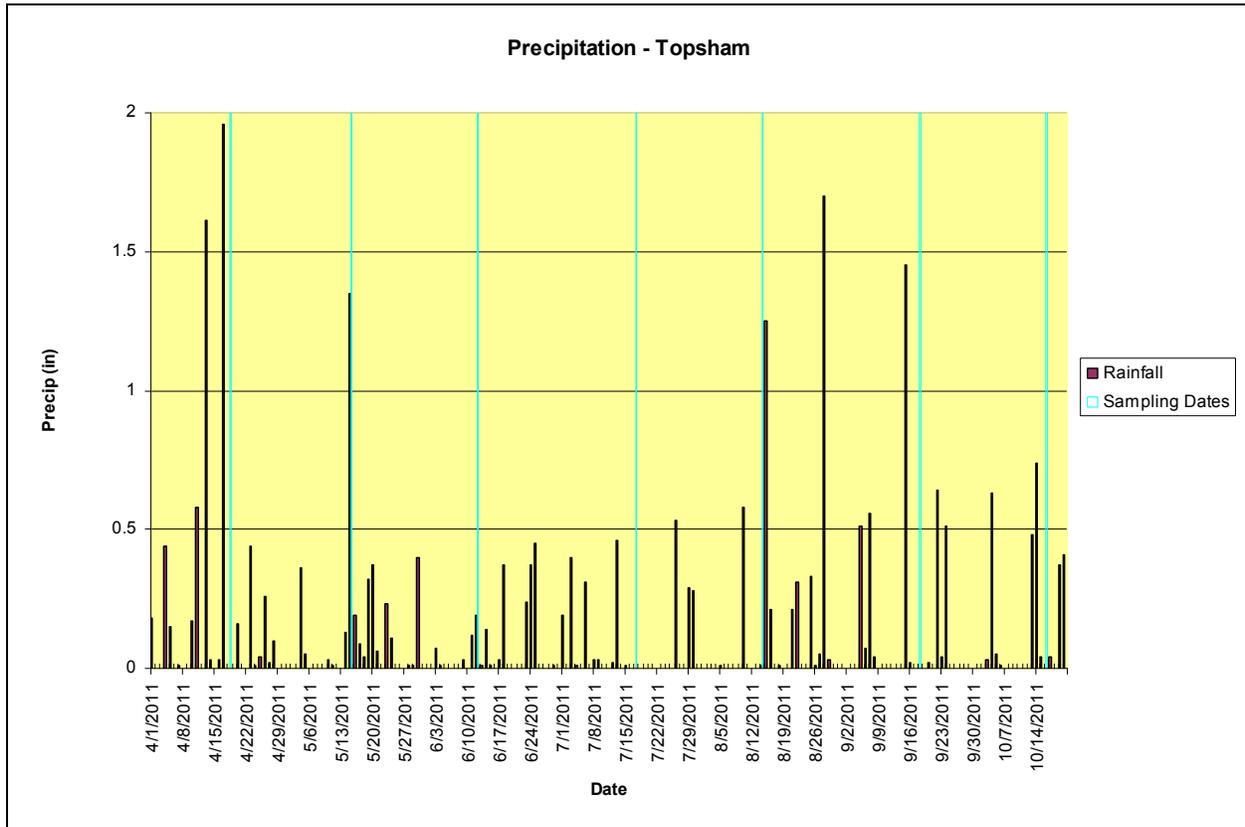


Figure 5-1-4: Seasonal precipitation measured at Highland Green, Topsham.

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).
- Non-point 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 are characteristic of many wetlands).

The following are recommendations for future monitoring:

- This is the first year the sampling season was extended to April and October. As noted in the discussion of temperature effects on dissolved oxygen, river temperatures are substantially lower in April and dissolved oxygen concentrations are proportionally higher. There is a good argument for collecting as much water quality data as possible, but if a primary goal of FOMB is to demonstrate the river meets minimum DO criterion for reclassification, they should reconsider the values of extending the season.
- Continue monitoring at all stations (or at least a subset of sites) to develop a long term trend database.

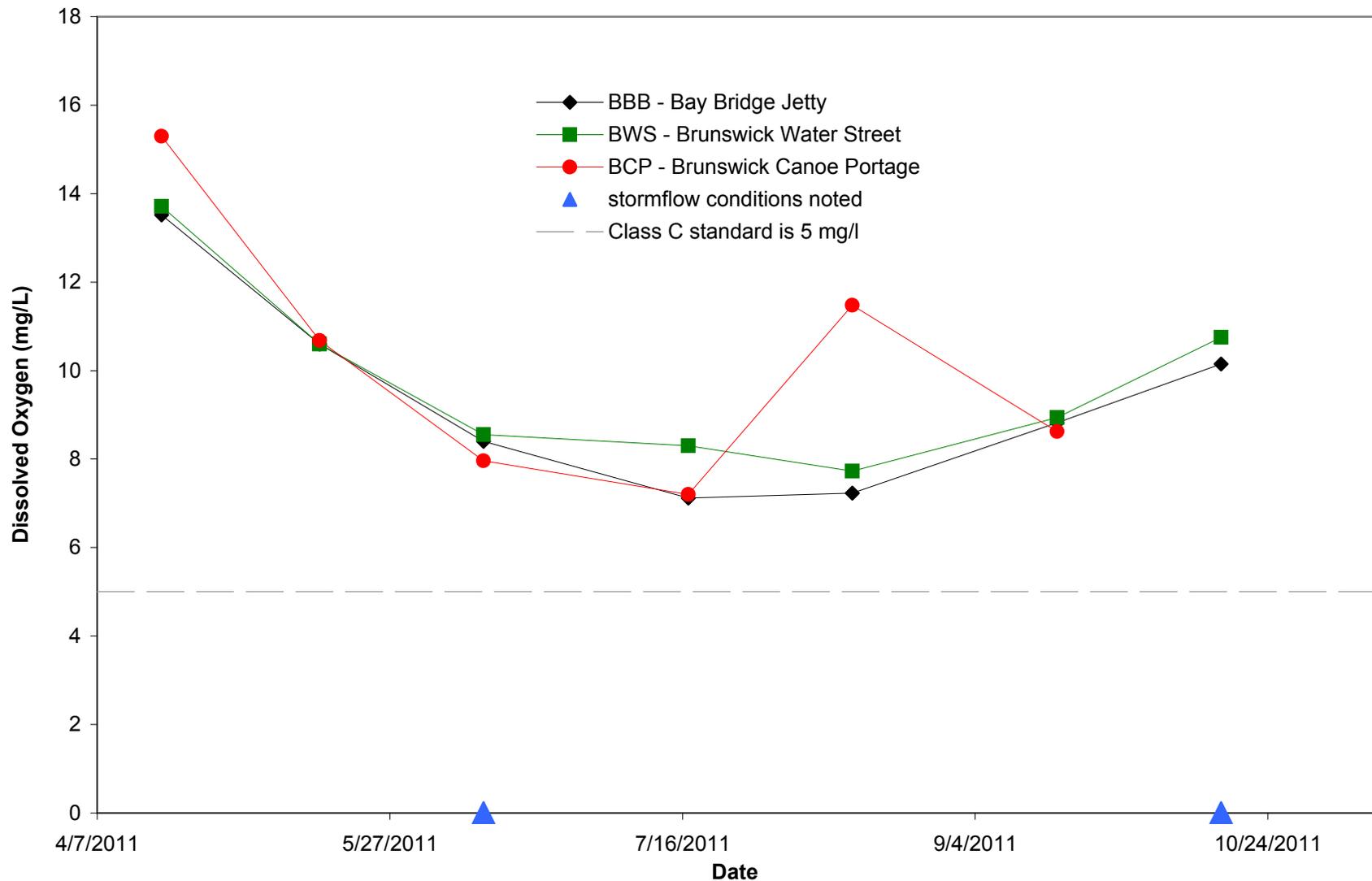


Figure 5-1-5. Dissolved oxygen concentrations at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

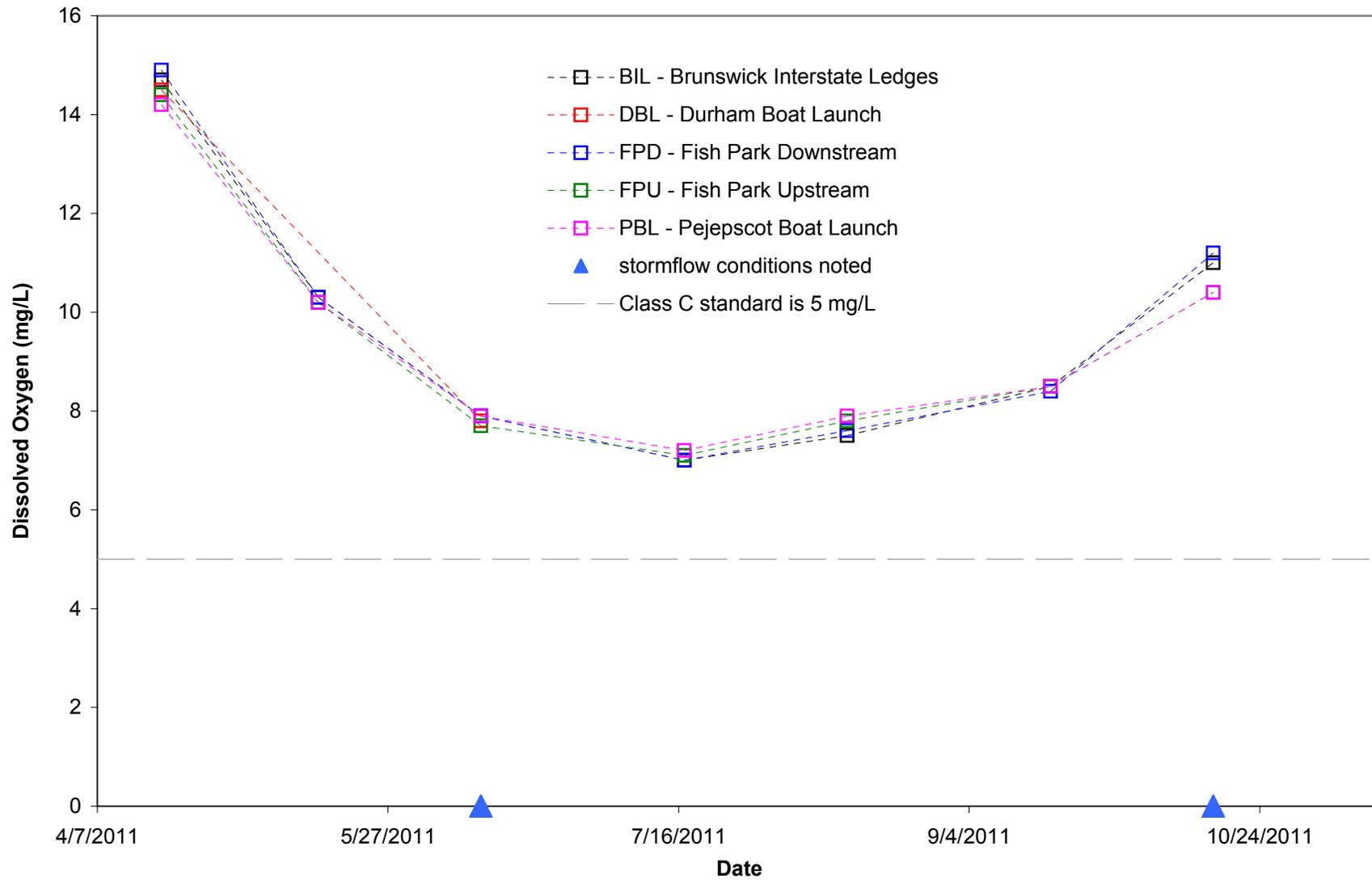


Figure 5-1-6. Dissolved oxygen concentrations at Friends of Merrymeeting Bay non-approved monitoring sites on the Androscoggin River for 2011.

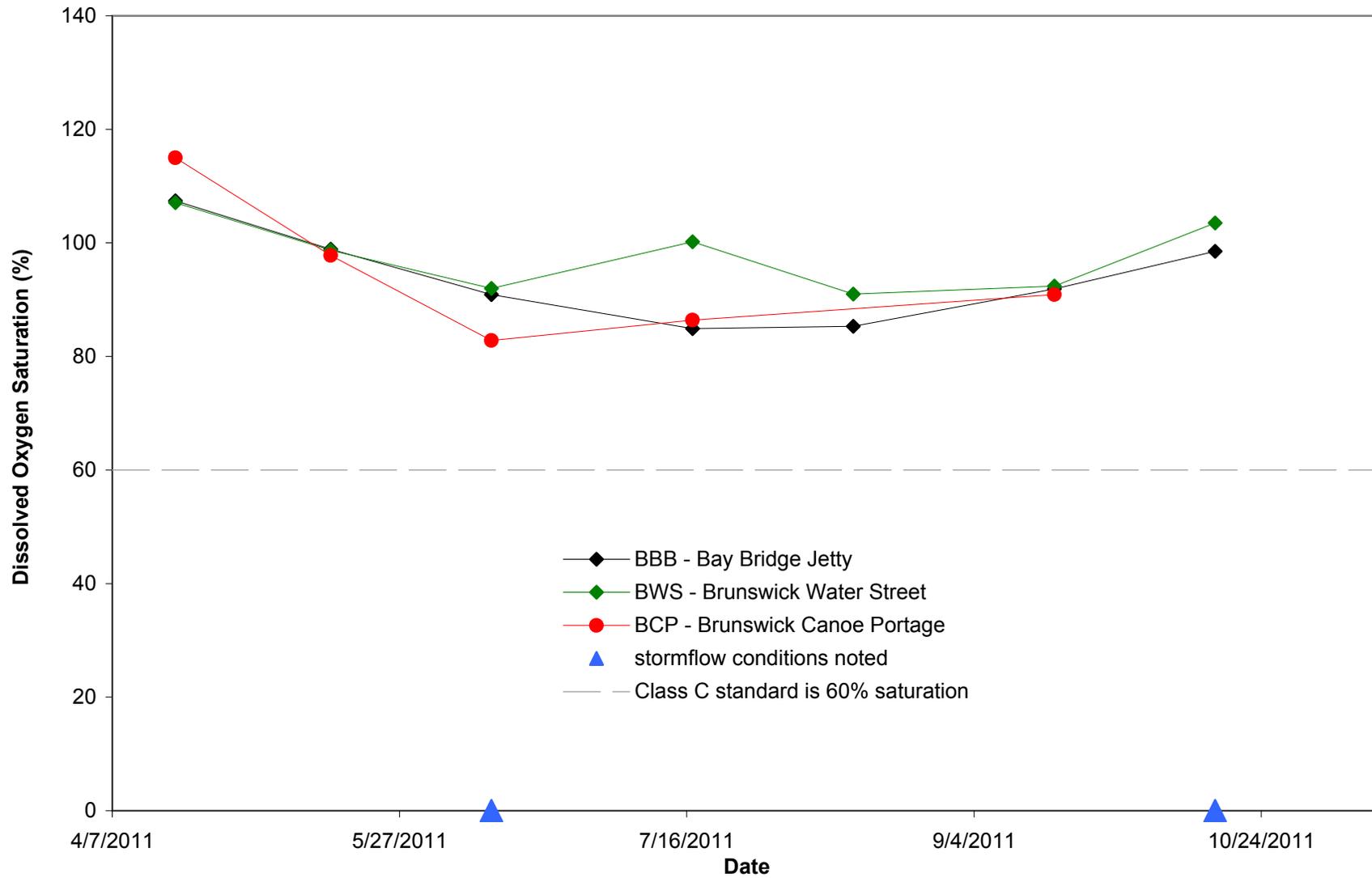


Figure 5-1-7. Dissolved oxygen % saturations at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

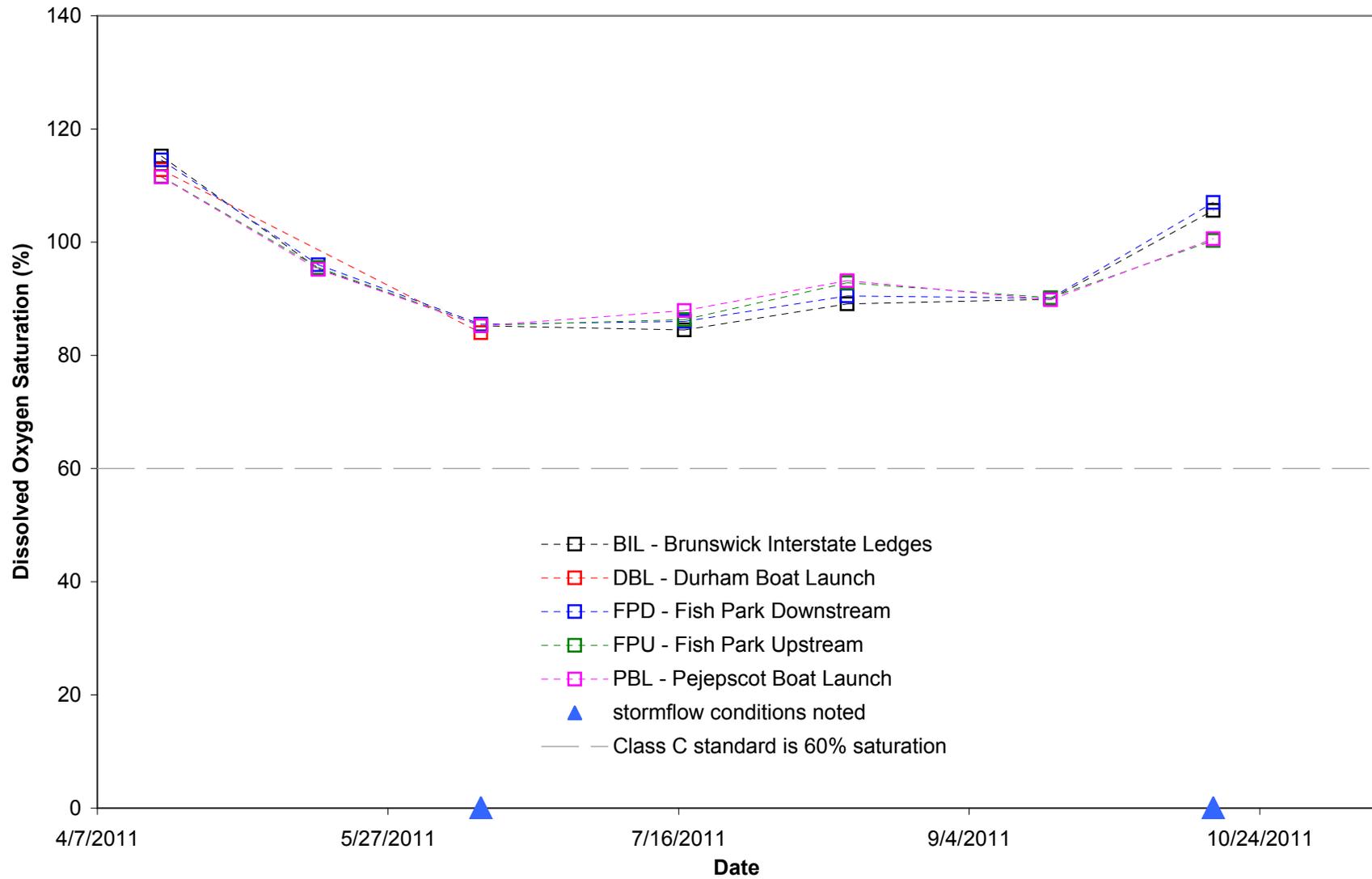


Figure 5-1-8. Dissolved oxygen % saturations at Friends of Merrymeeting Bay non-approved monitoring sites on the Androscoggin River for 2011.

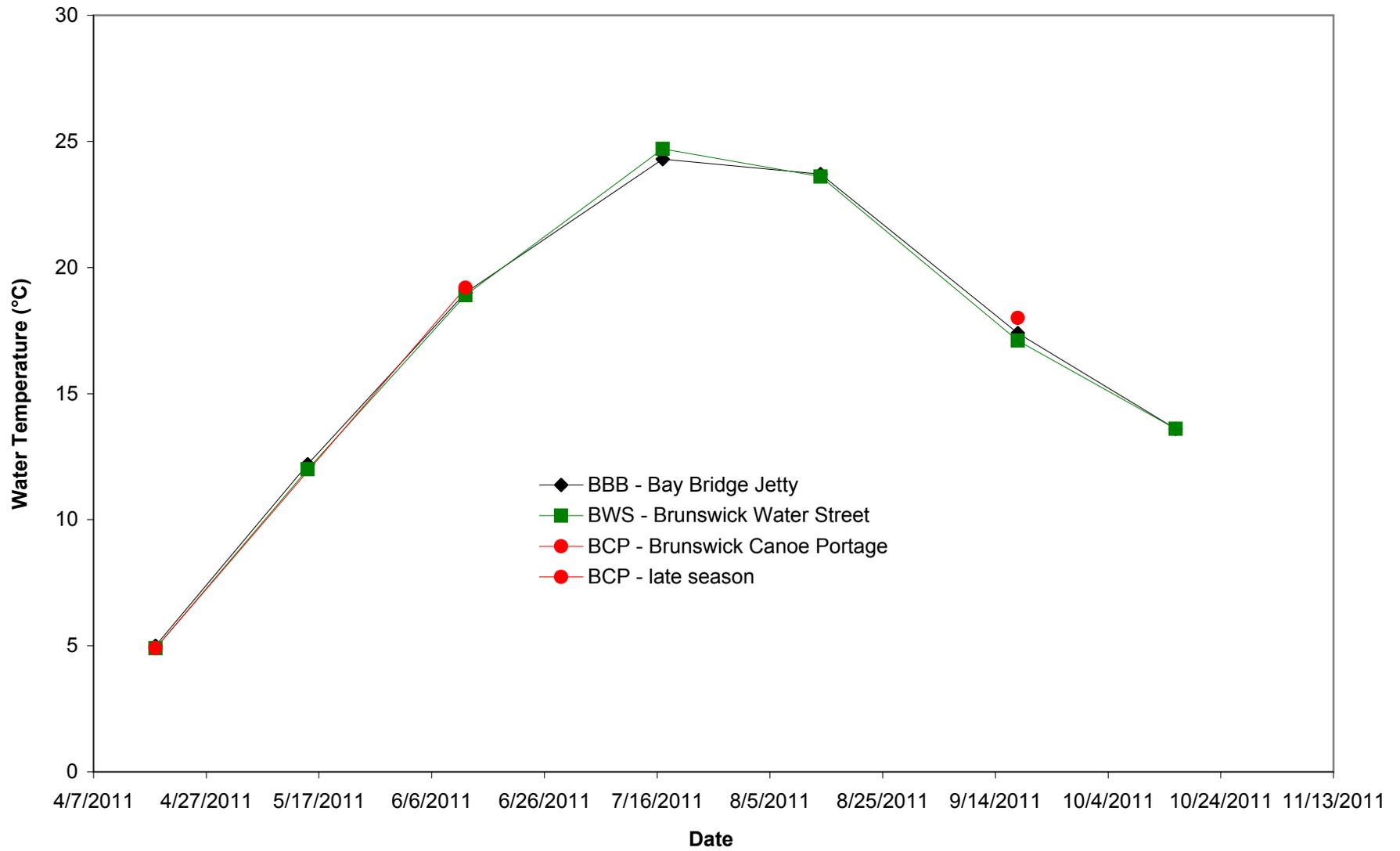


Figure 5-1-9. Water temperatures at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

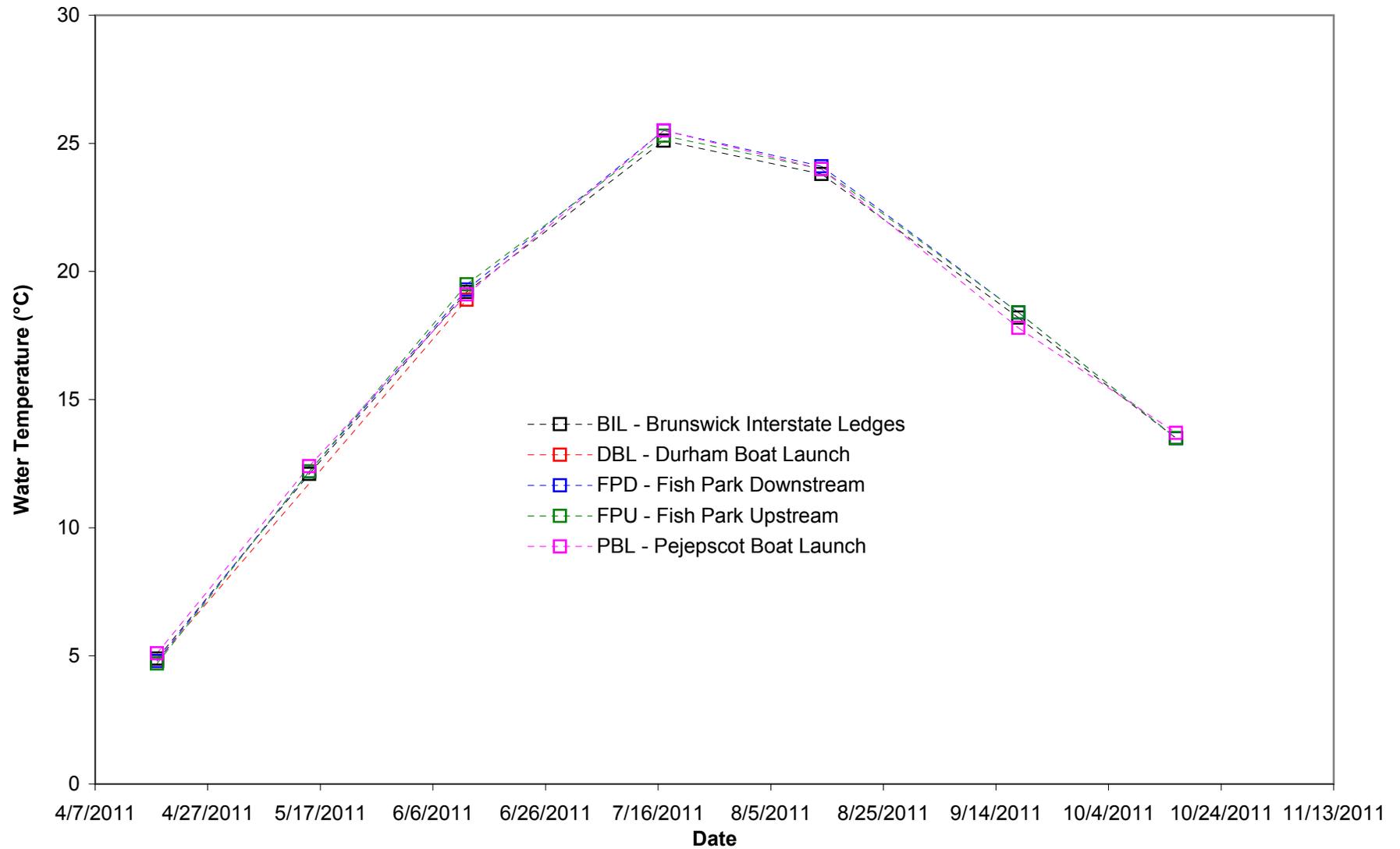


Figure 5-1-10. Water temperatures at Friends of Merrymeeting Bay non-approved monitoring sites on the Androscoggin River for 2011.

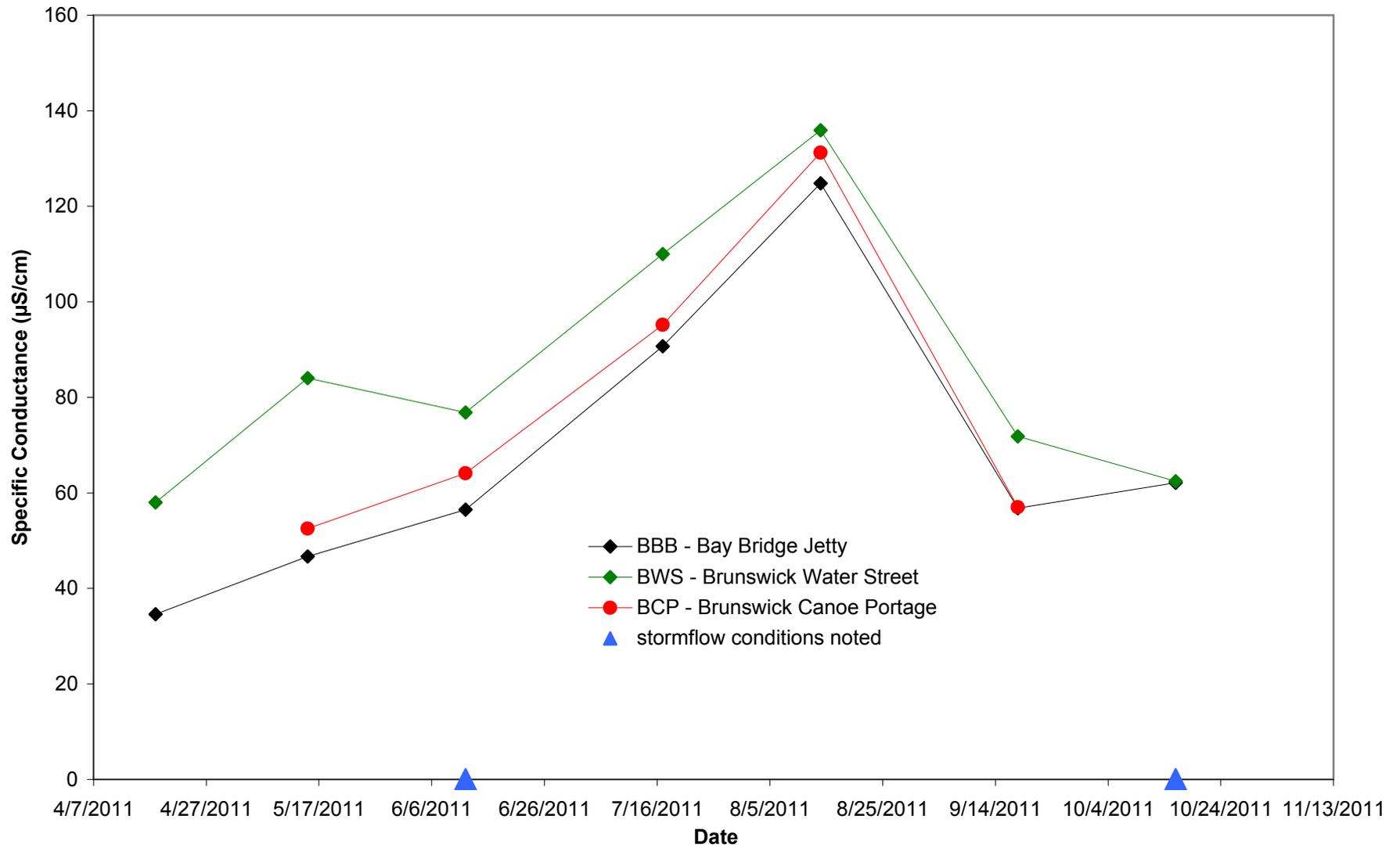


Figure 5-1-11. Specific conductance at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

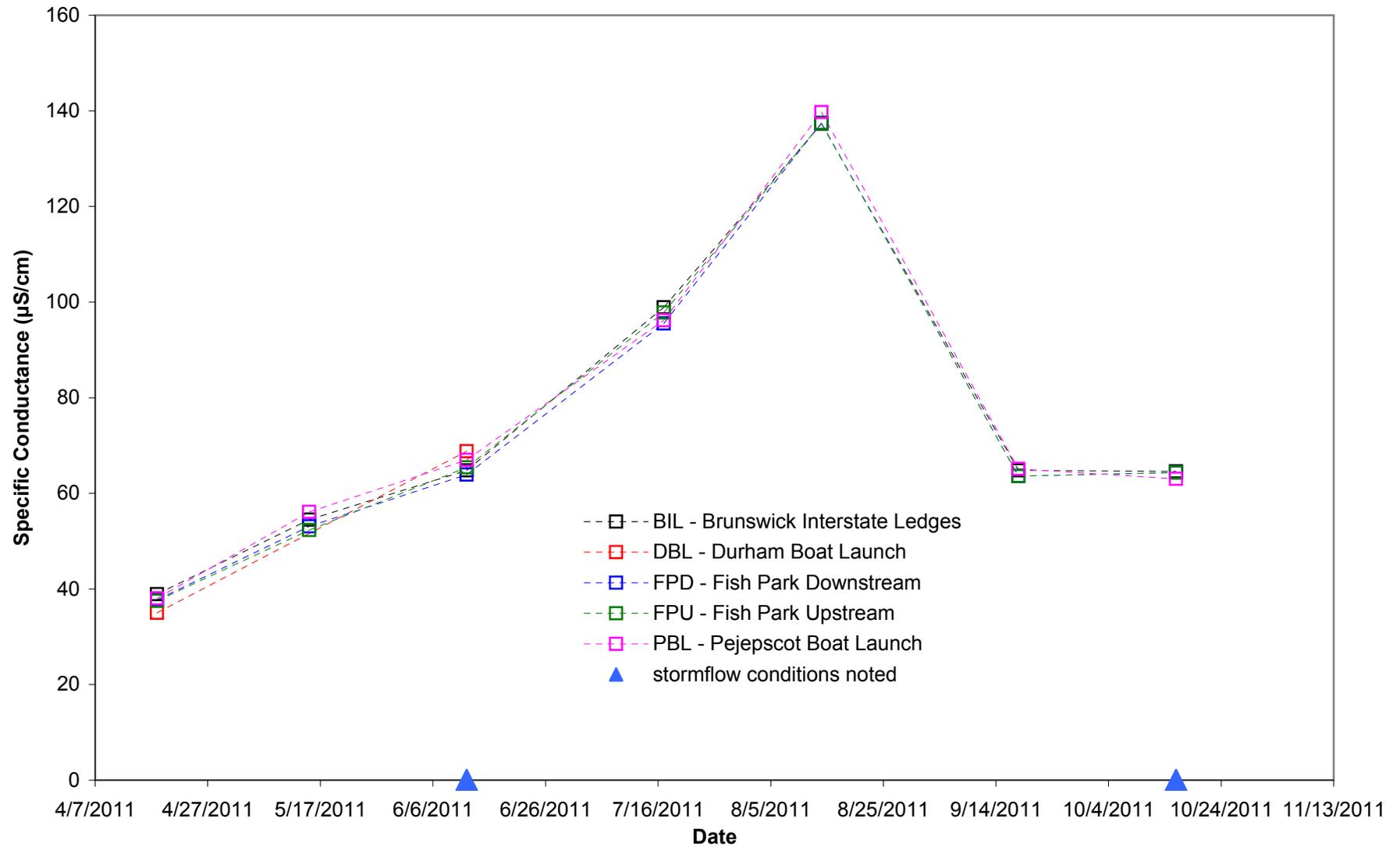


Figure 5-1-12. Specific conductance at Friends of Merrymeeting Bay non-approved monitoring sites on the Androscoggin River for 2011.

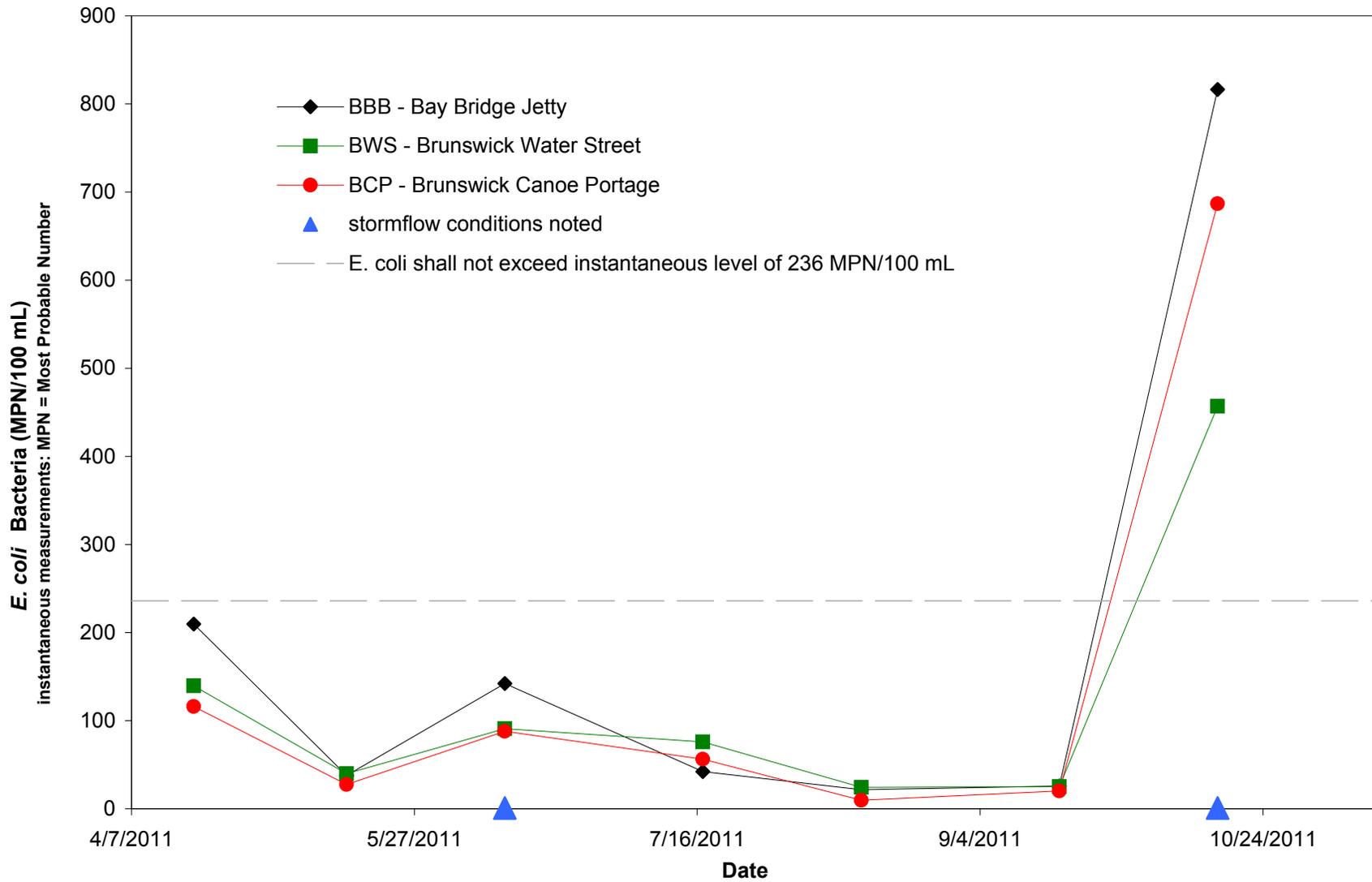


Figure 5-1-13. *E. coli* bacteria concentrations at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

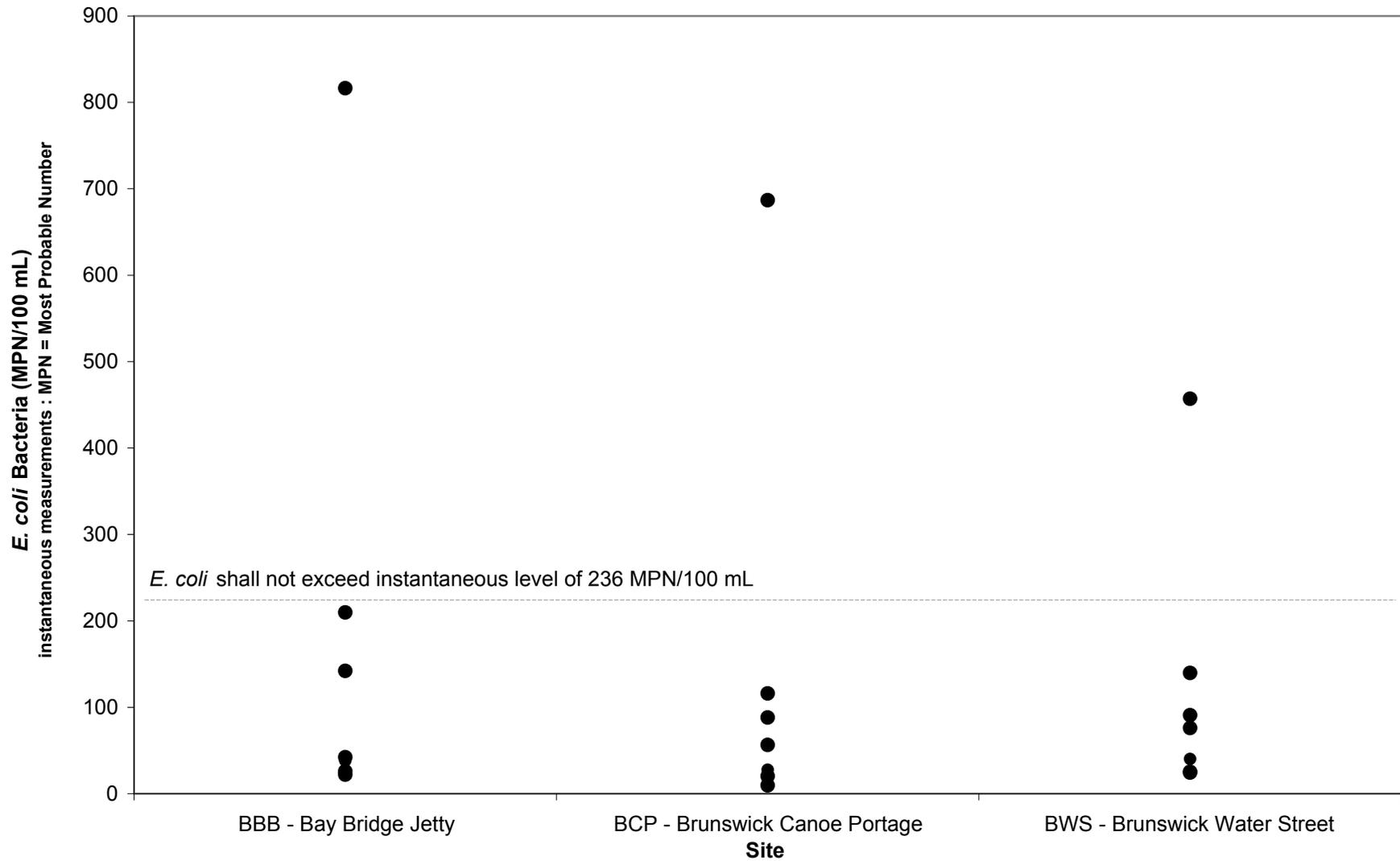


Figure 5-1-14. *E. coli* bacteria concentrations at Friends of Merrymeeting Bay approved monitoring sites on the Androscoggin River for 2011.

Appendix A-1. 2011 water quality data for "Approved" and "Non-Approved" sites. Non-Approved sites do not yet meet official VRMP sample location criteria and/or require further inspection and review.

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

** "N" = 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)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)
Androscoggin River - Friends of Merrymeeting Bay (Approved Sites)														
BBB -BAY BRIDGE JETTY	ANDROSCOGGIN RIVER-A231-VRMP	4/18/2011	7:20 AM	N			5	107.4	13.52	34.6				209.8
BBB	ANDROSCOGGIN RIVER-A231-VRMP	5/15/2011	7:40 AM	N			12.2	98.9	10.6	46.7				37.9
BBB	ANDROSCOGGIN RIVER-A231-VRMP	5/15/2011	7:40 AM	D										34.1
BBB	ANDROSCOGGIN RIVER-A231-VRMP	6/12/2011	7:55 AM	N			19	90.9	8.4	56.5				142.1
BBB	ANDROSCOGGIN RIVER-A231-VRMP	7/17/2011	7:00 AM	N			24.3	84.9	7.12	90.7				42.2
BBB	ANDROSCOGGIN RIVER-A231-VRMP	8/14/2011	7:50 AM	N			23.7	85.3	7.23	124.8				21.8
BBB	ANDROSCOGGIN RIVER-A231-VRMP	9/18/2011	7:50 AM	N			17.4	91.9	8.82	56.8				25.9
BBB	ANDROSCOGGIN RIVER-A231-VRMP	10/16/2011	9:20 AM	N			13.6	98.5	10.15	62.1				816.4
BCP - BRUNSWICK CANOE PORTAGE	ANDROSCOGGIN RIVER-A299BK-VR	4/18/2011	8:00 AM	N			4.9	115	15.3					116
BCP	ANDROSCOGGIN RIVER-A299BK-VR	5/15/2011	7:45 AM	N				97.8	10.68	52.5				27.5
BCP	ANDROSCOGGIN RIVER-A299BK-VR	6/12/2011	8:05 AM	N			19.2	82.8	7.96	64.1				88
BCP	ANDROSCOGGIN RIVER-A299BK-VR	7/17/2011	8:00 AM	N				86.4	7.2	95.2				56.3
BCP	ANDROSCOGGIN RIVER-A299BK-VR	8/13/2011	8:00 AM	N					11.48	131.2				9.6
BCP	ANDROSCOGGIN RIVER-A299BK-VR	8/13/2011	8:00 AM	D										5.2
BCP	ANDROSCOGGIN RIVER-A299BK-VR	9/18/2011	8:10 AM	N			18	90.9	8.62	57				20.3
BCP	ANDROSCOGGIN RIVER-A299BK-VR	10/16/2011	8:00 AM	N										686.7
BWS - BRUNSWICK WATER STREET	ANDROSCOGGIN RIVER-A281BK-VR	4/18/2011	8:00 AM	N			4.9	107.1	13.71	58				139.6
BWS	ANDROSCOGGIN RIVER-A281BK-VR	5/15/2011	7:05 AM	N			12	98.7	10.6	84				39.9
BWS	ANDROSCOGGIN RIVER-A281BK-VR	6/12/2011	7:20 AM	N			18.9	92	8.55	76.8				90.8
BWS	ANDROSCOGGIN RIVER-A281BK-VR	6/12/2011	7:20 AM	D										185
BWS	ANDROSCOGGIN RIVER-A281BK-VR	7/17/2011	7:30 AM	N			24.7	100.2	8.3	110				75.9
BWS	ANDROSCOGGIN RIVER-A281BK-VR	8/14/2011	7:00 AM	N			23.6	91	7.73	135.9				24.3
BWS	ANDROSCOGGIN RIVER-A281BK-VR	9/18/2011	7:15 AM	N			17.1	92.4	8.94	71.8				25.3
BWS	ANDROSCOGGIN RIVER-A281BK-VR	10/16/2011	8:50 AM	N			13.6	103.5	10.75	62.4				456.9

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)	** TSS (MG/L)	E Coli Bacteria (MPN/100ML)
Androscoggin River - Friends of Merrymeeting Bay (Non-approved Sites)														
BIL - BRUNSWICK INTERSTATE LEDGES	ANDROSCOGGIN RIVER-A24-FOMB	4/18/2011	8:00 AM	N			4.9	115.2	14.7	38.9				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	5/15/2011	7:55 AM	N			12.1	95.3	10.3	54.5				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	6/12/2011	8:05 AM	N			19.2	85.2	7.9	64.8				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	7/17/2011	7:55 AM	N			25.1	84.5	7	98.9				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	8/14/2011	8:00 AM	N			23.8	89.1	7.5	137.3				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	8/14/2011	8:00 AM	D			23.8	89.1	7.5	137.3				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	9/18/2011	8:15 AM	N			18.2	89.9	8.5	64.8				
BIL	ANDROSCOGGIN RIVER-A24-FOMB	10/16/2011	9:05 AM	N			13.5	105.6	11	64.6				
DBL - DURHAM BOAT LAUNCH	ANDROSCOGGIN RIVER-A158-FOMB	4/18/2011	7:00 AM	N			4.8	112.8	14.5	35				
DBL	ANDROSCOGGIN RIVER-A158-FOMB	4/18/2011	7:00 AM	D			4.8	112.8	14.5	35				
DBL	ANDROSCOGGIN RIVER-A158-FOMB	6/12/2011	7:00 AM	N			18.9	84	7.8	68.8				
FPU - FISH PARK UPSTREAM	ANDROSCOGGIN RIVER-A47-FOMB	4/18/2011	7:30 AM	N			4.7	111.6	14.4	37.5				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	5/15/2011	7:20 AM	N			12.2	95.5	10.2	52.3				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	6/12/2011	7:35 AM	N			19.5	85.3	7.7	65.4				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	6/12/2011	7:35 AM	D			19.2	85.3	7.7	65.4				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	7/17/2011	7:10 AM	N			25.3	86.3	7.1	97.8				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	7/17/2011	7:10 AM	D			25.3	86	7					
FPU	ANDROSCOGGIN RIVER-A47-FOMB	8/14/2011	7:05 AM	N			24	92.8	7.8	137.4				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	9/18/2011	7:45 AM	N			18.4	90.2	8.5	63.6				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	10/16/2011	8:35 AM	N			13.5	100.3	10.4	64.4				
FPU	ANDROSCOGGIN RIVER-A47-FOMB	10/16/2011	8:35 AM	D			13.5		10.4	64.4				
FPD - FISH PARK DOWNSTREAM	ANDROSCOGGIN RIVER-A45-FOMB	4/18/2011	7:45 AM	N			4.8	114.5	14.9	37.7				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	5/15/2011	7:30 AM	N			12.2	96	10.3	53.1				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	6/12/2011	7:45 AM	N			19.3	85.5	7.9	63.9				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	7/17/2011	7:25 AM	N			25.5	86	7	95.5				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	8/14/2011	7:20 AM	N			24.1	90.5	7.6	137.5				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	9/18/2011	7:55 AM	N			18.4	90.1	8.4	63.6				
FPD	ANDROSCOGGIN RIVER-A45-FOMB	10/16/2011	8:50 AM	N			13.5	107	11.2	64.3				

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)	Turbid- ity (NTU)	** TSS (MG/L)	E Coli Bacteria (MPN/ 100ML)
PBL - PEJEPSCOT BOAT LAUNCH	ANDROSCOGGIN RIVER-A71-FOMB	4/18/2011	6:30 AM	N			5.1	111.5	14.2	38				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	5/15/2011	6:50 AM	N			12.4	95.2	10.2	56.1				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	5/15/2011	6:50 AM	D			12.4	95.2	10.2	54.5				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	6/12/2011	6:25 AM	N			19.1	85.2	7.9	67				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	7/17/2011	6:40 AM	N			25.5	87.9	7.2	96.2				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	8/14/2011	6:45 AM	N			24	93.2	7.9	139.7				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	9/18/2011	7:20 AM	N			17.8	89.8	8.5	65.1				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	9/18/2011	7:20 AM	D			17.8			65.1				
PBL	ANDROSCOGGIN RIVER-A71-FOMB	10/16/2011	8:10 AM	N			13.7	100.6	10.4	63				

Appendix A-2. 2011 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 (° C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Tide Stage	Water Appearance	Comments
Androscoggin River - Friends of Merrymeeting Bay (Approved Sites)															
BBB - BAY BRIDGE JETTY	ANDROSCOGGIN RIV	4/18/2011	7:20 AM	N		HIGH	3.5	WADING	PARTLY CLOUDY	BREEZE	PARTLY CLOUDY	RUN		DARKLY STAINED	VERY FAST CURRENT, VERY HIGH WATER. WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	5/15/2011	7:40 AM	N	BASE FLOW	MEDIU M	11.4	WADING	CLOUDY, LIGHT RAIN	CALM	CLOUDY, HEAVY RAIN	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	5/15/2011	7:40 AM	D				WADING							WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	6/12/2011	7:55 AM	N		HIGH	15	WADING	HEAVY RAIN, SHOWER		CLOUDY, LIGHT RAIN, SHOWERS	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	7/17/2011	7:00 AM	N			24.7	WADING				RIFFLE		DARKLY STAINED	WADEABLE/MID-DEPTH TIME SAMPLED WAS NOT WRITTEN DOWN, SO ESTIMATE WAS DERIVED BY LOOKING AT START AND END TIME OF SAMPLING. DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	8/14/2011	7:50 AM	N	BASE FLOW	MEDIU M	20.9	WADING	CLOUDY, PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	9/18/2011	7:50 AM	N		HIGH	14.4	WADING	PARTLY CLOUDY	CALM	PARTLY CLOUDY	RUN		DARKLY STAINED	LOTS OF FISH JUMPING. WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BBB	ANDROSCOGGIN RIV	10/16/2011	9:20 AM	N	BASE FLOW	MEDIU M	13.8	WADING		STRONG WIND	CLEAR	RUN		DARKLY STAINED	VERY WINDY - DANGEROUS CURRENTS. VERY HIGH TIDE. WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BCP - BRUNSWICK CANOE PORTAGE	ANDROSCOGGIN RIV	4/18/2011	8:00 AM	N			5.3	BANK	CLEAR	CALM	CLEAR, HEAVY RAIN				WADEABLE/1.5 FT BELOW SURFACE DID NOT RECORD ANY OBSERVATIONAL DATA.
BCP	ANDROSCOGGIN RIV	5/15/2011	7:45 AM	N	BASE FLOW	MEDIU M	12	WADING	MOSTLY CLOUDY, SHOWER S	CALM	CLOUDY, SHOWERS	RUN		MEDIUM STAINED	WATER SAMPLING APPARATUS SNAPPED @ 1.5M-RETRIEVAL SUCCESSFUL, BUT UNSURE OF SAMPLE NON-WADEABLE/3 FT BELOW SURFACE, WATER SAMPLING APPARATUS SNAPPED @ 1.5M-RETRIEVAL SUCCESSFUL, BUT UNSURE OF SAMPLE NON-WADEABLE/3 FT BELOW SURFACE; WATER TEMPERATURE NOT RECORDED
BCP	ANDROSCOGGIN RIV	6/12/2011	8:05 AM	N	STORM FLOW	MEDIU M	14.8	WADING	HEAVY RAIN, SHOWER	CALM	LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN		MEDIUM STAINED	HEAVY RAIN PRIOR TO SAMPLING WADEABLE/MID-DEPTH
BCP	ANDROSCOGGIN RIV	7/17/2011	8:00 AM	N	BASE FLOW	MEDIU M		BOAT	CLEAR	CALM	CLEAR	RUN		DARKLY STAINED	SAMPLING DONE FROM BOAT-POISON IVY WAS THICK. NON-WADEABLE/3 FT BELOW SURFACE, SAMPLING DONE FROM BOAT-POISON IVY WAS THICK. NON-WADEABLE/3 FT BELOW SURFACE; WATER TEMPERATURE NOT RECORDED

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	Comments
BCP	ANDROSCOGGIN RIV	8/13/2011	8:00 AM	N	BASE FLOW	LOW	22.3	WADING	CLEAR	CALM	CLEAR	RUN		DARKLY STAINED	BOAT PARKED ALONG DOCK AND SLICK OF OILY BLUE TRAILING DOWNSTREAM. WADEABLE/1.5 FT BELOW SURFACE BOTH NON-WADEABLE (3 FT BELOW SURFACE) AND WADEABLE (1.5 FT BELOW SURFACE) CIRCLED ON FIELD SHEET. WATER TEMPERATURE NOT RECORDED; D.O. SATURATION OUTSIDE VALIDATION RANGE (134.7); BOAT PARKED ALONG DOCK AND SLICK OF OILY BLUE TRAILING DOWNSTREAM. WADEABLE/1.5 FT BELOW SURFACE; BOTH NON-WADEABLE (3 FT BELOW SURFACE) AND WADEABLE (1.5 FT BELOW SURFACE)
BCP	ANDROSCOGGIN RIV	8/13/2011	8:00 AM	D				WADING							BOAT PARKED ALONG DOCK AND SLICK OF OILY BLUE TRAILING DOWNSTREAM. WADEABLE/1.5 FT BELOW SURFACE BOTH NON-WADEABLE (3 FT BELOW SURFACE) AND WADEABLE (1.5 FT BELOW SURFACE) CIRCLED ON FIELD SHEET.
BCP	ANDROSCOGGIN RIV	9/18/2011	8:10 AM	N		HIGH	15.9	BANK	PARTLY CLOUDY	CALM	PARTLY CLOUDY	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH
BCP	ANDROSCOGGIN RIV	10/16/2011	8:00 AM	N	STORM FLOW	HIGH	13.8	BRIDGE	CLEAR	BREEZE	CLEAR, CLOUDY, SHOWERS	RUN		DARKLY STAINED	WAS NOT ABLE TO TEST FROM ROCKS-TESTED FROM SWINGING BRIDGE. NON-WADEABLE/3 FT BELOW SURFACE
BWS - BRUNSWICK WATER STREET	ANDROSCOGGIN RIV	4/18/2011	8:00 AM	N		HIGH	3.5	WADING	PARTLY CLOUDY	BREEZE	PARTLY CLOUDY	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	5/15/2011	7:05 AM	N	BASE FLOW	MEDIUM	11.6	WADING	CLOUDY, LIGHT RAIN	CALM	CLOUDY, HEAVY RAIN	RUN		DARKLY STAINED	WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	6/12/2011	7:20 AM	N		HIGH	14.5	WADING	HEAVY RAIN, SHOWER		CLOUDY, LIGHT RAIN, SHOWERS	RUN		DARKLY STAINED	D.O. TITRATION DUPLICATE=8.4 WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	6/12/2011	7:20 AM	D				WADING							D.O. TITRATION DUPLICATE=8.4 WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	7/17/2011	7:30 AM	N			25	WADING				RIFFLE		DARKLY STAINED	WADEABLE/MID-DEPTH TIME SAMPLED WAS NOT WRITTEN DOWN, SO ESTIMATE WAS DERIVED BY LOOKING AT START AND END TIME OF SAMPLING. DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	8/14/2011	7:00 AM	N	BASE FLOW	MEDIUM	20.9	WADING	CLOUDY, PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY	RUN		DARKLY STAINED	D.O. TITRATION DUPLICATE=7.8 MG/L WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	9/18/2011	7:15 AM	N		HIGH	14.6	WADING	PARTLY CLOUDY	CALM	PARTLY CLOUDY	RUN		DARKLY STAINED	D.O. DUPLICATE TITRATION=8.8 WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE
BWS	ANDROSCOGGIN RIV	10/16/2011	8:50 AM	N	BASE FLOW	MEDIUM	13.8	WADING		STRONG WIND	CLEAR	RUN		DARKLY STAINED	D.O. DUPLICATE TITRATION=10.8 MG/L WADEABLE/MID-DEPTH DID NOT COMPLETE CHAIN OF CUSTODY FOR LAB SAMPLE

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	Comments
Androscoggin River - Friends of Merrymeeting Bay (Non-approved Sites)															
BIL - BRUNSWICK INTERSTATE LEDGES	ANDROSCOGGIN RIV	4/18/2011	8:00 AM	N			6.5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, CLOUDY, HEAVY RAIN, PARTLY CLOUDY				D.O. DUPLICATE TITRATION=13.4 (MG/L)- SHALLOWER THAN PROBE NON-WADEABLE/MID-DEPTH DID NOT RECORD ANY OF THE OBSERATIONAL DATA.
BIL	ANDROSCOGGIN RIV	5/15/2011	7:55 AM	N			10	BANK	CLOUDY		CLEAR, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	6/12/2011	8:05 AM	N			12	BANK	MOSTLY CLOUDY, SHOWERS	CALM	CLOUDY, LIGHT RAIN				NON-WADEABLE/MID-DEPTH DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	7/17/2011	7:55 AM	N			22	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	8/14/2011	8:00 AM	N				BANK	PARTLY CLOUDY		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	8/14/2011	8:00 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	9/18/2011	8:15 AM	N			13	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
BIL	ANDROSCOGGIN RIV	10/16/2011	9:05 AM	N			11.5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
DBL - DURHAM BOAT LAUNCH	ANDROSCOGGIN RIV	4/18/2011	7:00 AM	N			5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, CLOUDY, HEAVY RAIN, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERATIONAL DATA.
DBL	ANDROSCOGGIN RIV	4/18/2011	7:00 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERATIONAL DATA.
DBL	ANDROSCOGGIN RIV	6/12/2011	7:00 AM	N			10	BANK	MOSTLY CLOUDY, SHOWER	CALM	CLOUDY, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU - FISH PARK UPSTREAM	ANDROSCOGGIN RIV	4/18/2011	7:30 AM	N			6.5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, CLOUDY, HEAVY RAIN, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERATIONAL DATA.
FPU	ANDROSCOGGIN RIV	5/15/2011	7:20 AM	N			10	BANK	CLOUDY		CLEAR, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	6/12/2011	7:35 AM	N			10.8	BANK	MOSTLY CLOUDY, SHOWER	CALM	CLOUDY, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	6/12/2011	7:35 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	7/17/2011	7:10 AM	N			18	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	7/17/2011	7:10 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	8/14/2011	7:05 AM	N				BANK	PARTLY CLOUDY		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	9/18/2011	7:45 AM	N			9	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	10/16/2011	8:35 AM	N			11	BANK	PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPU	ANDROSCOGGIN RIV	10/16/2011	8:35 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD - FISH PARK DOWN STREAM	ANDROSCOGGIN RIV	4/18/2011	7:45 AM	N			6.5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, CLOUDY, HEAVY RAIN, PARTLY CLOUDY				NON-WADEABLE/MID-DEPTH DID NOT RECORD ANY OF THE OBSERATIONAL 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	Comments
FPD	ANDROSCOGGIN RIV	5/15/2011	7:30 AM	N			10	BANK	CLOUDY		CLEAR, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD	ANDROSCOGGIN RIV	6/12/2011	7:45 AM	N			10.8	BANK	MOSTLY CLOUDY, SHOWER	CALM	CLOUDY, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD	ANDROSCOGGIN RIV	7/17/2011	7:25 AM	N			19	BANK	CLEAR		CLEAR				NON-WADEABLE/MID-DEPTH DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD	ANDROSCOGGIN RIV	8/14/2011	7:20 AM	N				BANK	PARTLY CLOUDY		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD	ANDROSCOGGIN RIV	9/18/2011	7:55 AM	N			9	BANK	CLEAR		CLEAR				NON-WADEABLE/MID-DEPTH DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
FPD	ANDROSCOGGIN RIV	10/16/2011	8:50 AM	N			11.1	BANK	PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL - PEJEPSCOT BOAT LAUNCH	ANDROSCOGGIN RIV	4/18/2011	6:30 AM	N			4	BANK	PARTLY CLOUDY	BREEZE	CLEAR, CLOUDY, HEAVY RAIN, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	5/15/2011	6:50 AM	N			10	BANK	CLOUDY		CLEAR, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	5/15/2011	6:50 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	6/12/2011	6:25 AM	N			10.8	BANK	MOSTLY CLOUDY, SHOWER	CALM	CLOUDY, LIGHT RAIN				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	7/17/2011	6:40 AM	N			17.5	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	8/14/2011	6:45 AM	N				BANK	PARTLY CLOUDY		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	9/18/2011	7:20 AM	N			9	BANK	CLEAR		CLEAR				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	9/18/2011	7:20 AM	D				BANK							NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.
PBL	ANDROSCOGGIN RIV	10/16/2011	8:10 AM	N			11.5	BANK	PARTLY CLOUDY	BREEZE	CLEAR, PARTLY CLOUDY				NON-WADEABLE/3 FT BELOW SURFACE DID NOT RECORD ANY OF THE OBSERVATIONAL DATA.