Section 5-7
Prestile Stream & Tributaries (Central Aroostook SWCD)

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

Overview

The Central Aroostook Soil and Water Conservation District and Storm Watchers volunteers began monitoring the Prestile Stream and tributaries in 2010. Prestile Stream originates from Christina Reservoir - a 303 acre manmade impoundment in Fort Fairfield. From Christina Reservoir, Prestile Stream flows south through Easton, Presque Isle, Westfield and Mars Hill where it is an old silted-in reservoir. The stream to Mars Hill is considered to be the upper watershed. From the Mars Hill dam, it flows through the towns of Blaine and Bridgewater, into New Brunswick and eventually the St. John River. Significant tributaries include Getchell Brook, Elliot Brook, Williams Brook, Clark Brook, Allen Brook, Frost Brook, Pretty Brook, Rideout Brook, Rocky Brook, Three Brooks, and Whitney Brook. The total watershed area is approximately 208 square miles. Land use in the watershed consists primarily of forest, agriculture (primarily potato cropland) and low-density residential development. With the short growing season, much of the cropland is left open from October to early May.[1]

The statutory water class of Prestile Stream from the headwaters to the Mars Hill dam is Class A. From the Mars Hill dam to the Canadian border, it is assigned Class B. The Upper Prestile Stream fails to attain classification and is listed on the Maine DEP 2010 Integrated Water Quality Report in Category 4-A: Rivers and Streams with Impaired Use other than mercury, TMDL Completed. The causes of impairment are poor quality of the aquatic life (macroinvertebrates), seasonal low dissolved oxygen, and nutrient/eutrophication-biological indicators. An EPA approved TMDL was completed 5/10/2010. Minor tributaries to Prestile Stream and Prestile Stream above the dam in Mars Hill, as well as Prestile Stream and tributaries entering below the dam in Mars Hill are listed in Category 5-D: Rivers and Streams Impaired by Legacy Pollutants. The cause of impairment is legacy DDT.

In addition to monitoring and completion of the TMDL, several other studies and surveys have been completed. A watershed survey of Allen and Frost Brooks was completed in 2005, and a survey of Christina Reservoir watershed was completed in 2009 by Central Aroostook SWCD. The Central Aroostook SWCD plans to continue surveying subwatersheds throughout the Prestile Stream watershed. The "Upper Prestile Stream Watershed-Based Management Plan" was done in 2009.[1]

The purpose of monitoring Prestile Stream and tributaries was to document erosion problems and the associated increases in turbidity, and to prioritize sub-watershed surveys and conservation work. Erosion problems were documented by sampling significant storm events throughout the year for turbidity and total suspended solids and then relating these measurements to estimates of

[1] Upper Prestile Stream Watershed-Based Management Plan, Prepared by FB Environmental, January 2009.

stream stage. Sampling was designed to provide spatial information about the watershed by having volunteers monitor throughout the watershed during or after given storms.

Methods

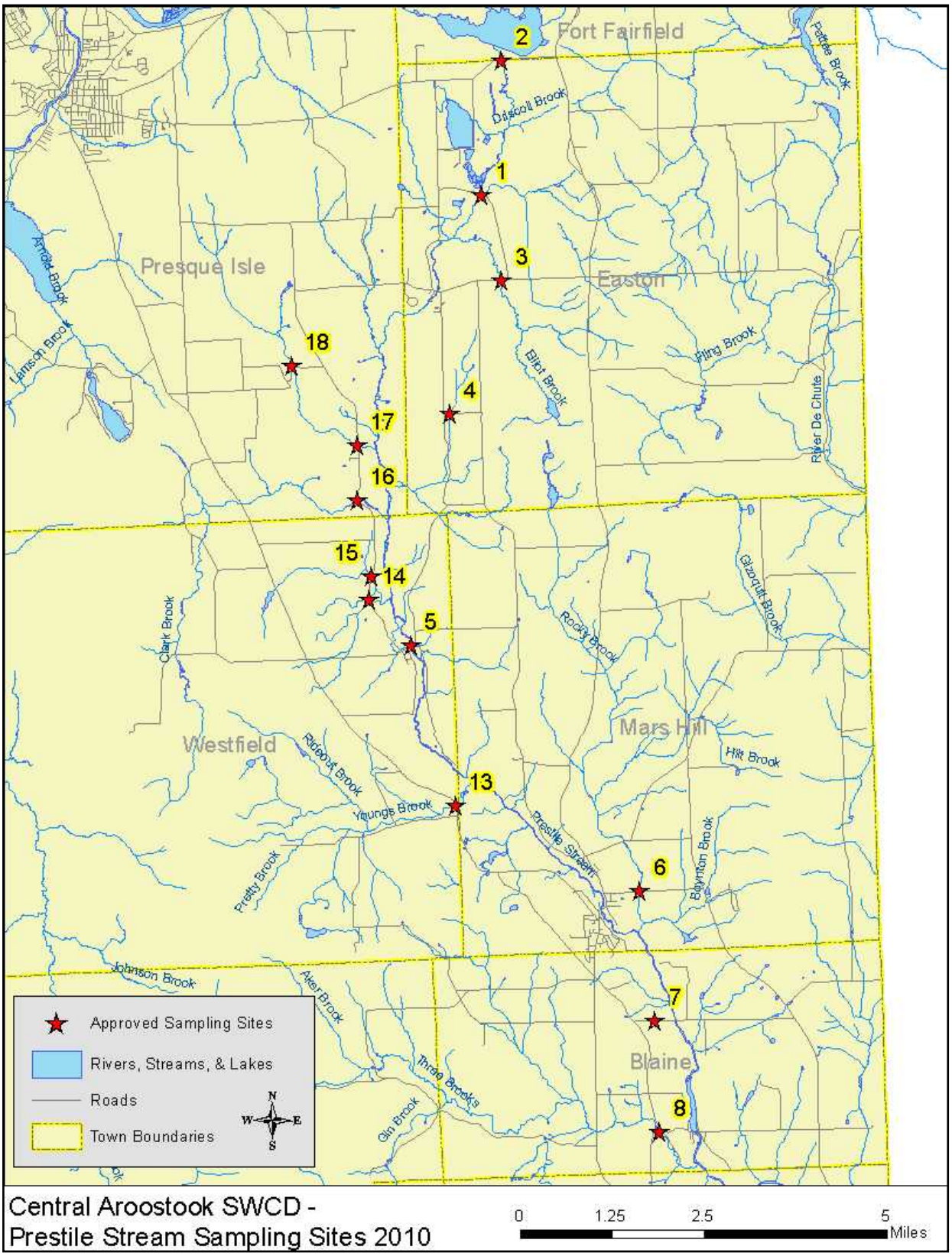
Central Aroostook SWCD and volunteers sampled Prestile Stream and tributaries at fourteen sites. The sites included four sites on the main stem and nine sites on eight tributaries. All of the sites are VRMP approved sites. Table 1 provides a list of the sites and Figure 1 is a map of sampling stations.

Table 1: Sampling Sites

VRMP Site ID	Organization Site Code	Sample Location	Class
Allen Brook-JPRAB06-VRMP	Site 15	Egypt Road-Westfield	A
Clark Brook-JPRCL05-VRMP	Site 16	Egypt Road-Presque Isle	A
Elliot Brook-JPREL11-VRMP	Site 3	Center Road-Easton	A
Frost Brook-JPRFB06-VRMP	Site 14	Egypt Road-Westfield	A
Getchell Brook-JPRGL18-VRMP	Site 4	West Ridge Rd-Easton	A
Prestile Stream-JPR124-VRMP	Site 5	Burleigh Rd.-Westfield	A
Prestile Stream-JPR39-VRMP	Site 7	Pierce Rd-Blaine	B
Prestile Stream-JPR43-VRMP	Site 1	Richardson Road-Easton	A
Prestile Stream-JPR62-VRMP	Site 2	Conant Road-Easton	A
Pretty Brook-JPRYG05-VRMP	Site 13	Route 1- Mars Hill	A
Rocky Brook-JPRRB06-VRMP	Site 6	Boyton Rd-Mars Hill	B
Three Brooks-JPRTB52-VRMP	Site 8	Old Houlton Rd-Blaine	B
Williams Brook-JPRWB03-VRMP	Site 17-Lower	Egypt Rd-Presque Isle	A
Williams Brook-JPRWB19-VRMP	Site 18-Upper	Phair Jct-Presque Isle	A

Monitoring was conducted for five sample events – one in the summer, two in fall and two in winter (over a 2 day period). The Project Manager (Ben Lynch-CASWCD) was responsible for tracking storm events and determining when to sample. The idea was to target larger storms - storms anticipated to produce approximately 1" of rain in a 24 hour period. At each site, the monitors obtained water samples using either an extension pole, ARI sampler or DEP "bacteria sampler" for turbidity analysis. Samples for total suspended sediments (TSS) were also collected 1 time at five sites. An estimate of stage was made by measuring from some mark or point on the bridge to the water. This provided an estimate of stage conditions (low, medium or high and storm vs. baseflow). The turbidity samples were analyzed by Central Aroostook SWCD staff using a LaMotte 2020e turbidity meter. TSS samples were sent to the State of Maine HETL Lab for analysis.

Figure 1: Map of Sampling Sites



Results

Turbidity

Turbidity was measured 4-5 times during five sampling events at each of the fourteen sampling sites. The sampling events were on 7/14/2010, 9/30/2010, 10/2/2010, 12/13/2010 and 12/14/2010. Turbidity is a measure of the clarity of the water. It is a relatively easy and inexpensive measurement to make. In the lab, it is measured using a turbidity meter which measures the optical property of the sample due to suspended sediments. Maine has no statutory criteria for turbidity, but streams are supposed to support native wildlife, including native fishes. The impacts of turbidity are measured by a combination of intensity (measured in NTU) and duration (hours, days or weeks). Negative impacts on aquatic organisms are expected when the intensity is greater than 10 NTU and the conditions last for weeks, or if the intensity is higher than about 100 NTU for many hours at a time. Table 2 provides a summary of turbidity for each site including minimum, maximum and average values.

Table 2: Turbidity (NTU) Summary

Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
Allen Brook-Site 15	Y	4	1.3	33.5	10.3
Clark Brook-Site 16	Y	4	1.5	57.5	18.1
Eliott Brook-Site 3	Y	4	0.3	39.7	10.8
Frost Brook-Site 14	Y	4	0.5	38.4	11.4
Getchell Brook-Site 4	Y	5	0.2	50.5	13.5
Prestile Stream-Site 5	Y	5	1.2	65.6	25.5
Prestile Stream-Site 7	Y	5	1.4	88.9	33.5
Prestile Stream-Site 1	Y	5	3.2	36.4	11.4
Prestile Stream-Site 2	Y	5	1.6	12.5	6.8
Pretty Brook-Site 13	Y	5	1.5	26.4	20.2
Rocky Brook-Site 6	Y	5	0.9	72.8	24.5
Three Brooks-Site 8	Y	5	1.3	62.4	18.7
Williams Brook-Site 17	Y	4	0.6	82.8	22.7
Williams Brook-Site 18	Y	5	0.8	49.9	13.8

The first sampling event was in the summer (7/14/2010). Turbidity at all the sites ranged from 1.1-7.5 NTU. Flow conditions were reported as a range of conditions from baseflow-low stage to stormflow-high stage. Overall turbidity was low to low-moderate. The highest values were at the four Prestile Stream sites and ranged from 4.0 at Prestile Stream-Site 1 to 7.5 at Prestile Stream-Site 2.

The second sampling event was in the fall (9/30/2010). Turbidity at all the sites ranged from 0.2-12.5 NTU. Flow conditions were reported at most of the sites as baseflow- medium or high stage. Three sites reported stormflow as either medium or high stage. The highest values were at Prestile-Site 1 (4.0 NTU) and Prestile-Site 2 (12.5 NTU). All of the rest of the sites were 1.5 NTU or below, which are considered low.

The third sampling event was in the fall (10/2/2010). Turbidity at all the sites ranged from 0.4-12.8 NTU. All the samples were collected between 7:00-9:00 AM. Flow conditions were reported at all sites as stormflow and either medium or high stage. The highest values were at Clark Brook (10.7 NTU), Prestile Stream-Site 5 (12.8 NTU), Prestile Stream-Site 7 (10.6 NTU), Prestile Stream-Site 2 (9.7 NTU), and Three Brooks (7.6 NTU). These values are considered to be moderate. The rest of the sites were 6.0 NTU or lower.

The fourth sampling event was in the winter (12/13/2010). Turbidity was sampled at 12 sites and ranged from 2.68 NTU-88.9 NTU. All the samples were collected between 3:00-6:00 PM. Flow conditions were reported as stormflow and high stage at all the sites. The lowest values occurred at Prestile Stream-Site 1 (9.23 NTU) and Prestile Stream-Site 2 (2.68 NTU). All of the rest of the sites were very high. The highest value occurred at Prestile Stream-Site 7 (88.9 NTU), followed by Rocky Brook (72.8 NTU), Prestile Stream-Site 5 (65.6 NTU), Pretty Brook (65 NTU), Three Brooks (62.4 NTU), Clark Brook (57.5 NTU), Getchell Brook (50.5 NTU), Williams Brook-Site 18 (49.9 NTU), Frost Brook (38.4 NTU) and Allen Brook (33.5 NTU).

The fifth sampling event occurred on 12/14/2010. Turbidity was sampled at 11 sites and ranged from 1.62 Ntu-82.6 NTU. All the samples were collected between 8:30-11:30 AM. Flow conditions were reported as stormflow and high stage for all sites. The lowest value was at Prestile Stream-Site 2 (1.62 NTU). Moderate values occurred at Williams Brook-Site 18 (13.4 NTU) and Getchell Brook (14.5 NTU). The rest of the sites were high to very high: Three Brooks (21 NTU), Pretty Brook (26.4 NTU), Prestile-Site 1 (36.4), Eliott Brook (39.7 NTU), Prestile Stream-Site 5 (43.2 NTU), Rocky Brook (43.8 NTU), Prestile Stream-Site 7 (61.5 NTU) and Williams Brook-Site 17 (82.6 NTU).

With respect to the results so far, our interpretations are preliminary for this on-going study. The summer event had the lowest values and winter events the highest. Field cover is generally good in the summer, while fields are typically bare in the early spring and winter. Bare fields are possibly the most important source of turbidity. During the first thaws of late winter and early spring, salt sand washing off roads has been observed to cause turbidity events in local streams. Unvegetated or eroding roadside ditches are also important sources of waterborne sediment. It appears that Prestile-Site 5 and Prestile-Site 7 generally had the highest values over the span of sampling events. All of the sites with the exception of Prestile-Site 2 had high values during the 12/13/11 and 12/14/11 sampling events. Further statistical analysis of the data could perhaps discern differences between the sites.

Total Suspended Solids (TSS)

Total Suspended Solids was measured 1 time at six of the sampling sites. TSS is a measure of the weight of suspended particles and is analyzed by filtering water samples and weighing the filtrate. Table 3 provides the TSS values.

Table 3- Total Suspended Solids (MG/L)

Site	Approved Site	# of Samples	Minimum Value	Maximum Value	Average Value
Eliott Brook-Site 3	Y	1	11	11	11
Prestile Stream-Site 5	Y	1	30	30	30
Prestile Stream-Site 7	Y	1	120	120	120
Prestile Stream-Site 1	Y	1	8.4	8.4	8.4
Prestile Stream-Site 2	Y	1	4	4	4
Williams Brook-Site 17	Y	1	41	41	41

Not much can be concluded about the TSS values because there were limited samples and the samples were done on different dates. Small particles such as clay generally have the greatest impact on turbidity, while large particles such as sand often have a big impact on total suspended solids (a measure of the weight of the suspended particles). Organic particles are often an important source of turbidity, but not of TSS. Poor correlation between turbidity in NTU and TSS is probably due to different sources and different types of suspended particles and their different weights and optical properties. For instance, road salt sand can be an important source of turbidity in the late winter or spring. Plankton in reservoirs can be an important source of summer time turbidity for outlet streams. And bare agricultural fields in the fall or winter can be important in NPS pollution for late season rain storms.

Discussion and Recommendations

There are numerous sources of pollution and other stresses to the Prestile Stream and tributaries' sites monitored by the Central Aroostook SWCD and Storm Watch volunteers that could potentially have an impact on water quality. Some of those sources of pollution and stress may include:

- Nonpoint source pollution (e.g., eroded soil, fertilizers, pesticides, heavy metals, petroleum residues, road salt, sewage systems, 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:

- Continue storm event monitoring at all stations to further characterize erosion effects in the watershed.
- Collect total suspended sediment samples at at least 2 sites so that a regression equation of turbidity and TSS can be developed. The same sites should be done for each sampling event and a smaller and larger stream should be chosen.

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)	Turbid. (NTU)	TSS (MG/L)	E Coli Bacteria (MPN/100 ML)
Prestile Stream & Tributaries -Central Aroostook SWCD (Approved Sites)													
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	7/14/2010	4:00 PM	N							1.64		
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	9/30/2010	12:32 PM	N							1.3		
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	10/2/2010	8:15 AM	N							4.66		
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	12/13/2010	3:18 PM	N							33.5		
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	12/13/2010	3:18 PM	D							32.5		
SITE 16	CLARK BROOK - JPRCL05 - VRMP	7/14/2010	3:45 PM	N							2.72		
SITE 16	CLARK BROOK - JPRCL05 - VRMP	9/30/2010	12:40 PM	N							1.52		
SITE 16	CLARK BROOK - JPRCL05 - VRMP	10/2/2010	8:00 AM	N							10.68		
SITE 16	CLARK BROOK - JPRCL05 - VRMP	12/13/2010	3:04 PM	N							57.5		
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	7/14/2010	8:00 AM	N							1.58		
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	7/14/2010	8:00 AM	D							2.2		
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	9/30/2010	10:20 AM	N							0.32		
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	10/2/2010	7:00 AM	N							1.66		
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	12/14/2010	8:00 AM	N							39.7	11	
SITE 14	FROST BROOK - JPRFB06 - VRMP	7/14/2010	4:10 PM	N							3.01		
SITE 14	FROST BROOK - JPRFB06 - VRMP	9/30/2010	12:25 PM	N							0.47		
SITE 14	FROST BROOK - JPRFB06 - VRMP	10/2/2010	8:30 AM	N							3.69		
SITE 14	FROST BROOK - JPRFB06 - VRMP	10/2/2010	8:30 AM	D							3.63		
SITE 14	FROST BROOK - JPRFB06 - VRMP	12/13/2010	3:12 PM	N							38.4		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	7/14/2010	4:34 PM	N			71.2		8.14		1.7		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	9/30/2010	10:31 AM	N							0.24		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	9/30/2010	10:31 AM	D							0.26		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	10/2/2010	8:00 AM	N							0.42		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	12/13/2010	4:49 PM	N							50.5		
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	12/14/2010	10:55 AM	N							14.5		
SITE 5	PRESTILE STREAM - JPR124 - VRMP	7/14/2010	4:13 PM	N			73		7.01		4.5		
SITE 5	PRESTILE STREAM - JPR124 - VRMP	9/30/2010	12:07 PM	N							1.2		
SITE 5	PRESTILE STREAM - JPR124 - VRMP	9/30/2010	12:07 PM	D							1.38		
SITE 5	PRESTILE STREAM - JPR124 - VRMP	10/2/2010	7:45 AM	N							12.8	30	
SITE 5	PRESTILE STREAM - JPR124 - VRMP	10/2/2010	7:45 AM	D								29	
SITE 5	PRESTILE STREAM - JPR124 - VRMP	12/13/2010	3:27 PM	N							65.6		
SITE 5	PRESTILE STREAM - JPR124 - VRMP	12/14/2010	10:40 AM	N							43.2		
SITE 7	PRESTILE STREAM - JPR39 - VRMP	7/14/2010	2:55 PM	N							5.03		
SITE 7	PRESTILE STREAM - JPR39 - VRMP	7/14/2010	2:55 PM	D							5.28		
SITE 7	PRESTILE STREAM - JPR39 - VRMP	9/30/2010	11:12 AM	N							1.42		
SITE 7	PRESTILE STREAM - JPR39 - VRMP	10/2/2010	8:57 AM	N							10.59		

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)	Turbid. (NTU)	TSS (MG/L)	E Coli Bacteria (MPN/100 ML)
SITE 7	PRESTILE STREAM - JPR39 - VRMP	12/13/2010	3:58 PM	N							88.9	120	
SITE 7	PRESTILE STREAM - JPR39 - VRMP	12/14/2010	10:20 AM	N							61.5		
SITE 1	PRESTILE STREAM - JPR43 - VRMP	7/14/2010	9:32 AM	N							4.02	8.4	
SITE 1	PRESTILE STREAM - JPR43 - VRMP	9/30/2010	10:05 AM	N							3.23		
SITE 1	PRESTILE STREAM - JPR43 - VRMP	10/2/2010	7:15 AM	N							3.93		
SITE 1	PRESTILE STREAM - JPR43 - VRMP	12/13/2010	4:57 PM	N							9.23		
SITE 1	PRESTILE STREAM - JPR43 - VRMP	12/14/2010	8:00 AM	N							36.4		
SITE 2	PRESTILE STREAM - JPR62 - VRMP	7/14/2010	8:30 AM	N							7.55	14	
SITE 2	PRESTILE STREAM - JPR62 - VRMP	9/30/2010	9:45 AM	N							12.5		
SITE 2	PRESTILE STREAM - JPR62 - VRMP	10/2/2010	7:22 AM	N							9.72		
SITE 2	PRESTILE STREAM - JPR62 - VRMP	12/13/2010	5:09 PM	N							2.68		
SITE 2	PRESTILE STREAM - JPR62 - VRMP	12/14/2010	8:30 AM	N							1.62		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	7/14/2010	2:15 PM	N							2.14		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	9/30/2010	11:50 AM	N							1.53		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	10/2/2010	7:30 AM	N							6.02		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/13/2010	3:38 PM	N							65		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/14/2010	11:24 AM	N							26.4		
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/14/2010	11:24 AM	D							25.7		
	ROCKY BROOK - JPRRB06 - VRMP	7/14/2010	3:12 PM	N							1.86		
	ROCKY BROOK - JPRRB06 - VRMP	9/30/2010	10:55 AM	N							0.95		
	ROCKY BROOK - JPRRB06 - VRMP	10/2/2010	8:40 AM	N							2.93		
	ROCKY BROOK - JPRRB06 - VRMP	12/13/2010	4:25 PM	N							72.8		
	ROCKY BROOK - JPRRB06 - VRMP	12/14/2010	10:00 AM	N							43.8		
	ROCKY BROOK - JPRRB06 - VRMP	12/14/2010	10:00 AM	D							45.3		
SITE 8	THREE BROOKS - JPRTB52 - VRMP	7/14/2010	2:38 PM	N							1.47		
SITE 8	THREE BROOKS - JPRTB52 - VRMP	9/30/2010	11:30 AM	N							1.3		
SITE 8	THREE BROOKS - JPRTB52 - VRMP	10/2/2010	9:07 AM	N							7.6		
SITE 8	THREE BROOKS - JPRTB52 - VRMP	12/13/2010	4:10 PM	N							62.4		
SITE 8	THREE BROOKS - JPRTB52 - VRMP	12/14/2010	10:30 AM	N							21		
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	7/14/2010	5:03 PM	N							1.89		
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	9/30/2010	1:01 PM	N							0.61		
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	10/2/2010	8:20 AM	N							5.91		
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	12/13/2010	5:40 PM	N									
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	12/14/2010	10:22 AM	N							82.6	41	
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	7/14/2010	5:20 PM	N							1.12		
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	7/14/2010	5:20 PM	D							1.11		
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	9/30/2010	1:10 PM	N							0.85		
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	10/2/2010	8:32 AM	N							3.72		
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	12/13/2010	5:50 PM	N							49.9		
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	12/14/2010	7:41 AM	N							13.4		

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 Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
Prestile Stream & Tributaries -Central Aroostook SWCD (Approved Sites)														
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	7/14/2010	4:00 PM	N	BASE-FLOW	LOW	80	CULVERT	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	WADEABLE/MID-DEPTH
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	9/30/2010	12:32 PM	N	BASE-FLOW	HIGH		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	MEASURED TO TOP OF SOUTH CULVERT WADEABLE/MID-DEPTH
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	10/2/2010	8:15 AM	N	STORM-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	SHOWERS, HEAVY RAIN, LIGHT RAIN	RUN	MEDIUM	WADEABLE/MID-DEPTH
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	12/13/2010	3:18 PM	N	STORM-FLOW	HIGH	54	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 15	ALLEN BROOK - JPRAB06 - VRMP	12/13/2010	3:18 PM	D				CULVERT						NON-WADEABLE/MID-DEPTH
SITE 16	CLARK BROOK - JPRCL05 - VRMP	7/14/2010	3:45 PM	N	BASE-FLOW	MEDIUM	80	CULVERT	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RIFFLE	CLEAR	BEAVER DAM AT UPSTREAM END OF CULVERT, SAMPLED DOWNSTREAM SOUTH CULVERT WADEABLE/MID-DEPTH
SITE 16	CLARK BROOK - JPRCL05 - VRMP	9/30/2010	12:40 PM	N	BASE-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	SAMPLED FROM DOWNSTREAM END OF CULVERT BECAUSE BEAVER DAMMING WAS AFFECTING FLOW AT INLET SIDE WADEABLE/MID-DEPTH
SITE 16	CLARK BROOK - JPRCL05 - VRMP	10/2/2010	8:00 AM	N	STORM-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, SHOWERS	RUN	MEDIUM	BEAVER DAM UPSTREAM OF SOUTH CULVERT WADEABLE/MID-DEPTH
SITE 16	CLARK BROOK - JPRCL05 - VRMP	12/13/2010	3:04 PM	N	STORM-FLOW	HIGH	54	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	7/14/2010	8:00 AM	N	STORM-FLOW	HIGH	70	CULVERT	LIGHT RAI	CALM	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	SAMPLED FROM EAST CULVERT; TURBIDITY DUPLICATE DONE AFTER RECALIBRATION OF STANDARDS 0.03/10.07 NTU WADEABLE/MID-DEPTH
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	7/14/2010	8:00 AM	D				CULVERT						SAMPLED FROM EAST CULVERT; TURBIDITY DUPLICATE DONE AFTER RECALIBRATION OF STANDARDS 0.03/10.07 NTU WADEABLE/MID-DEPTH
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	9/30/2010	10:20 AM	N	BASE-FLOW	MEDIUM		CULVERT	CLOUDY	CALM	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN	RUN	CLEAR	SAMPLED AND MEASURED FROM WEST CULVERT WADEABLE/MID-DEPTH
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	10/2/2010	7:00 AM	N	STORM-FLOW	HIGH	51	CULVERT	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, FOGGY	RUN	CLEAR	MEASURED 6" BELOW SURFACE WADEABLE/MID-DEPTH
SITE 3	ELLIOT BROOK - JPREB11 - VRMP	12/14/2010	8:00 AM	N	STORM-FLOW	HIGH	45	CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN		TURBID	NON-WADEABLE/MID-DEPTH
SITE 14	FROST BROOK - JPRFB06 - VRMP	7/14/2010	4:10 PM	N	BASE-FLOW	LOW	80	CULVERT	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	WADEABLE/MID-DEPTH
SITE 14	FROST BROOK - JPRFB06 - VRMP	9/30/2010	12:25 PM	N	BASE-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	WADEABLE/MID-DEPTH

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	Water Appearance	Comments
SITE 14	FROST BROOK - JPRFB06 - VRMP	10/2/2010	8:30 AM	N	STORM-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, SHOWERS	RUN	MEDIUM	WADEABLE/MID-DEPTH
SITE 14	FROST BROOK - JPRFB06 - VRMP	10/2/2010	8:30 AM	D				CULVERT						WADEABLE/MID-DEPTH
SITE 14	FROST BROOK - JPRFB06 - VRMP	12/13/2010	3:12 PM	N	STORM-FLOW	HIGH	54	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	7/14/2010	4:34 PM	N	STORM-FLOW	MEDIUM	80	CULVERT	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	RAIN GAUGE: 1" @ PRETTY BROOK WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	9/30/2010	10:31 AM	N	STORM-FLOW	HIGH		CULVERT	CLOUDY	CALM	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	SAMPLED WEST CULVERT BECAUSE EAST CULVERT BLOCKED; NO FLOW IN EAST - MANY LIMBS BLOCKING FLOW; EROSION ON OUTLET SIDE OF GETCHELL CULVERTS WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	9/30/2010	10:31 AM	D				CULVERT						SAMPLED WEST CULVERT BECAUSE EAST CULVERT BLOCKED; NO FLOW IN EAST - MANY LIMBS BLOCKING FLOW; EROSION ON OUTLET SIDE OF GETCHELL CULVERTS WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	10/2/2010	8:00 AM	N	STORM-FLOW	MEDIUM	54	CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN	RIFFLE	CLEAR	MEASURED OFF OF EAST CULVERT WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	12/13/2010	4:49 PM	N	STORM-FLOW	HIGH	50	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 4	GETCHELL BROOK - JPRGL18 - VRMP	12/14/2010	10:55 AM	N	STORM-FLOW	HIGH		CULVERT	LIGHT RAI	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY	RUN	TURBID	WATER LEVEL HIGH NON-WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	7/14/2010	4:13 PM	N	STORM-FLOW	MEDIUM	80	BRIDGE	CLOUDY	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	TURBID	STAGE HEIGHT AT BOTTOM EDGE OF BEND ON RAILING NON-WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	9/30/2010	12:07 PM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	STAGE HEIGHT TAKEN FROM WEST SIDE OF BRIDGE SUPPORT ON HORIZONTAL LINE WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	9/30/2010	12:07 PM	D				BRIDGE						STAGE HEIGHT TAKEN FROM WEST SIDE OF BRIDGE SUPPORT ON HORIZONTAL LINE WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	10/2/2010	7:45 AM	N	STORM-FLOW	MEDIUM	54	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN	RUN	TURBID	BEAVER DAM UNDER BRIDGE, WATER LEVEL MAY NOT BE ACCURATE WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	10/2/2010	7:45 AM	D				BRIDGE						BEAVER DAM UNDER BRIDGE, WATER LEVEL MAY NOT BE ACCURATE WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	12/13/2010	3:27 PM	N	STORM-FLOW	HIGH	52	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 5	PRESTILE STREAM - JPR124 - VRMP	12/14/2010	10:40 AM	N	STORM-FLOW	HIGH	54	BRIDGE	LIGHT RAI	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY	RUN	TURBID	WATER VERY HIGH AND ABOVE BOTTOM OF BRIDGE; COULD ONLY SAMPLE NEAR SURFACE BECAUSE FLOW WAS TOO FAST TO GET ARI SAMPLER MID-DEPTH NON-WADEABLE/MID-DEPTH
SITE 7	PRESTILE STREAM - JPR39 - VRMP	7/14/2010	2:55 PM	N	BASE-FLOW	MEDIUM	85	BRIDGE	CLOUDY	CALM	RAIN, MOSTLY CLOUDY, SHOWERS	RUN	TURBID	WATER APPEARANCE SLIGHTLY TURBID NON-WADEABLE/MID-DEPTH
SITE 7	PRESTILE STREAM - JPR39 - VRMP	7/14/2010	2:55 PM	D				BRIDGE						WATER APPEARANCE SLIGHTLY TURBID NON-WADEABLE/MID-DEPTH
SITE 7	PRESTILE STREAM - JPR39 - VRMP	9/30/2010	11:12 AM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	CALM	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN		NON-WADEABLE/MID-DEPTH
SITE 7	PRESTILE STREAM - JPR39 - VRMP	10/2/2010	8:57 AM	N	STORM-FLOW	MEDIUM	52	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN	RIFFLE	TURBID	ORANGE DOT PAINTED AT TOP POINT OF MEASUREMENT NON-WADEABLE/MID-DEPTH

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	Water Appearance	Comments
SITE 7	PRESTILE STREAM - JPR39 - VRMP	12/13/2010	3:58 PM	N	STORM-FLOW	HIGH	52	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 7	PRESTILE STREAM - JPR39 - VRMP	12/14/2010	10:20 AM	N	STORM-FLOW	HIGH	45	BRIDGE	LIGHT RAI	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 1	PRESTILE STREAM - JPR43 - VRMP	7/14/2010	9:32 AM	N	STORM-FLOW	MEDIUM	70	CULVERT	LIGHT RAI	CALM	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY,	RUN	CLEAR	SAMPLED UPSTREAM FROM MIDDLE CULVERT WADEABLE/MID-DEPTH
SITE 1	PRESTILE STREAM - JPR43 - VRMP	9/30/2010	10:05 AM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	CALM	MOSTLY CLOUDY, LIGHT RAIN, OVERCAST	RUN	MEDIUM	WADEABLE/MID-DEPTH
SITE 1	PRESTILE STREAM - JPR43 - VRMP	10/2/2010	7:15 AM	N	STORM-FLOW	HIGH	51	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, FOGGY	RUN	MEDIUM	DATASHEET STATES VERTICAL DEPTH FOR SAMPLE 6" BELOW SURFACE WADEABLE/MID-DEPTH
SITE 1	PRESTILE STREAM - JPR43 - VRMP	12/13/2010	4:57 PM	N	STORM-FLOW	HIGH	48	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN		*TOO DARK AND DANGEROUS TO MEASURE HEIGHT SAFELY; TOO DARK TO SEE WATER APPEARANCE NON-WADEABLE/MID-DEPTH
SITE 1	PRESTILE STREAM - JPR43 - VRMP	12/14/2010	8:00 AM	N	STORM-FLOW	HIGH	45	CULVERT	CLOUDY	BREEZE	HEAVY RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 2	PRESTILE STREAM - JPR62 - VRMP	7/14/2010	8:30 AM	N	STORM-FLOW	HIGH	70	BRIDGE	LIGHT RAI	CALM	RAIN, MOSTLY CLOUDY, SHOWERS	RUN	TURBID	SAMPLED DOWNSTREAM OF BRIDGE; WATER APPEARANCE SLIGHTLY MURKY WADEABLE/1.5 FT BELOW SURFACE
SITE 2	PRESTILE STREAM - JPR62 - VRMP	9/30/2010	9:45 AM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	CALM	HEAVY RAIN, LIGHT RAIN	RUN	GREEN -	CHISTINA: MORE OF A POOL/POND ABOVE BRIDGE NON-WADEABLE/MID-DEPTH
SITE 2	PRESTILE STREAM - JPR62 - VRMP	10/2/2010	7:22 AM	N	STORM-FLOW	HIGH	51	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, FOGGY	RUN	GREEN -	SAMPLED 6" BELOW SURFACE WADEABLE/MID-DEPTH
SITE 2	PRESTILE STREAM - JPR62 - VRMP	12/13/2010	5:09 PM	N	STORM-FLOW	HIGH	48	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN		TOO DARK TO SEE WATER APPEARANCE NON-WADEABLE/MID-DEPTH
SITE 2	PRESTILE STREAM - JPR62 - VRMP	12/14/2010	8:30 AM	N	STORM-FLOW	HIGH	45	CULVERT	CLOUDY	BREEZE	HEAVY RAIN		TURBID	NON-WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	7/14/2010	2:15 PM	N	STORM-FLOW	MEDIUM	80	BRIDGE	CLOUDY	BREEZE	RAIN, MOSTLY CLOUDY,	RUN	CLEAR	TOO DIFFICULT/UNSAFE TO MEASURE HEIGHT NON-WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	9/30/2010	11:50 AM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	BREEZE	RAIN, PARTLY CLOUDY	RUN	CLEAR	STAGE HEIGHT MEASURED FROM TOP OF DRAINAGE HOLE ON BRIDGE SUPPORT NON-WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	10/2/2010	7:30 AM	N	STORM-FLOW	MEDIUM	54	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN	RUN		NO MEASURING POINT HEIGHT FOR THIS SITE HAS BEEN ESTABLISHED WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/13/2010	3:38 PM	N	STORM-FLOW	HIGH	52	BRIDGE	HEAVY RAIN		LIGHT RAIN, HEAVY RAIN	RUN	TURBID	NOT ABLE TO MEASURE BRIDGE TO SURFACE HEIGHT NON-WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/14/2010	11:24 AM	N	STORM-FLOW	HIGH		BRIDGE	LIGHT RAIN, CLOUD		HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NOT ABLE TO MEASURE BRIDGE TO SURFACE HEIGHT NON-WADEABLE/MID-DEPTH
SITE 13	PRETTY BROOK - JPRYG05 - VRMP	12/14/2010	11:24 AM	D				BRIDGE						NOT ABLE TO MEASURE BRIDGE TO SURFACE HEIGHT NON-WADEABLE/MID-DEPTH
	ROCKY BROOK - JPRRB06 - VRMP	7/14/2010	3:12 PM	N	BASE-FLOW	MEDIUM	85	CULVERT	CLOUDY	CALM	RAIN, LIGHT RAIN, MOSTLY CLOUDY	RUN	TURBID	WATER APPEARANCE SLIGHTLY TURBID NON-WADEABLE/MID-DEPTH
	ROCKY BROOK - JPRRB06 - VRMP	9/30/2010	10:55 AM	N	STORM-FLOW	MEDIUM		CULVERT	CLOUDY	CALM	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	WADEABLE/MID-DEPTH
	ROCKY BROOK - JPRRB06 - VRMP	10/2/2010	8:40 AM	N	STORM-FLOW	MEDIUM	52	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN	RIFFLE	TURBID	1" RAIN GAUGE IN ROCKY BRK WATERSHED NON-WADEABLE/MID-DEPTH
	ROCKY BROOK - JPRRB06 - VRMP	12/13/2010	4:25 PM	N	STORM-FLOW	HIGH	50	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN		MEASURING POINT HEIGHT (154.85) HAD MEASURED TO TOP OF GUARDRAIL; ASSUMED WATER APPEARANCE WAS TURBID, BUT GETTING TOO DARK TO SEE NON-
	ROCKY BROOK - JPRRB06 - VRMP	12/14/2010	10:00 AM	N	STORM-FLOW	HIGH	45	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
	ROCKY BROOK - JPRRB06 - VRMP	12/14/2010	10:00 AM	D				BRIDGE						NON-WADEABLE/MID-DEPTH

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	Water Appearance	Comments
SITE 8	THREE BROOKS - JPRTB52 - VRMP	7/14/2010	2:38 PM	N	BASE-FLOW	MEDIUM	85	BRIDGE	CLOUDY	CALM	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
SITE 8	THREE BROOKS - JPRTB52 - VRMP	9/30/2010	11:30 AM	N	BASE-FLOW	MEDIUM		BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	STAGE HEIGHT MEASURED FROM INCORRECT SPOT - MEASURED FROM CRACK IN WEST SIDE OF BRIDGE BASE WADEABLE/MID-DEPTH
SITE 8	THREE BROOKS - JPRTB52 - VRMP	10/2/2010	9:07 AM	N	STORM-FLOW	HIGH	52	BRIDGE	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN	RIFFLE	TURBID	1" OF RAIN SINCE DARK THE NIGHT BEFORE NON-WADEABLE/MID-DEPTH
SITE 8	THREE BROOKS - JPRTB52 - VRMP	12/13/2010	4:10 PM	N	STORM-FLOW	HIGH	50	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 8	THREE BROOKS - JPRTB52 - VRMP	12/14/2010	10:30 AM	N	STORM-FLOW	HIGH	45	BRIDGE	HEAVY RA	BREEZE	HEAVY RAIN	RUN	TURBID	NON-WADEABLE/MID-DEPTH
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	7/14/2010	5:03 PM	N	STORM-FLOW	MEDIUM	82	CULVERT	CLOUDY	CALM	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY, SHOWERS	RUN	CLEAR	USGS GAGE HEIGHT=1.799 FT, FLOW= 3.3CFS @ TIME OF SAMPLING, DOWN FROM PEAK OF 1.86 FT AND 4.3CFS @ 4:15 AM ON 7/14/10; SAMPLED FROM ABOVE SOUTH CULVERT WADEABLE/MID-DEPTH
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	9/30/2010	1:01 PM	N	BASE-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	WADEABLE/MID-DEPTH
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	10/2/2010	8:20 AM	N	STORM-FLOW	HIGH	50	CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, SHOWERS	RUN	MEDIUM	RAIN GAUGE = 1.7" WADEABLE/MID-DEPTH
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	12/13/2010	5:40 PM	N	STORM-FLOW	HIGH	53		HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY	RIFFLE		SAMPLE BOTTLE LOST, NO SAMPLE FOR TURBIDITY; TOO DARK TO SEE WATER APPEARANCE, BUT ASSUMING TURBID WADEABLE/MID-DEPTH
SITE 17	WILLIAMS BROOK - JPRWB03 - VRMP	12/14/2010	10:22 AM	N	STORM-FLOW	HIGH		CULVERT	LIGHT RAI	BREEZE	RAIN, MOSTLY CLOUDY	RUN	TURBID	SECOND SAMPLE TAKE FOR THIS SITE ON 12/14/10 NON-WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	7/14/2010	5:20 PM	N	STORM-FLOW	MEDIUM	82	CULVERT	CLOUDY	CALM	RAIN, MOSTLY CLOUDY, SHOWERS	RUN	TURBID	USGS GAGE HEIGHT=1.799 FT, FLOW= 3.3CFS @ TIME OF SAMPLING, DOWN FROM 1.86 FT AND 4.3CFS @ 4:15 AM ON 7/14/10 WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	7/14/2010	5:20 PM	D				CULVERT						USGS GAGE HEIGHT=1.799 FT, FLOW= 3.3CFS @ TIME OF SAMPLING, DOWN FROM 1.86 FT AND 4.3CFS @ 4:15 AM ON 7/14/10 WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	9/30/2010	1:10 PM	N	BASE-FLOW	MEDIUM		CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, LIGHT RAIN, PARTLY CLOUDY	RUN	CLEAR	WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	10/2/2010	8:32 AM	N	STORM-FLOW	HIGH	50	CULVERT	CLOUDY	BREEZE	MOSTLY CLOUDY, HEAVY RAIN, LIGHT RAIN, SHOWERS	RUN	TURBID	RAIN GAUE = 1.7" IN WILLIAMS BRK WATERSHED WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	12/13/2010	5:50 PM	N	STORM-FLOW	HIGH	53	CULVERT	HEAVY RA	BREEZE	HEAVY RAIN, LIGHT RAIN, MOSTLY CLOUDY	RIFFLE		WATER LEVEL OVERTOPPING CULVERT, THAT IS WHY STAGE HEIGHT IS 0"; TOO DARK TO SEE WATER APPEARANCE, BUT ASSUMING TURBID WADEABLE/MID-DEPTH
SITE 18	WILLIAMS BROOK - JPRWB19 - VRMP	12/14/2010	7:41 AM	N	STORM-FLOW	HIGH	42	CULVERT	LIGHT RAI	BREEZE	HEAVY RAIN, LIGHT RAIN	RUN	TURBID	WATER AT LEAST 6 IN. ABOVE CULVER BEING SUCKED IN (PUT -6 IN. IN FOR STAGE HEIGHT); FLOODING OVER ROAD AND ERODING ROAD DITCH/SHOULDER; SAMPLED WHERE WATER WAS BEING SUCKED DOWN INTO CULVERT NON-WADEABLE/MID-DEPTH