Section 5-6 Mousam River (Mousam and Kennebunk Rivers Alliance)

Mousam River

The Mousam River is 23 miles long and originates at Square Pond which flows to Mousam Lake in Shapleigh. From Mousam Lake, the River flows through the towns of Alfred and Sanford to Estes Lake. The Littlefield River and Middle Branch River flow into Estes Lake from the north. From Estes Lake, Mousam River continues through the town of Kennebunk before discharging to the Gulf of Maine at Parsons Beach. Back Creek (tidal creek) enters the Mousam River near the mouth. The river is dammed at several places along its route including at Mill Pond and No. 1 Pond in Sanford, Estes Lake and Old Falls Pond.

Water quality in the Mousam River was impacted historically by industrial and commercial use related to mills in the towns of Sanford and Kennebunk (Baker, 1999). Today, water quality impacts are caused in large part by stormwater runoff associated with increasing development of the watershed and high levels of impervious surfaces in the town centers of Sanford and Kennebunk. Water quality is also impacted by several point source discharges to the main stem. In addition, the industrial legacy of the ten dams on the main stem of the river may also contribute to degraded water quality.

According to Maine's statutory Water Classification System, the Mousam River Basin has designations listed below. Below head of tide, the river is Class SB.

- A. Mousam River, main stem.
 - (1) From the outlet of Mousam Lake to a point located 0.5 miles above Mill Street in Springvale Class B.
 - (2) From a point located 0.5 mile above Mill Street in Springvale to its confluence with Estes Lake Class C.
 - (3) From the outlet of Estes Lake to tidewater Class B.
- B. Mousam River, tributaries Class B.

Monitoring History

• In 2001 the Maine DEP TMDL report identified a 3.7 mile segment of the Mousam River, located from the Route 4 bridge to Estes Lake, as not attaining Class C standards due to dissolved oxygen concentration. This segment is included on Maine's 303(d) list for both point and non-point sources. Maine DEP lists a 9.9 mile segment of the river in Sanford from the Route 224 bridge to Estes Lake as impaired for toxics.

¹ http://www.mainelegislature.org/legis/statutes/38/title38sec467.html

- The Maine DEP Biological Monitoring Program has been monitoring the river since 1995. This data is available on DEP's website.
- The Mousam and Kennebunk Rivers Alliance (MKA) began in 2009 with assistance from the Wells National Estuarine Research Reserve (NERR) and Maine Rivers for the purpose of monitoring the Kennebunk and Mousam rivers. MKA joined the Volunteer River Monitoring Program in 2009.
- MKA added two sites in 2010 to bracket the sewage outfall upstream and downstream in Sanford. Two additional sites in Sanford were added in 2012.

Methods and Sampling Sites

Mousam Kennebunk Alliance has eleven sites on the mainstem. Four tributary sites are located on the Middle Branch, Littlefield River and Back Creek. All sites are freshwater except sites MOUR04 and BC02. Previous reports have identified Station MOUR35 as Class SB, but it has since been determined that this site is just above the hydraulic head of tide and is freshwater. All of the Mousam River sites are VRMP approved.

Monitoring is conducted biweekly from June through September. Monitors take measurements of water temperature and dissolved oxygen using a YSI meter. Specific conductance is measured using an Oakton EC 11+/11 Testr pen and salinity is measured at the tidal sites. Grab samples for *E. coli* collected at the freshwater sites and Enterococcus bacteria at the tidal sites. Bacteria samples are transported to Nelson Labs for analysis.

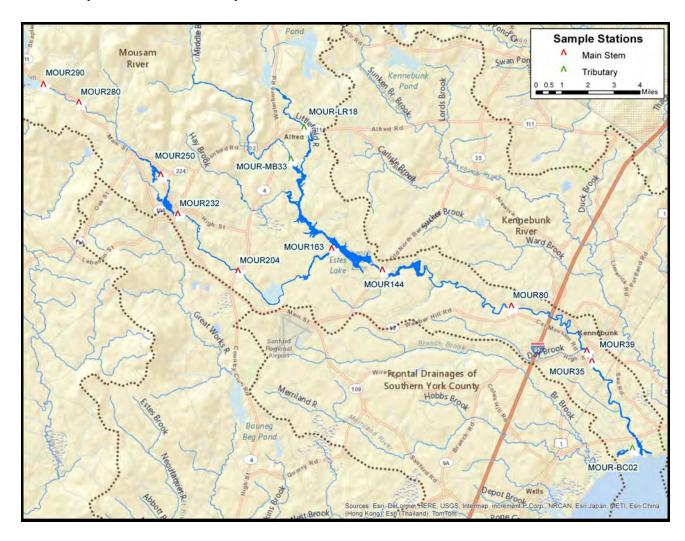
Table 5-6-1: Mousam and Kennebunk Rivers Alliance sampling sites for the Mousam River.

(0	Main Ste Ordered from upstre	m Sites am to downstream)		
VRMP Site ID	Organization Site Code	Sample Location	River Mile	Class
SMU290	MOUR290	Headwaters	25.6	В
SMU280	MOUR280	S Curve Road	24.6	В
SMU250	MOUR250	Behind YMCA	21.6	С
SMU232	MOUR232	High Street/Weaver Dr	19.7	С
SMU204	MOUR204	Off Route 4	16.9	С
SMU163	MOUR163	New Dam Road	12.8	С
SMU144	MOUR144	Whicher's Hill Road	10.9	В
SMU80	MOUR80	Mill Street	4.6	В
SMU39	MOUR39	Berry Ct.	0.5	В

SMU35	MOUR35	Roger's Pond	0.1	В
SMU04	MOUR04	Route 9 Bridge	0.4	SB
	Tributar	y Sites		
Middle Branch Mousam River SMUMB58	MOURMB58	Mast Road		В
Middle Branch Mousam River SMUMB33	MOURMB33	Swett's Bridge	4.4	В
Littlefield River SMUMBLR18	LR18	Back Road	2.2	В
Back Creek SMUBC02	BC02	Above Parson's Beach	0.2	SB

2013 Mousam River Sampling Sites, Entire WatershedMousam and Kennebunk Rivers Alliance

Figure 5-6-1: Map of Mousam and Kennebunk Rivers Alliance sampling sites on Mousam River. Mainstem and tributary sites are differentiated by coloration.



Results

For the purpose of discussion, the sampling stations are divided into three groups; Upper Main Stem (MOUR290, MOUR280, MOUR250, MOUR232, MOUR204), Lower Main Stem (MOUR163, MOUR144, MOUR80, MOUR39, MOUR35, MOUR04) and Tributaries (MOUR-LR18, MOUR-MB58, MOUR-MB33, MOUR-BC02). Refer to appendices A-1 and A-2 in discussion of individual site data and trends.

Two types of graphs are provided in this report to look at water quality data. The first type of graph is a longitudinal profile graph, which depicts main stem sites according to their position (river mile) on the river (the larger the river mile, the more upstream the sampling station is). A box and whisker diagram depicts the range of data observed at each station during the course of the sampling season (The box represents the range of the middle 50% of values, the whiskers represent the minimum and maximum extremes, and the line connects the median values at each station). The longitudinal profile plot is useful for showing general water quality trends and can be helpful in identifying the location of specific influences. The second type of graph is a time series graph, which shows the temporal/seasonal trends of water quality data associated with each station. Time series graphs are useful in assessing the relative influence of external factors (e.g., weather) on water quality trends.

Dissolved Oxygen -

Dissolved oxygen levels are generally lowest early in the morning and then increase during the day, peaking mid to late afternoon. Monitors should try to collect some samples early in the morning. Dissolved oxygen is also affected by flow conditions and temperature. During high flow conditions, more oxygen is added to the river from the atmosphere as the water is more turbulent and there is more opportunity for mixing. If flow during the summer months is higher or lower than normal, this will affect the dissolved oxygen.

Class B criteria for dissolved oxygen are a minimum of 7 mg/l (milligrams/liter) or 75% saturation. Class C criteria for dissolved oxygen are a minimum of 5 mg/l or 60 % saturation. To meet water quality criteria, both concentration and saturation standards must be met. The Class SB standard is 85% saturation (no specific concentration standard).

2014 Results:

The 2014 sampling season was a fairly high flow year and sampling coincided with significant rain events. The dissolved oxygen (DO) results reflect this with dissolved oxygen being good to excellent at most sampling sites-particularly the main stem. The exceptions were the following sites where DO was fair to good. Site MOUR-80 did not meet Class B dissolved oxygen concentration criterion of 7 mg/l on 4 of 6 sample dates and percent saturation criterion of 75% on 3 of 6 sample dates. Site MOUR-39 did not meet DO concentration criterion on 5 of 6 samples dates. Site MOUR-04 (tidal) did not meet Class SB DO percent saturation criterion of 85% on 3 of 5 sample dates with values being slightly below the criterion.

The longitudinal DO profiles show a general declining trend in the middle portion of the river, with some recovery near the bottom end of the river. The middle portion of the river is characterized by a fair amount of urban development around Sanford and then a slower moving section of river with a fair amount of wetland area. Both of these factors are likely to contribute to the general DO sag in the middle portion of the river.

For the tributary sites, Site MOURMB-33 was overall good with only 1 date that the DO percent saturation criterion was not met. Site LR-18 did not meet the DO concentration and the percent saturation criterion on any of the sample dates. This site is consistently very low every year and is likely naturally prone to low DO. Dissolved oxygen at this site is poor. Site BC-02 (tidal) did not meet the DO percent saturation criterion on 5 of 6 sample dates-but the mean was 82.5%. Overall, dissolved oxygen at this site is considered fair.

The monitors did a decent job of getting out to sites earlier in the day (before 8:00 am) and should continue to try and do so. Afternoon is the time of day when plant photosynthesis peaks, and DO is at the highest level during any 24-hour period. Supplemental afternoon monitoring could be beneficial to help assess the root cause of non-attainment sites.

Table 5-6-2: A summary of minimum, maximum, and average dissolved oxygen concentration (mg/l) values for Mousam and Kennebunk Rivers Alliance monitoring sites on the Mousam River.

		(Orde	Main St ered from upstr	em Sites	nstream)		
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
MOUR-290	В	4	8.3	7.4	9.2	7	0
MOUR-280	В	4	8.0	7.2	8.9	7	0
MOUR-250	С	4	8.3	7.8	9.3	7	0
MOUR-232	С	4	8.6	8.2	9.3	5	0
MOUR-204	С	6	7.4	6.6	8.8	5	0
MOUR-163	С	6	7.3	6.6	8.8	5	0
MOUR-144	В	6	8.3	7.5	9.8	7	0
MOUR-80	В	6	6.4	5.6	7.1	7	4
MOUR-39	В	6	6.9	6.6	7.6	7	5
MOUR-35	В	6	8.1	7.8	8.4	7	0
MOUR-04	SB	5	8.1	7.4	10.6	n/a	n/a
			Tributa	ry Sites			
MOUSMB-33	В	6	7.9	7.0	8.9	7	0
LR-18	В	6	4.4	2.8	6.4	7	6
BC-02	SB	6	8.1	7.1	10.4	n/a	n/a

Table 5-6-3: A summary of minimum, maximum, and average dissolved oxygen saturation (%) values for Mousam and Kennebunk Rivers Alliance monitoring sites on the Mousam River.

		(Orde	Main Stered from upstr	em Sites eam to dowr	nstream)		
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
MOUR-290	В	4	93.7	86.4	107.5	75	0
MOUR-280	В	4	91.8	86.9	105.2	75	0
MOUR-250	С	4	96.7	90.2	112.0	60	0
MOUR-232	С	4	101.9	96.3	114.5	60	0
MOUR-204	С	6	82.8	73.0	92.6	60	0
MOUR-163	С	6	79.7	75.0	85.5	60	0
MOUR-144	В	6	92.8	86.6	101.5	75	0
MOUR-80	В	6	73.8	65.0	82.1	75	3
MOUR-39	В	6	79.8	77.3	77.3 86.2		0
MOUR-35	В	6	92.6	89.6	94.8	75	0
MOUR-04	SB	5	88.0	80.1	107.2	85	3
			Tributa	ry Sites			
Site	Class	# of Observations	Mean	Minimum	Maximum	Criterion	# Exceeding
MOUSMB-33	В	6	81.8	70.6	92.2	75	1
LR-18	В	6	48.8	31.5	66.0	75	6
BC-02	SB	6	82.5	70.5	105.1	85	5

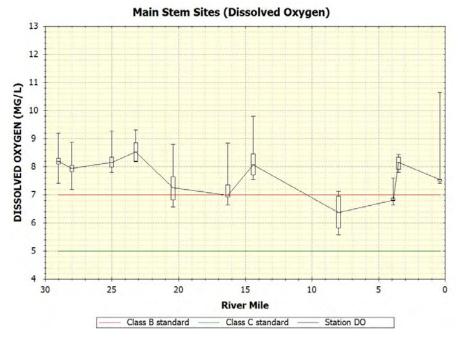
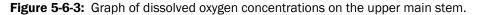


Figure 5-6-2: Graph of dissolved oxygen concentrations on the main stem by river mile.



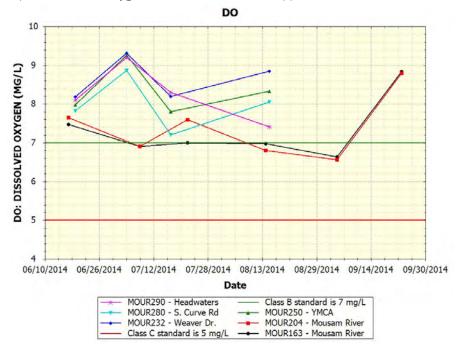


Figure 5-6-4: Graph of dissolved oxygen concentrations on the middle main stem and tributaries.

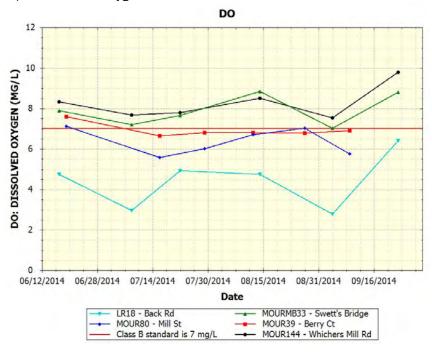
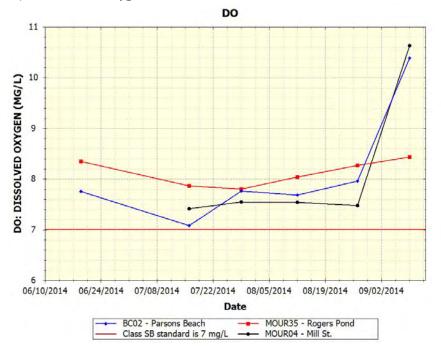


Figure 5-6-5: Graph of dissolved oxygen concentrations on the tidal sites.

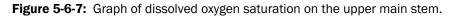


Mousam River - Main Stem Sites (Dissolved Oxygen Saturation) 140 130 **DISSOLVED OXYGEN SATURATION (%)** 120 110 100 90 80 70 60 50 25 20 15 10 30 5 **River Mile**

Class C Criteria

Station DO Saturation

Figure 5-6-6: Graph of dissolved oxygen saturation on the main stem by river mile.



Class B Criteria

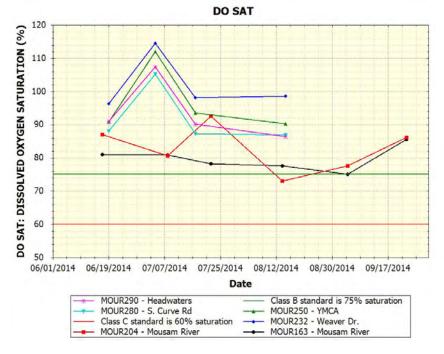


Figure 5-6-8: Graph of dissolved oxygen saturation on the middle main stem and tributaries.

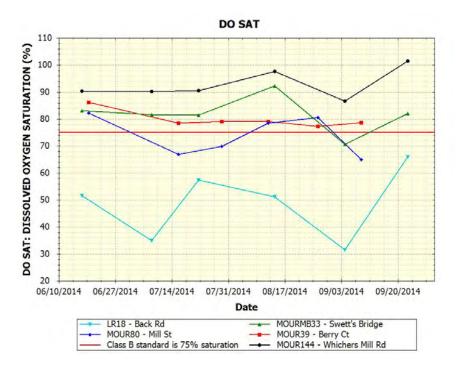
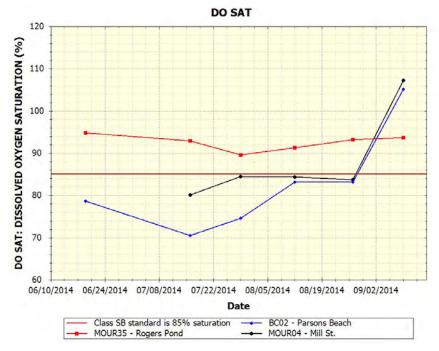


Figure 5-6-9: Graph of dissolved oxygen saturation on the tidal sites.



Water Temperature

Maine's Regulations Relating to Temperature (06-096 CMR Chapter 582) require that discharge of pollutants not raise the temperature of any river and stream above the EPA criteria for indigenous species (23°C maximum and 19°C weekly average) or 0.3°C (0.5°F) above the temperature that would naturally occur outside a mixing zone established by the Board of Environmental Protection. Pollutant is defined in statute as many things including dirt and heat. For tidal waters, discharge of pollutants may not raise the temperature more than 4°F (2.2°C) or more than 1.5°F (0.8°C) from June 1 to September 1, and may not cause the temperature of any tidal waters to exceed 85°F (29°C) at any point outside a mixing zone established by the Board of Environmental Protection. These temperature criteria do not apply to this VRMP data.

2014 Results:

Temperature on the Mousam River ranged from 15.8°-25.9°C over the course of the sampling season. Mean temperatures on the main stem ranged from 19.9°-23.8°C. With the exception of a few dates, most of the measurements through the summer were above 20°C. The fairly high temperatures may reflect that there are a number of impoundments. Site LR-18 was similar to the main stem. The other tributaries, MOURMB-33 and BC-02 had lower temperatures with mean temperatures of 17°-17.9°C.

Table 5-6-4: A summary of minimum, maximum, and average water temperature (°C) values for Mousam and Kennebunk Rivers Alliance monitoring sites on the Mousam River.

		(Orde	Main Stered from upstr	tem Sites eam to dowr	nstream)		
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
MOUR-290	В	4	23.3	21.4	25.2	n/a	n/a
MOUR-280	В	4	22.5	20.1	24.3	n/a	n/a
MOUR-250	С	4	22.8	20.1	24.7	n/a	n/a
MOUR-232	С	4	23.8	20.7	25.9	n/a	n/a
MOUR-204	С	6	21.3	16.0	24.3	n/a	n/a
MOUR-163	С	6	19.9	12.4	23.6	n/a	n/a
MOUR-144	В	6	20.7	17.0	23.7	n/a	n/a
MOUR-80	В	6	22.1	18.5	23.5	n/a	n/a
MOUR-39	В	6	22.1	20.7	23.7	n/a	n/a
MOUR-35	В	6	22.0	20.5	23.9	n/a	n/a
MOUR-04	SB	5	20.0	15.8	21.2	n/a	n/a

			Tributa	ry Sites			
MOUSMB-33	В	6	17.9	12.5	21.4	n/a	n/a
LR-18	В	6	20.4	15.0	23.6	n/a	n/a
BC-02	SB	6	17.0	13.8	20.3	n/a	n/a

Figure 5-6-10: Graph of temperature on the main stem by river mile.

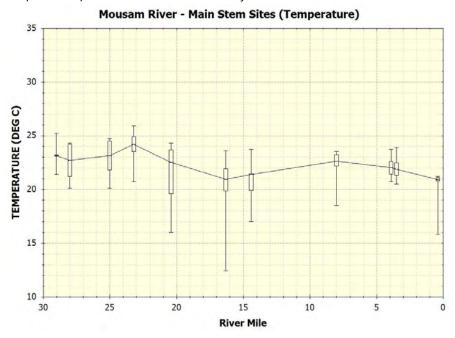


Figure 5-6-11: Graph of temperature on the upper main stem.

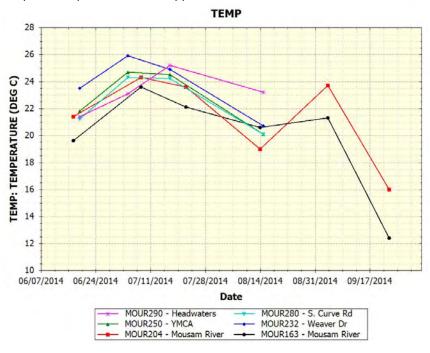
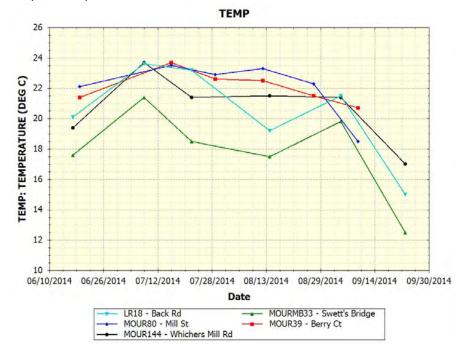


Figure 5-6-12: Graph of temperature on the middle main stem and tributaries.



TEMP 26 24 TEMP: TEMPERATURE (DEG C) 22 18 16 12 06/10/2014 06/25/2014 07/10/2014 07/25/2014 08/09/2014 08/24/2014 09/08/2014 Date MOUR35 - Rogers Pond BC02 - Parsons Beach MOUR04 - Mill St.

Figure 5-6-13: Graph of temperature on the tidal sites.

Specific Conductance

Specific conductance is related to the amount of dissolved materials in the water. While there are no numerical standards, a relationship exists between conductivity and chloride which has numerical criteria. In general, streams located in urban areas tend to have higher 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.

2014 Results:

Specific conductance on all the sites ranged from 60-180 μ S/cm. The values for the upper part of the river (MOUR-290 to MOUR-232) and the tributary site LR-18 were low. The middle to lower part of the river (MOUR-204 to MOUR-39) as well as site MOURMB-33 were slightly higher, but still relatively low. No further concerns are noted.

Table 5-6-5: A summary of minimum, maximum, and average specific conductivity (ms/cm) values for Mousam and Kennebunk Rivers Alliance monitoring sites on the Mousam River.

			em Sites				
		·	ered from upstr	eam to dowr	nstream)		
Site	Class	# of Observations	Average	Minimum	Maximum	Criterion	# Exceeding
MOUR-290	В	4	80	80	80	n/a	n/a
MOUR-280	В	4	78	70	80	n/a	n/a
MOUR-250	С	4	90	90	90	n/a	n/a
MOUR-232	С	4	105	100	110	n/a	n/a
MOUR-204	С	6	147	110	180	n/a	n/a
MOUR-163	С	6	140	110	160	n/a	n/a
MOUR-144	В	6	150	130	170	n/a	n/a
MOUR-80	В	6	120	17	160	n/a	n/a
MOUR-39	В	6	143	130	160	n/a	n/a
MOUR-35	В	-	-	-	-	n/a	n/a
MOUR-04	SB	Tidal	-	-	-	-	-
			Tributa	ry Sites			
MOUSMB-33	В	6	120	60	180	n/a	n/a
LR-18	В	6	102	80	110	n/a	n/a
BC-02	SB	Tidal	-	-	-	-	-

Figure 5-6-14: Graph of specific conductance on the main stem by river mile.

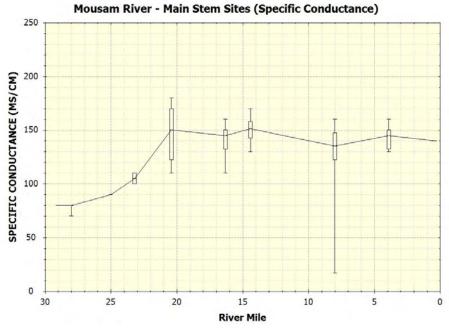
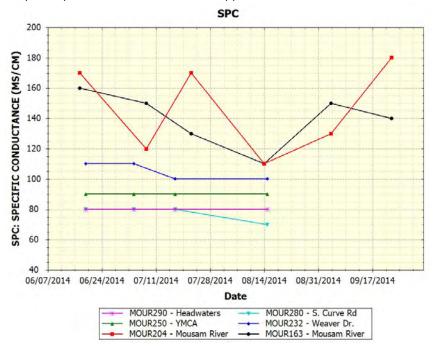


Figure 5-6-15: Graph of specific conductance on the upper main stem.



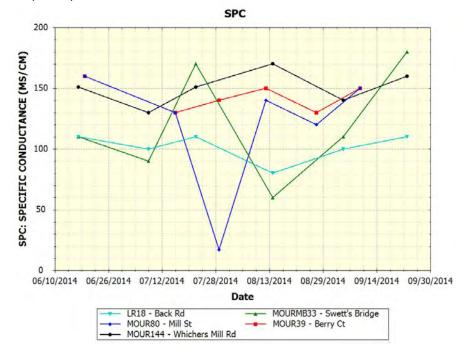


Figure 5-6-16: Graph of specific conductance on the middle main stem and tributaries.

Bacteria

Enterococcus bacteria are used as the indicator organism for marine waters and *E. coli* bacteria are used for freshwaters. While these types of bacteria are not pathogens, their presence in the water may indicate the presence of other organisms including bacteria and viruses that can cause gastrointestinal illnesses. Monitoring should include at least 6 samples and include a mix of dry and storm event sampling.

Class B 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 64/100 ml (milliliters) or an instantaneous level of 236/100 ml." Class C criteria are: "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." "Class SB criteria are as follows: "Between May 15th and September 30th, the numbers of enterococcus bacteria of human and domestic animal origin in these waters may not exceed a geometric mean of 8 per 100 milliliters or an instantaneous level of 54 per 100 milliliters." Geometric means are calculated instead of averages because it is more appropriate to use this calculation for something like bacteria where there may be one or more very high or low values that can skew the mean.

2014 Results:

On the main stem sites, bacteria was overall low. Sites MOUR-204 and MOUR-163 had 1 very high value (2420 MPN/100 ml). The high values occurred on 8/14/15 when there had been heavy rain. At Site MOUR-04, *E. coli* was erroneously analyzed instead of Enterococcus. The tributary sites, MOURMB-33 and LR-18 also exceeded the instantaneous criterion of 236 MPN/100 ml on 1 date ((8/14/15). Both of these sites also exceeded the geometric mean criterion. Site BC-02 exceeded the instantaneous criterion for Enterococcus on 3 of 6 sample dates and exceeded the geometric mean criteria.

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

Main Stem Sites (Ordered from upstream to downstream)												
			(Ordered fr	om upstre	am to dow	nstream)						
Site	Class	# of Obs.	Туре	Min	Max	Geometric Mean	Criterion Inst/Geo	Exceeding				
MOUR290	В	-	E. Coli	E. Coli		-	236/64	-				
MOUR280	В	-	E. Coli	-	-	-	236/64	-				
MOUR250	С	-	E. Coli	-	-	-	236/126	-				
MOUR232	С	-	E. Coli	-	-	-	236/126	-				
MOUR204	С	5	E. Coli	12	2420	72	236/126	1				
MOUR163	С	5	E. Coli	28	2420	83	236/126	1				
MOUR144	В	5	E. Coli	3	58	58 10		0				
MOUR80	В	7	E. Coli	3	172	17	236/64	0				
MOUR39	В	7	E. Coli	4	155	68	236/64	0				
MOUR35	В	7	E. Coli	31	148	70	236/64	0				
MOUR-04	SB	5	E.Coli*	7	411	164	236/64**	4				
				Tributary	y Sites							
MOUR-MB33	В	5	E. Coli	48	2420	124	236/64	1				
MOUR-LR18	В	5	E. Coli	17	2420	90	236/64	1				
MOUR-BC02 SB 6 Entero 20		20	504	87	54/8	3						

^{*}E.Coli analyzed- should have been Enterococcus

^{**}Compared to criterion for *E.Coli*

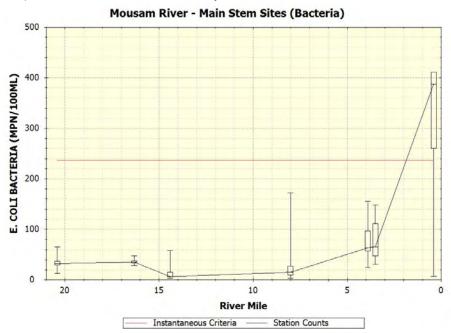
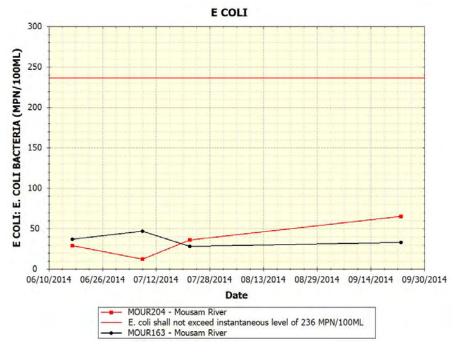


Figure 5-6-17: Graph of bacteria on the main stem by river mile.





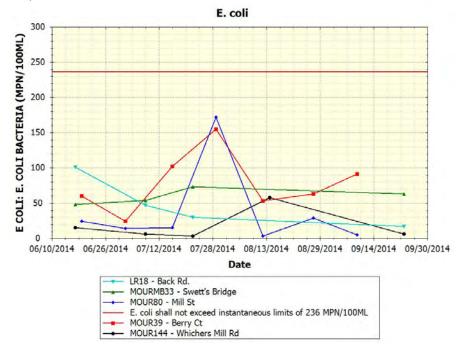
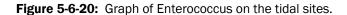
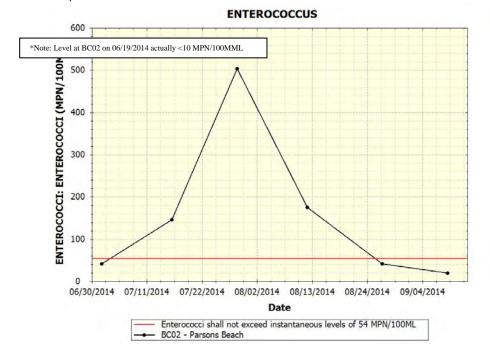


Figure 5-6-19: Graph of *E.Coli* on the middle main stem and tributaries.





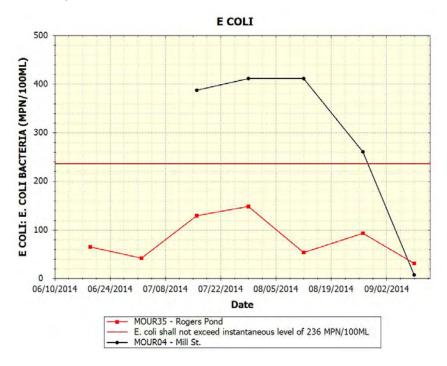


Figure 5-6-21: Graph of *E.Coli* on the tidal sites.

Discussion and Recommendations

There are numerous sources of pollution and other stresses to the Mousam River and tributary sites monitored by the Mousam and Kennebunk Rivers Alliance that could potentially have an impact on water quality. Some of those sources of pollution and stress may include:

- Non-point source pollution (e.g., septic systems, eroded soil, fertilizers, pesticides, heavy metals, petroleum residues, road salt, wildlife and pet feces) and polluted stormwater originating from urban impervious surfaces (e.g. streets, parking lots, driveways, rooftops) (even though urban development and roads are fairly sparse in the watershed), agriculture, and forestry.
- Point source pollution (pollution originating from a direct discharge including wastewater treatment plant discharge, combined sewer overflows and overboard discharges).
- 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 larger 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:

• Dissolved oxygen was low at some of the sites. Site LR-01 should be monitored throughout the season and further investigation made as to whether this is natural. Factors contributing to low

dissolved oxygen may include low flow and the site being below extensive wetlands. Occasional mid to late afternoon sampling would help to discriminate whether this is potentially naturally low dissolved oxygen.

- Monitoring should continue to focus on early morning (before 8:00 am) sampling to best document potential dissolved oxygen problems. Over a 24 hour period, the lowest readings occur in the early morning and highest readings in mid to late afternoon. This occurs because oxygen is used up during the night due to plant respiration and during the day, plant life is photosynthesizing. This is particularly important during the summer months of July through early September when temperatures are warmest and dissolved oxygen tends to be at the lowest levels. Ideally, all DO monitoring should be conducted before 8:00 am. Later day monitoring is not likely to represent critical conditions, which makes it difficult to assess the overall river condition.
- Occasional morning and afternoon DO monitoring during lower flow portions of the summer would be beneficial in better assessing the root cause of DO non-attainment. Sampling in the early morning and middle afternoon will capture the diurnal variation in DO. A large diurnal variation would be indicative of nutrient enrichment.
- Bacteria sampling showed exceedances at the freshwater sites for one date when there was heavy
 rain. High bacteria values during storm events are due to stormwater runoff and/or combined
 sewer overflow problems. In order to calculate an accurate geometric mean value, it is important
 to include both dry and wet weather conditions.
- Continue monitoring at all stations to continue building this long term trend database.

Appendix A-1. 2014 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.

^{** &}quot;N" = normal environmental sample; "D" = field duplicate; "D.O." = dissolved oxygen; "Spec. Cond" = specific conductance; "Turb" = turbidity; "TSS" = total suspended solids" Refer to Appendix A-2 for observational data and quality assurance/quality control (QA/QC) notes.

				**				**		**			Total		E Coli	Entero-
				Sample	*		Water	D.O.	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization				Туре	Sample	Depth	Temp	Sat.	D.O.	Cond.	Salinity	idity	Solids	TSS	(MPN/	(MPN/
Site Code	VRMP Site ID	Date	Time	Qualifier	Depth	Unit	(DEG C)	(%)	(MG/L)	(US/CM)	(PPTH)	(NTU)	(MG/L)	(MG/L)	100ML)	100ML)
Mousam River	- Mousam-Kennebunk Alliance: Approved Sit	es														
												1				
BC-02	BACK CREEK - SMUBC02 - VRMP	6/19/2014		N												U<10
BC-02	BACK CREEK - SMUBC02 - VRMP	6/19/2014		N			13.8	78.7	7.75							
BC-02	BACK CREEK - SMUBC02 - VRMP		9:10 AM	N												41
BC-02	BACK CREEK - SMUBC02 - VRMP	7/16/2014		N			15.3	70.5	7.08							
BC-02	BACK CREEK - SMUBC02 - VRMP	7/16/2014		N												146
BC-02	BACK CREEK - SMUBC02 - VRMP	7/29/2014	8:50 AM	N			17.9	74.6	7.76							504
BC-02	BACK CREEK - SMUBC02 - VRMP	7/29/2014		L												512
BC-02	BACK CREEK - SMUBC02 - VRMP	8/12/2014	9:23 AM	N			19.3	83.1	7.68							
BC-02	BACK CREEK - SMUBC02 - VRMP	8/12/2014	9:35 AM	N												175
BC-02	BACK CREEK - SMUBC02 - VRMP	8/12/2014	9:35 AM	L												156
BC-02	BACK CREEK - SMUBC02 - VRMP	8/27/2014	9:24 AM	N			20.3	83.1	7.96							41
BC-02	BACK CREEK - SMUBC02 - VRMP	8/27/2014	9:24 AM	L												31
BC-02	BACK CREEK - SMUBC02 - VRMP	9/9/2014	8:57 AM	N												20
BC-02	BACK CREEK - SMUBC02 - VRMP	9/9/2014	8:57 AM	L												10
BC-02	BACK CREEK - SMUBC02 - VRMP	9/9/2014	9:15 AM	N			15.3	105	10.39							
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	6/17/2014	7:45 AM	N			20.1	51.6	4.75	110						
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	6/17/2014	7:50 AM	N											101	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	7/8/2014	8:49 AM	N			23.6	35	2.97	100					47	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	7/8/2014	8:49 AM	L											40	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	7/22/2014	8:15 AM	N			23.2	57.4	4.92	110.1					30	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	8/14/2014		N			19.2	51.2	4.75	80						
FU-10	FILLEFELLED VIACUA - SIMININIDENTO - AKIMIA	0/14/2014	U.ZJ AIVI	IN			13.2	31.2	4.73	80						\vdash
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	8/14/2014	6:30 AM	N											>2420	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	9/4/2014	8:30 AM	N			21.5	31.5	2.78	100						
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	9/23/2014	6:48 AM	N											17	

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

				** Sample	*		Water	** D.O.	**	** Spec.		Turb-	Total Diss.	**	E Coli Bacteria	cocci
Organization Site Code	VRMP Site ID	Date	Time	Type Qualifier	Sample Depth	Unit	Temp (DEG C)	Sat. (%)	D.O.	Cond. (US/CM)	Salinity (PPTH)	idity (NTU)	Solids (MG/L)	TSS (MG/L)	(MPN/ 100ML)	(MPN/ 100ML)
Site code	VIIII SICE ID	Date	Time	Qualifici	Берин	Oilit	(DEG C)	(70)	(1410, 2)	(03/ 01/1)	(,	(1410)	(1410/11)	(1410/11)	TOOME	100IVIL)
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	9/23/2014	7:45 AM	N			15	66	6.4	110						
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	6/17/2014	8:02 AM	N			17.6	83	7.9	110						
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	6/17/2014	8:10 AM	N											48	
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	7/8/2014	9:07 AM	N			21.4	81.5	7.2	90					54	
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	7/22/2014	8:25 AM	N			18.5	81.4	7.65	170					73	
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	7/22/2014	8:25 AM	D			18.5	81.3	7.65	170						
	MIDDLE BRANCH MOUSAM RIVER -															
MOUSMB-33	SMUMB33 - VRMP	8/14/2014	6:40 AM	N			17.5	92.2	8.85	60						
	MIDDLE BRANCH MOUSAM RIVER -	, ,														
MOUSMB-33	SMUMB33 - VRMP	8/14/2014	6:47 AM	N											>2420	
	MIDDLE BRANCH MOUSAM RIVER -	3,23,2023														
MOUSMB-33	SMUMB33 - VRMP	9/4/2014	8·45 AM	N			19.8	70.6	7.03	110						
	MIDDLE BRANCH MOUSAM RIVER -	37 .7 202 .	01.07				20.0	70.0	7.00							
MOUSMB-33	SMUMB33 - VRMP	9/23/2014	7·58 AM	N			12.5	82	8.8	180						
IVIOOSIVID 33	MIDDLE BRANCH MOUSAM RIVER -	3/23/2014	7.30 AIVI	14			12.5	02	0.0	100						
MOUSMB-33	SMUMB33 - VRMP	9/23/2014	8.03 ٧٧٧	N											63	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/16/2014		N											387	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/16/2014		N			21.1	80.1	7.41	140					367	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/10/2014		N			21.1	84.5	7.41	140					411	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	8/12/2014		N			20.8	84.4	7.54						411	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	8/27/2014		N			20.8	83.7	7.34						260	
															260	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	9/9/2014 9/9/2014	8:57 AM	N			15.8	107	10.63						7	
MOUR-04	MOUSAM RIVER - SMU04 - VRMP MOUSAM RIVER - SMU144 - VRMP	· · ·	9:15 AM	N			10.4	00.2	0.22	151					/	
MOUR-144		6/17/2014		N			19.4	90.3	8.33	151					15	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	6/17/2014		N			22.7	00.2	7.67	120					15	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	7/8/2014	9:52 AM	N			23.7	90.2	7.67	130					6	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	7/22/2014		N			21.4	90.5	7.8	151					3	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	8/14/2014		N			21.5	97.6	8.5	170					F0	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	8/14/2014		N			24.4	00.0	7.54	1.40					58	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/4/2014		N			21.4	86.6	7.54	140						
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/23/2014		N			17	102	9.8	160					-	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/23/2014		N			1.7								6	
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	6/17/2014		N			19.6	81	7.47	160					_	
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	6/17/2014		N							ļ				37	
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	7/8/2014	9:23 AM	N			23.6	80.8	6.9	150					47	

				**				**		**			Total		E Coli	Entero-
				Sample	*		Water	D.O.	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization				Туре	Sample	Depth	Temp	Sat.	D.O.	Cond.	Salinity	idity	Solids	TSS	(MPN/	(MPN/
Site Code	VRMP Site ID	Date	Time	Qualifier	Depth	Unit	(DEG C)	(%)	(MG/L)		(PPTH)	(NTU)	(MG/L)	(MG/L)	100ML)	100ML)
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	7/22/2014	1	N			22.1	78.2	7	130					28	<u> </u>
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014		N			20.6	77.6	6.97	110						<u> </u>
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014		D			20.6	76.9	6.98	110						
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014	1	N											>2420	
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/4/2014	9:05 AM	N			21.3	75	6.63	150						ļ
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/23/2014		N			12.4	85.5	8.84	140						ļ
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/23/2014		N											33	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	6/17/2014		N			21.4	87	7.65	170						<u> </u>
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	6/17/2014	8:42 AM	N											29	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/8/2014	9:39 AM	N			24.3	80.6	6.9	120					12	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/22/2014	8:50 AM	N			23.6	92.6	7.6	170						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/22/2014	9:00 AM	N											36	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	8/14/2014	7:20 AM	N			19	73	6.8	110						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	8/14/2014	7:25 AM	N											>2420	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/4/2014	9:17 AM	N			23.7	77.6	6.56	130						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/4/2014	9:17 AM	D			23.7	77.4	6.54	130						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:02 AM	N			16	86.2	8.8	180						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:02 AM	D			16.1	86.4	8.82	180						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:05 AM	N											65	
MOUR-232	MOUSAM RIVER - SMU232-VRMP	6/19/2014	7:30 AM	N			23.5	96.3	8.18	110						
MOUR-232	MOUSAM RIVER - SMU232-VRMP	7/4/2014	8:10 AM	N			25.9	115	9.31	110						
MOUR-232	MOUSAM RIVER - SMU232-VRMP	7/17/2014	7:40 AM	N			24.9	98.1	8.2	100						
MOUR-232	MOUSAM RIVER - SMU232-VRMP	8/15/2014	7:50 AM	N			20.7	98.6	8.85	100						
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	6/19/2014	7:10 AM	N			21.8	90.9	7.98	90						
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	7/4/2014	8:00 AM	N			24.7	112	9.26	90						
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	7/17/2014	7:30 AM	N			24.5	93.5	7.8	90						
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	8/15/2014	7:30 AM	N			20.1	90.2	8.33	90						
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	6/19/2014	6:50 AM	N			21.2	88.1	7.82	80						
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/4/2014	7:45 AM	N			24.3	105	8.87	80						
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/17/2014	7:10 AM	N			24.2	87.2	7.2	80						
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/17/2014	7:10 AM	D			24.4	87.4	6.8	80						
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	8/15/2014	7:14 AM	N			20.1	86.9	8.05	70						
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	6/19/2014		N			21.4	91	8.1	80						
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	7/4/2014		N			23.1	107	9.2	80						
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	7/17/2014					25.2	90.1		80						
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	8/15/2014		N			23.2	86.4	7.41	80						
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	6/19/2014		N			21.3	94.8							65	
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/2/2014		N				1							42	†
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/16/2014		N					<u> </u>						129	
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/16/2014		N			23.9	92.9	7.86							†
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/29/2014				 	22.4	89.6								

				**				**		**			Total		E Coli	Entero-
				Sample	*		Water	D.O.	**	Spec.		Turb-	Diss.	**	Bacteria	cocci
Organization				Туре	Sample	Depth	Temp	Sat.	D.O.	Cond.	Salinity	idity	Solids	TSS	(MPN/	(MPN/
Site Code	VRMP Site ID	Date	Time	Qualifier	Depth	Unit	(DEG C)	(%)	(MG/L)	(US/CM)	(PPTH)	(NTU)	(MG/L)	(MG/L)	100ML)	100ML)
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/29/2014	8:13 AM	N											148	
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	8/12/2014	8:40 AM	N			22.5	91.3	8.04						53	
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	8/27/2014	8:35 AM	N			21.3	93.2	8.27						93	
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	9/9/2014	8:32 AM	N			20.5	93.7	8.43						31	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	6/19/2014	8:48 AM	N			21.4	86.2	7.59	160					60	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/2/2014	8:07 AM	N											24	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/2/2014	8:50 AM	N												95
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/16/2014	7:47 AM	N											102	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/16/2014	7:51 AM	N			23.7	78.5	6.64	130						
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/29/2014	7:55 AM	N			22.6	79.1	6.81	140					155	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	8/12/2014	8:18 AM	N			22.5	79.1	6.81	150					53	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	8/27/2014	8:13 AM	N			21.5	77.3	6.79	130					63	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	9/9/2014	8:12 AM	N			20.7	78.6	6.91	150					91	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	6/19/2014	8:10 AM	N			22.1	82.1	7.12	160					24	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/2/2014	7:45 AM	N											14	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:09 AM	N											15	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:09 AM	L											15	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:19 AM	N			23.5	66.8	5.58	130						
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/29/2014	7:25 AM	N			22.9	69.8	6.02	17					172	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/29/2014	7:25 AM	L											186	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/12/2014	7:40 AM	N			23.3	78.5	6.71	140					3	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/12/2014	7:40 AM	L											2	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/27/2014	7:37 AM	N			22.3	80.6	7.03	120					29	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/27/2014	7:37 AM	L											260	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	9/9/2014	7:45 AM	N			18.5	65	5.75	150					5	
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	9/9/2014	7:45 AM	L											7	

Appendix A-2. 2014 observational data and quality assurance/quality control (QA/QC) notes for "approved" and "non-approved" sites.

** "N" = normal environmental sample; "D" = field duplicate; "L" = lab duplicate

Refer to Appendix A-1 for water quality data

Organization Site Code	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp (°C)	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
Hart Brook - City of	Lewiston: Approved Sites													
BC-02	BACK CREEK - SMUBC02 - VRMP	6/19/2014	9:16 AM	N										
											PARTLY			NON-WADEABLE/3 FT BELOW
BC-02	BACK CREEK - SMUBC02 - VRMP	6/19/2014	9:35 AM	N	BASEFLOW	LOW	16.11	BRIDGE	CLEAR	CALM	CLOUDY	RUN	CLEAR	SURFACE
BC-02	BACK CREEK - SMUBC02 - VRMP	7/2/2014	9:10 AM	N							0.540			
BC-02	BACK CREEK - SMUBC02 - VRMP	7/16/2014	8:55 AM	N	BASEFLOW	LOW		BANK	PARTLY CLOUDY	CALM	CLEAR, CLOUDY, LIGHT RAIN	RIFFLE	MEDIUM STAINED	HEAVY RAIN LAST NIGHT NON- WADEABLE/MID-DEPTH
BC-02	BACK CREEK - SMUBC02 - VRMP	7/16/2014	8:58 AM	N										
BC-02	BACK CREEK - SMUBCO2 - VRMP	7/29/2014	8:50 AM	N	STORMFLOW	LOW	16.67	BRIDGE	CLEAR, PARTLY CLOUDY	CALM	LIGHT RAIN, MOSTLY CLOUDY	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
BC-02	BACK CREEK - SMUBC02 - VRMP	7/29/2014	8:50 AM	L										
BC-02	BACK CREEK - SMUBCO2 - VRMP	8/12/2014	9:23 AM	N	BASEFLOW	LOW	17.78	BRIDGE	PARTLY CLOUDY		CLEAR	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
BC-02	BACK CREEK - SMUBC02 - VRMP	8/12/2014	9:35 AM	N										
BC-02	BACK CREEK - SMUBC02 - VRMP	8/12/2014	9:35 AM	L										
BC-02	BACK CREEK - SMUBCO2 - VRMP	8/27/2014	9:24 AM	N	BASEFLOW	HIGH	20	BRIDGE	PARTLY CLOUDY	CALM	CLEAR, PARTLY CLOUDY	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
BC-02	BACK CREEK - SMUBCO2 - VRMP	8/27/2014	9:24 AM	L										
BC-02	BACK CREEK - SMUBCO2 - VRMP	9/9/2014	8:57 AM	N										
BC-02	BACK CREEK - SMUBC02 - VRMP	9/9/2014	8:57 AM	L										OIL SLICK WADEABLE/1.5 FT
BC-02	BACK CREEK - SMUBC02 - VRMP LITTLEFIELD RIVER - SMUMBLR18 -	9/9/2014	9:15 AM	N	BASEFLOW	MEDIUM	11.67	BRIDGE	CLEAR	CALM	CLEAR	RIFFLE	CLEAR MEDIUM	BELOW SURFACE
LR-18	VRMP	6/17/2014	7:45 AM	N	BASEFLOW	MEDIUM	15.56	BRIDGE	CLEAR	CALM	CLEAR	RUN	STAINED	NON-WADEABLE/MID-DEPTH

				**										
Organization Site				Sample Type			Air Temp		Current	Air	Past 24HR		Water	
Code	VRMP Site ID LITTLEFIELD RIVER - SMUMBLR18 -	Date	Time	Qualifier	Flow	Stage	(°C)	Sample Location	Weather	Condition	Weather	Habitat	Appearance	Comments
LR-18	VRMP	6/17/2014	7:50 AM	N										
LIV-10	VICION	0/17/2014	7.50 AIVI	IN.							HEAVY RAIN,			
											LIGHT RAIN,			THUNDERSTORM PREVIOUS 24
	LITTLEFIELD RIVER - SMUMBLR18 -										PARTLY		DARKLY	HOURS NON-WADEABLE/MID-
LR-18	VRMP	7/8/2014	8:49 AM	N	STORMFLOW	MEDIUM	22.22	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	DEPTH
	LITTLEFIELD RIVER - SMUMBLR18 -													
LR-18	VRMP	7/8/2014	8:49 AM	L										
	LITTLEFIELD RIVER - SMUMBLR18 -												DARKLY	
LR-18	VRMP	7/22/2014	8:15 AM	N	BASEFLOW	MEDIUM	17.22	BRIDGE	CLEAR	CALM	CLEAR	RUN	STAINED	NON-WADEABLE/MID-DEPTH
	LITTLEFIELD RIVER - SMUMBLR18 -												MEDIUM	HEAVY RAIN LAST NIGHT NON-
LR-18	VRMP	8/14/2014	6:25 AM	N	STORMFLOW	HIGH	16.67	BRIDGE	CLEAR		HEAVY RAIN	RUN	STAINED	WADEABLE/MID-DEPTH
15.40	LITTLEFIELD RIVER - SMUMBLR18 -	0/44/2044												
LR-18	VRMP	8/14/2014	6:30 AM	N							DADTIV		NAFRILINA	
LR-18	LITTLEFIELD RIVER - SMUMBLR18 - VRMP	9/4/2014	8:30 AM	N	BASEFLOW	MEDIUM	16.11	BRIDGE	CLEAR	CALM	PARTLY CLOUDY	RUN	MEDIUM STAINED	NON-WADEABLE/MID-DEPTH
LN-10	LITTLEFIELD RIVER - SMUMBLR18 -	9/4/2014	6.30 AIVI	IN	BASEFLOW	IVIEDIOIVI	10.11	BRIDGE	CLEAR	CALIVI	CLOODT	KUN	STAINED	NON-WADEABLE/MID-DEPTH
LR-18	VRMP	9/23/2014	6:48 AM	N										
2.1. 10	LITTLEFIELD RIVER - SMUMBLR18 -	3/23/2011	0.107								PARTLY		MEDIUM	
LR-18	VRMP	9/23/2014	7:45 AM	N	BASEFLOW	LOW	7.78	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	NON-WADEABLE/MID-DEPTH
	MIDDLE BRANCH MOUSAM RIVER -												MEDIUM	·
MOUSMB-33	SMUMB33 - VRMP	6/17/2014	8:02 AM	N	BASEFLOW	MEDIUM	15.56	BRIDGE	CLEAR	CALM	CLEAR	RUN	STAINED	NON-WADEABLE/MID-DEPTH
	MIDDLE BRANCH MOUSAM RIVER -													
MOUSMB-33	SMUMB33 - VRMP	6/17/2014	8:10 AM	N										
											HEAVY RAIN,			
											LIGHT RAIN,			THUNDERSTORM PREVIOUS 24
	MIDDLE BRANCH MOUSAM RIVER -	7/0/0044	0.07.114		5.46551.614		22.22	2212.05	0.545		PARTLY		DARKLY	HOURS NON-WADEABLE/MID-
MOUSMB-33	SMUMB33 - VRMP	7/8/2014	9:07 AM	N	BASEFLOW	MEDIUM	22.22	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	DEPTH
MOLICME 22	MIDDLE BRANCH MOUSAM RIVER -	7/22/2014	0.25 414	NI NI	DASELLOW	MEDILIM	17 22	DDIDCE	CLEAR	CALM	CLEAR	RUN	DARKLY	NON WADEARIE/MID DERTH
MOUSMB-33	SMUMB33 - VRMP MIDDLE BRANCH MOUSAM RIVER -	7/22/2014	8:25 AM	N	BASEFLOW	MEDIUM	17.22	BRIDGE	CLEAR	CALIVI	CLEAR	KUN	STAINED	NON-WADEABLE/MID-DEPTH
MOUSMB-33	SMUMB33 - VRMP	7/22/2014	8:25 AM	D				BRIDGE						NON-WADEABLE/MID-DEPTH
INICOSIVID 33	SIVICIVIESS VIIIVII	7/22/2014	0.237(14)					BINIDGE						HEAVY RAIN LAST NIGHT; LOTS OF
	MIDDLE BRANCH MOUSAM RIVER -												MEDIUM	DEBRIS FLOATING IN RIVER NON-
MOUSMB-33	SMUMB33 - VRMP	8/14/2014	6:40 AM	N	STORMFLOW	HIGH	16.67	BRIDGE	CLEAR		HEAVY RAIN	RUN	STAINED	WADEABLE/MID-DEPTH
	MIDDLE BRANCH MOUSAM RIVER -													
MOUSMB-33	SMUMB33 - VRMP	8/14/2014	6:47 AM	N										
	MIDDLE BRANCH MOUSAM RIVER -										PARTLY		MEDIUM	
MOUSMB-33	SMUMB33 - VRMP	9/4/2014	8:45 AM	N	BASEFLOW	MEDIUM	16.11	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	NON-WADEABLE/MID-DEPTH
	MIDDLE BRANCH MOUSAM RIVER -										PARTLY		MEDIUM	
MOUSMB-33	SMUMB33 - VRMP	9/23/2014	7:58 AM	N	BASEFLOW	MEDIUM	7.78	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	NON-WADEABLE/MID-DEPTH
	MIDDLE BRANCH MOUSAM RIVER -	0 /00 /004 4												
MOUSMB-33	SMUMB33 - VRMP	9/23/2014	8:03 AM	N										
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/16/2014	8:35 AM	N										
IVIOUR-04	IVIOUSAIVI RIVER - SIVIOU4 - VRIVIP	7/16/2014	0.33 AIVI	IN							CLEAR,			
									PARTLY		CLOUDY, LIGHT		MEDIUM	HEAVY RAIN LAST NIGHT
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/16/2014	8:40 AM	N	BASEFLOW	LOW		WADING	CLOUDY	CALM	RAIN	RIFFLE	STAINED	WADEABLE/MID-DEPTH
	CO. W. LUTEL SINIOG VILLINI	.,120,2014	3 3 / 1111	.,	5, 521 2011	-5**			CLEAR,	C. ILIVI	LIGHT RAIN,		J.,	
									PARTLY		MOSTLY		MEDIUM	NON-WADEABLE/3 FT BELOW
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	7/29/2014	8:37 AM	N	STORMFLOW	HIGH	16.67	BANK	CLOUDY	CALM	CLOUDY	RIFFLE	STAINED	SURFACE
														SOME OIL (OTHER) SLICK NON-
														WADEABLE/3 FT BELOW SURFACE
														SAMPLING LOCATION NOT
									PARTLY				MEDIUM	RECORDED. NO VERTICAL DEPTH
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	8/12/2014	9:07 AM	N	BASEFLOW	LOW	17.78	BANK	CLOUDY	<u> </u>	CLEAR	RIFFLE	STAINED	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	Water Appearance	Comments
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	8/27/2014	9:06 AM	N	BASEFLOW	MEDIUM	20	BANK	PARTLY CLOUDY	CALM	CLEAR, PARTLY CLOUDY	RIFFLE	CLEAR	NON-WADEABLE/3 FT BELOW SURFACE
										CALIVI				OIL SLICK NON-WADEABLE/3 FT
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	9/9/2014	8:57 AM	N	BASEFLOW	MEDIUM	11.67	WADING	CLEAR		CLEAR	RIFFLE	CLEAR	BELOW SURFACE
MOUR-04	MOUSAM RIVER - SMU04 - VRMP	9/9/2014	9:15 AM	N									DARKLY	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	6/17/2014	8:50 AM	N	BASEFLOW	MEDIUM	15.56	WADING	CLEAR	CALM	CLEAR	CASCADE	STAINED	WADEABLE/MID-DEPTH
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	6/17/2014	8:55 AM	N										
											HEAVY RAIN, LIGHT RAIN,			
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	7/8/2014	9:52 AM	N	STORMFLOW	MEDIUM	22.22	WADING	CLEAR	CALM	PARTLY CLOUDY	CASCADE	MEDIUM STAINED	THUNDERSTORM PREVIOUS 24 HOURS WADEABLE/MID-DEPTH
	MOUSAM RIVER - SMU144 - VRMP	7/22/2014	7:40 AM	N	BASEFLOW	MEDIUM	17.22	WADING	CLEAR	CALM	CLEAR	CASCADE	MEDIUM STAINED	WADEABLE/MID-DEPTH
MOUR-144										CALIVI			MEDIUM	HEAVY RAIN LAST NIGHT
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	8/14/2014	7:35 AM	N	STORMFLOW	HIGH	16.67	WADING	CLEAR		HEAVY RAIN	CASCADE	STAINED	WADEABLE/MID-DEPTH
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	8/14/2014	7:40 AM	N							PARTLY		MEDIUM	
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/4/2014	9:35 AM	N	BASEFLOW	MEDIUM	16.11	WADING	CLEAR	CALM	CLOUDY PARTLY	CASCADE	STAINED	WADEABLE/MID-DEPTH
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/23/2014	9:15 AM	N	BASEFLOW	MEDIUM	7.78	WADING	CLEAR	CALM	CLOUDY	CASCADE	CLEAR	WADEABLE/MID-DEPTH
MOUR-144	MOUSAM RIVER - SMU144 - VRMP	9/23/2014	9:18 AM	N										
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	6/17/2014	8:20 AM	N	BASEFLOW	MEDIUM	15.56	WADING	CLEAR	CALM	CLEAR	RUN	CLEAR	WADEABLE/MID-DEPTH
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	6/17/2014	8:27 AM	N										
											HEAVY RAIN, LIGHT RAIN,			
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	7/8/2014	9:23 AM	N	BASEFLOW	HIGH	22.22	WADING	CLEAR	CALM	PARTLY CLOUDY	RUN	MEDIUM STAINED	THUNDERSTORMS PREVIOUS 24 HOURS WADEABLE/MID-DEPTH
														·
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	7/22/2014	8:45 AM	N	BASEFLOW	MEDIUM	17.22	WADING	CLEAR	CALM	CLEAR	RUN	CLEAR MEDIUM	WADEABLE/MID-DEPTH HEAVY RAIN LAST NIGHT
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014	7:00 AM	N	STORMFLOW	HIGH	16.67	WADING	CLEAR		HEAVY RAIN	RUN	STAINED	WADEABLE/MID-DEPTH HEAVY RAIN LAST NIGHT
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014	7:00 AM	D				WADING						WADEABLE/MID-DEPTH
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	8/14/2014	7:05 AM	N							DARTIV		MEDILINA.	
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/4/2014	9:05 AM	N	BASEFLOW	MEDIUM	16.11	WADING	CLEAR	CALM	PARTLY CLOUDY	RUN	MEDIUM STAINED	WADEABLE/MID-DEPTH
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/23/2014	8:40 AM	N	BASEFLOW	MEDIUM	7.78	WADING	CLEAR	CALM	PARTLY CLOUDY	RUN	MEDIUM STAINED	WADEABLE/MID-DEPTH
MOUR-163	MOUSAM RIVER - SMU163 - VRMP	9/23/2014	8:43 AM	N										
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	6/17/2014	8:40 AM	N	BASEFLOW	MEDIUM	15.56	BRIDGE	CLEAR	CALM	CLEAR	RUN	DARKLY STAINED	NON-WADEABLE/MID-DEPTH
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	6/17/2014	8:42 AM	N										
201	THE STREET STREET	5/11/2014	0.1271111	.,							HEAVY RAIN, LIGHT RAIN,			THUNDERSTORMS PREVIOUS 24
											PARTLY		DARKLY	HOURS NON-WADEABLE/MID-
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/8/2014	9:39 AM	N	BASEFLOW	MEDIUM	22.22	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	DEPTH

Organization Site	VRMP Site ID	Date	Time	** Sample Type Qualifier	Flow	Stage	Air Temp	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
													DARKLY	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/22/2014	8:50 AM	N	BASEFLOW	MEDIUM	17.22	BRIDGE	CLEAR	CALM	CLEAR	RUN	STAINED	NON-WADEABLE/MID-DEPTH
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	7/22/2014	9:00 AM	N										
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	8/14/2014	7:20 AM	N	STORMFLOW	HIGH	16.67	BRIDGE	CLEAR		HEAVY RAIN	RUN	MEDIUM STAINED	HEAVY RAIN LAST NIGHT NON- WADEABLE/MID-DEPTH
														,
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	8/14/2014	7:25 AM	N							PARTLY		MEDIUM	
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/4/2014	9:17 AM	N	BASEFLOW	MEDIUM	16.11	BRIDGE	CLEAR	CALM	CLOUDY	RUN	STAINED	NON-WADEABLE/MID-DEPTH
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/4/2014	9:17 AM	D				BRIDGE						NON-WADEABLE/MID-DEPTH
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:02 AM	N	BASEFLOW	MEDIUM	7.78	BRIDGE	CLEAR	CALM	PARTLY CLOUDY	RUN	MEDIUM STAINED	NON-WADEABLE/MID-DEPTH
				-				DDIDCE						
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:02 AM	D				BRIDGE						NON-WADEABLE/MID-DEPTH
MOUR-204	MOUSAM RIVER - SMU204 - VRMP	9/23/2014	9:05 AM	N					PARTLY		PARTLY		MEDIUM	
MOUR-232	MOUSAM RIVER - SMU232-VRMP	6/19/2014	7:30 AM	N	BASEFLOW	MEDIUM	21.6	WADING	CLOUDY		CLOUDY	RUN	STAINED	WADEABLE/MID-DEPTH
											HEAVY RAIN,			
									MOSTLY CLOUDY,		PARTLY CLOUDY,			STRONG THUNDERSTORMS LAST
MOUR-232	MOUSAM RIVER - SMU232-VRMP	7/4/2014	8:10 AM	N	STORMFLOW	HIGH		WADING	SHOWERS		SHOWERS	RIFFLE	CLEAR	NIGHT WADEABLE/MID-DEPTH
	MOOS IN INVENTORING STREET	77 17 202 1	0.107		3.02011			***************************************	MOSTLY		HEAVY RAIN,		OLL/ III	WADEABLE/MID-DEPTH D.O.
									CLOUDY,		PARTLY			METER-DID NOT RECORD TIME OF
									PARTLY		CLOUDY,			CALIBRATION. CALIBRATION VALUE
MOUR-232	MOUSAM RIVER - SMU232-VRMP	7/17/2014	7:40 AM	N	BASEFLOW	MEDIUM	20.9	WADING	CLOUDY	CALM	SHOWERS	RUN	CLEAR	OK.
											HEAVY RAIN,			
											MOSTLY			YESTERDAY HEAVY DOWNPOURS,
											CLOUDY,		MEDIUM	LIGHTENING, FLASH FLOODING, 3"
MOUR-232	MOUSAM RIVER - SMU232-VRMP	8/15/2014	7:50 AM	N	STORMFLOW	HIGH	21.2	WADING	CLEAR		SHOWERS	RIFFLE	STAINED	OF RAIN WADEABLE/MID-DEPTH
									PARTLY		PARTLY			WADEABLE/MID-DEPTH NO VALUE
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	6/19/2014	7:10 AM	N	BASEFLOW	MEDIUM	21.6	WADING	CLOUDY		CLOUDY	RIFFLE	CLEAR	FOR D.O. IN % SATURATION.
											HEAVY RAIN,			
									MOSTLY		PARTLY			
									CLOUDY,		CLOUDY,		MEDIUM	STRONG THUNDERSTORMS LAST
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	7/4/2014	8:00 AM	N	BASEFLOW	MEDIUM		WADING	SHOWERS		SHOWERS	RIFFLE	STAINED	NIGHT WADEABLE/MID-DEPTH
														YESTERDAY FLASH FLOODING IN
														SOME AREAS OF YORK COUNTY,
											HEAVY RAIN,			THUNDER/MICROBURST WADEABLE/MID-DEPTH D.O.
											PARTLY			METER-DID NOT RECORD TIME OF
											CLOUDY,			CALIBRATION. CALIBRATION VALUE
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	7/17/2014	7:30 AM	N	BASEFLOW	MEDIUM	20.9	WADING	CLOUDY	CALM	SHOWERS	RUN	CLEAR	OK.
											HEAVY RAIN,			
											MOSTLY			YESTERDAY HEAVY DOWNPOURS,
											CLOUDY,			LIGHTENING, FLASH FLOODING, 3"
MOUR-250	MOUSAM RIVER - SMU250 - VRMP	8/15/2014	7:30 AM	N	STORMFLOW	HIGH	21.2	WADING	CLEAR	CALM	SHOWERS	RUN	CLEAR	OF RAIN WADEABLE/MID-DEPTH
									PARTLY		PARTLY			WADEABLE/MID-DEPTH NO VALUE
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	6/19/2014	6:50 AM	N	BASEFLOW	MEDIUM	21.6	WADING	CLOUDY		CLOUDY	RIFFLE	CLEAR	FOR DO IN % SATURATION.
		,									HEAVY RAIN,			
									MOSTLY		PARTLY			
		l							CLOUDY,		CLOUDY,			STRONG THUNDERSTORMS LAST
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/4/2014	7:45 AM	N	BASEFLOW	MEDIUM		WADING	SHOWERS	<u> </u>	SHOWERS	RIFFLE	CLEAR	NIGHT. WADEABLE/MID-DEPTH

				**										
Organization Site				Sample Type	-1		Air Temp		Current	Air	Past 24HR		Water	
Code	VRMP Site ID	Date	Time	Qualifier	Flow	Stage	(°C)	Sample Location	Weather	Condition	Weather	Habitat	Appearance	Comments YESTERDAY FLASH FLOODING IN
														SOME AREAS OF YORK COUNTY,
														THUNDER/MICROBURST
											HEAVY RAIN,			WADEABLE/MID-DEPTH
											PARTLY CLOUDY,			D.O.METER-DID NOT RECORD TIME OF CALIBRATION. CALIBRATION
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/17/2014	7:10 AM	N	BASEFLOW	MEDIUM	20.9	WADING	CLOUDY	CALM	SHOWERS	RUN	CLEAR	VALUE OK.
														YESTERDAY FLASH FLOODING IN
														SOME AREAS OF YORK COUNTY,
														THUNDER/MICROBURST
														WADEABLE/MID-DEPTH D.O.METER-DID NOT RECORD TIME
														OF CALIBRATION. CALIBRATION
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	7/17/2014	7:10 AM	D				WADING						VALUE OK.
											HEAVY RAIN,			
											MOSTLY			YESTERDAY HEAVY DOWNPOURS,
MOUR-280	MOUSAM RIVER - SMU280 - VRMP	8/15/2014	7:14 AM	N	STORMFLOW	HIGH	21.2	WADING	CLEAR	CALM	CLOUDY, SHOWERS	RUN	CLEAR	LIGHTENING, FLASH FLOODING, 3" OF RAIN WADEABLE/MID-DEPTH
WIOON 280	WIGOSAWI KIVEK - SWIOZBO - VIKIVII	0/13/2014	7.14 AIVI	IN	STORIVII LOVV	TIIGH	21.2	WADING	PARTLY	CALIVI	PARTLY	KON	CLLAIN	OF NAIN WADEABLE/WIID-DET TIT
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	6/19/2014	6:40 AM	N	BASEFLOW	MEDIUM	21.6	BANK	CLOUDY		CLOUDY	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
											HEAVY RAIN,			STRONG THUNDERSTORMS LAST
									MOSTLY		PARTLY			NIGHT NON-WADEABLE/MID-
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	7/4/2014	7:30 AM	N	BASEFLOW	MEDIUM		BANK	CLOUDY, SHOWERS		CLOUDY, SHOWERS	RUN	CLEAR	DEPTH NO VALUE FOR D.O. IN % SATURATION.
moon 250	Wie ob, William Sillogue Villiam	77 172011	71507111		57.527.2077			5,	5110112115		5110112110		OLL/ III	YESTERDAY FLASH FLOODING IN
														SOME AREAS OF YORK COUNTY,
														THUNDER/MICROBURST NON-
											HEAVY RAIN, PARTLY			WADEABLE/MID-DEPTH D.O. METER-DID NOT RECORD TIME OF
											CLOUDY,			CALIBRATION. CALIBRATION
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	7/17/2014	7:00 AM	N	BASEFLOW	MEDIUM	20.9	BANK	CLOUDY	CALM	SHOWERS	RUN	CLEAR	VALUE OK.
											HEAVY RAIN,			
											MOSTLY			YESTERDAY HEAVY DOWNPOURS,
MOUR-290	MOUSAM RIVER - SMU290 - VRMP	8/15/2014	7:00 AM	N	STORMFLOW	HIGH	21.2	BANK	CLEAR	CALM	CLOUDY, SHOWERS	RUN	CLEAR	FLASH FLOODING, 3" OF RAIN NON- WADEABLE/MID-DEPTH
moon 250	INCOSTRUCTURES SINGESCONTRACTOR	0/15/2011	71007111		5.5 25			5,	OLL) III	0, 12111	PARTLY		OLL/ III	Wilderiget, Wild Service
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	6/19/2014	9:00 AM	N	BASEFLOW	LOW	16.11	BANK	CLEAR	BREEZE	CLOUDY	RUN	CLEAR	WADEABLE/MID-DEPTH
MOUD 25	MOLICANA DIVED. CAALIZE, VIDAAD.	7/2/2014	0.20 414	N.										
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/2/2014	8:20 AM	N										
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/16/2014	8:05 AM	N										
											CLEAR,			
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/16/2014	8:12 AM	N	BASEFLOW	MEDIUM		WADING	PARTLY CLOUDY	CALM	CLOUDY, LIGHT RAIN	RUN	FOAMY	HEAVY RAIN LAST NIGHT NON- WADEABLE/MID-DEPTH
WOOK-33	WOOSAW RIVER - SWOSS - VRIVIE	7/10/2014	0.12 AIVI	IN	BASLILOW	IVILDIOIVI		WADING	CLEAR,	CALIVI	LIGHT RAIN,	KON	TOAWIT	WADLABLE/IVIID-DEFITI
									PARTLY		MOSTLY			
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	7/29/2014	8:12 AM	N	STORMFLOW	MEDIUM	16.67	BANK	CLOUDY	CALM	CLOUDY	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
MOUR-35	MOLICANA DIVER CANLIZE VENAD	7/20/2014	0.12 AM	N										
CC-ADOINI	MOUSAM RIVER - SMU35 - VRMP	7/29/2014	8:13 AM	N						<u> </u>				SAMPLING LOCATION NOT
									PARTLY					RECORDED. NO VERTICAL DEPTH
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	8/12/2014	8:40 AM	N	BASEFLOW	HIGH	17.78		CLOUDY	CALM	CLEAR	RUN	CLEAR	RECORDED.
									PARTLY		CLEAR, PARTLY			
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	8/27/2014	8:35 AM	N	BASEFLOW	MEDIUM	20	WADING	CLOUDY		CLOUDY	RUN	CLEAR	NON-WADEABLE/MID-DEPTH
		-, ,					-			1				NON-WADEABLE/3 FT BELOW
MOUR-35	MOUSAM RIVER - SMU35 - VRMP	9/9/2014	8:32 AM	N	BASEFLOW	MEDIUM	11.67	BANK	CLEAR	CALM	CLEAR	RUN	CLEAR	SURFACE

				**										
Organization Site Code	VRMP Site ID	Date	Time	Sample Type Qualifier	Flow	Stage	Air Temp	Sample Location	Current Weather	Air Condition	Past 24HR Weather	Habitat	Water Appearance	Comments
						Ĭ					PARTLY		MEDIUM	
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	6/19/2014	8:48 AM	N	BASEFLOW	HIGH	16.11	BANK	CLEAR	BREEZE	CLOUDY	RUN	STAINED	POLLEN WADEABLE/MID-DEPTH
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/2/2014	8:07 AM	N										
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/2/2014	8:50 AM	N										
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/16/2014	7:47 AM	N							CLEAR,			
									PARTLY		CLOUDY, LIGHT		DARKLY	HEAVY RAIN LAST NIGHT
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/16/2014	7:51 AM	N	BASEFLOW	HIGH		WADING	CLOUDY	CALM	RAIN	RIFFLE	STAINED	WADEABLE/MID-DEPTH
									CLEAR,		LIGHT RAIN,			
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	7/29/2014	7:55 AM	N	STORMFLOW	HIGH	16.67	WADING	PARTLY CLOUDY	CALM	MOSTLY CLOUDY	RIFFLE	MEDIUM STAINED	WADEABLE/1.5 FT BELOW SURFACE
WICON-33	WOOSAW RIVER - SWOSS - VRIVII	7/23/2014	7.55 AIVI	IN	31 OKIVII LOVV	111011	10.07	WADING	CLOODI	CALIVI	CEGODI	MITTEL	JIAINED	OIL FILM SAMPLING LOCATION
									PARTLY				MEDIUM	NOT RECORDED. NO VERTICAL
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	8/12/2014	8:18 AM	N	BASEFLOW	HIGH	17.78		CLOUDY	CALM	CLEAR	RIFFLE	STAINED	DEPTH RECORDED.
									PARTLY		CLEAR, PARTLY		MEDIUM	OIL FILM NEAR SHORE. WATER LEVEL HIGH. WADEABLE/MID-
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	8/27/2014	8:13 AM	N	BASEFLOW	HIGH	20	WADING	CLOUDY		CLOUDY	RIFFLE	STAINED	DEPTH
		-, , -												
MOUR-39	MOUSAM RIVER - SMU39 - VRMP	9/9/2014	8:12 AM	N	BASEFLOW	MEDIUM	11.67	WADING	CLEAR	CALM	CLEAR	RIFFLE	CLEAR	OIL SLICK WADEABLE/MID-DEPTH
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	6/19/2014	8:10 AM	N	BASEFLOW	HIGH	16.11	BANK	CLEAR	BREEZE	PARTLY CLOUDY	RIFFLE	MEDIUM STAINED	POLLEN WADEABLE/MID-DEPTH
IVIOUR-80	IVIOUSAIVI KIVEK - SIVIOOU - VKIVIP	6/19/2014	6.10 AIVI	IN	BASEFLOW	піоп	10.11	DAINK	CLEAR	DNEEZE	CLOODY	KIFFLE	STAINED	POLLEN WADEABLE/MID-DEPTH
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/2/2014	7:45 AM	N										
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:09 AM	N										
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:09 AM	L										
											CLEAR,			
MOUD 90	MACHICANA DIVED CAMILOO VENAD	7/16/2014	7.10 414	N.	DACEEL OVA	IIICII		MADING	PARTLY	CALAA	CLOUDY, LIGHT	DIEELE	MEDIUM	HEAVY RAIN LAST NIGHT
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/16/2014	7:19 AM	N	BASEFLOW	HIGH		WADING	CLOUDY CLEAR,	CALM	RAIN LIGHT RAIN,	RIFFLE	STAINED	WADEABLE/MID-DEPTH VERY HIGH WATER, SLIGHT OIL
									PARTLY		MOSTLY		MEDIUM	FILM WADEABLE/1.5 FT BELOW
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/29/2014	7:25 AM	N	STORMFLOW	HIGH	16.67	WADING	CLOUDY	CALM	CLOUDY	RIFFLE	STAINED	SURFACE
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	7/29/2014	7:25 AM	L										
														OIL FILM SAMPLING LOCATION
MOUD OO	MOUGANA DIVER CAMUOS VENAD	0/42/2044	7.40.414		DACEEL OVA		47.70		PARTLY	64144	CLEAR	DIFFLE	MEDIUM	NOT RECORDED. NO VERTICAL
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/12/2014	7:40 AM	N	BASEFLOW	HIGH	17.78		CLOUDY	CALM	CLEAR	RIFFLE	STAINED	DEPTH RECORDED.
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/12/2014	7:40 AM	L										
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/27/2014	7:37 AM	N	BASEFLOW	HIGH	20	WADING	PARTLY CLOUDY	CALM	CLEAR, PARTLY CLOUDY	RIFFLE	DARKLY STAINED	WADEABLE/MID-DEPTH
IVIOUK-80	IVIOUSAIVI RIVER - SIVIUOU - VRIVIP	6/27/2014	7.57 AIVI	IN	DASEFLOW	піоп	20	WADING	CLOUDT	CALIVI	CLOODY	KIFFLE	STAINED	WADEABLE/WIID-DEPTH
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	8/27/2014	7:37 AM	L										
1401:2 00	AAOLICAAA DIVED CAAVOO VETTE	0/0/2211	7.45		DACES: 0:	MEDILI	44.57	MAS::::0	CLEAR		CI E + S	DIES: 5	0.515	OIL CHOK WADE STEELS STEELS
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	9/9/2014	7:45 AM	N	BASEFLOW	MEDIUM	11.67	WADING	CLEAR	CALM	CLEAR	RIFFLE	CLEAR	OIL SLICK WADEABLE/MID-DEPTH
MOUR-80	MOUSAM RIVER - SMU80 - VRMP	9/9/2014	7:45 AM	L									<u> </u>	
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