

ATTACHMENT I

WATER QUALITY METRICS

- 1. All water quality data is expressed as mg/L, unless otherwise noted.*
- 2. All water quality data less than the limit of analytical detection is expressed as “<”. Results of statistical data calculated with data expressed as less than that limit of detection are also expressed as “<”. The reader is cautioned that certain statistical expressions may also be equal to the limit of detection, but are not expressed as “≤”.*
- 3. All water quality standards expressed as “ADEM Standard” have been represented from, “Alabama Department of Environmental Management Water Division – Water Quality Program; Chapter 335-6-10 Water Quality Criteria.”*
- 4. All water quality standards expressed as “EPA Standard” have been represented from, “USEPA Office of Water, Science and Technology. 2009. National Recommended Water Quality Criteria,” which may be found online at:
<http://water.epa.gov/scitech/swguidance/standards/current/>.*
- 5. In most cases, stream classification was considered when selecting an appropriate standard. When in doubt, the more stringent standard was selected.*
- 6. Stream locations have been calculated to begin at the stream headwaters within the City of Birmingham and extend its full length until the point where the stream continues beyond the City of Birmingham limits. Should another jurisdiction bisect a stream segment, the mileage designation would continue again where the stream segment enters the City of Birmingham jurisdiction and will also include the mileage traversed through the other jurisdiction.*
- 7. All reported parameters for “Instream” and “Screening Sites” were determined through laboratory analysis except for pH and Temperature, which were measured in the field using HACH pH test strips and a digital thermometer. “Inflow Sites” were measured in the field using HACH test strips for Ammonia and pH. All other parameters were measured using either a LaMotte or HACH “Stormwater Kit” and temperature with a digital thermometer.*
- 8. Reported standard concentrations for Chromium (III), nickel, and silver are expressed as a function of the average wet and dry period hardness concentration (mg/L-CaCO₃) for the stream. Other metals having a hardness toxicity function in State law were also adjusted accordingly.*

**Cahaba River
Water Quality Monitoring
2010**

SCREENING SITES

Date	Station	Mileage	Arsenic		BOD (5)		COD		Chromium (CR3)		Chromium (Hexavalent)		Fecal Coliform	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100mL)		
9/22/2010	IRCRI4	Miles from Headwater	<0.0500		<5.0		12.8		<0.0100		<0.0100		2560	
Count			1		1		1		1		1		1	
Mean			<0.0500		<5.0		12.8		<0.0100		<0.010		2560	
Median			<0.050		<5.0		12.8		<0.0100		<0.010		2560	
Maximum			<0.050		<5.0		12.8		<0.0100		<0.100		2560	
Std Dev														
Reporting Limits			<0.050		5.0		10.0		0.0100		<0.010		Variable	
EPA Standard			0.340						0.339					
ADEM Standard			0.340						0.339					

**Cahaba River
Water Quality Monitoring
2010**

SCREENING SITES

Date	Station	Mileage	Miles from Headwater	Dissolved Cyanide	Dieldrin	Hardness (CaCO3)	Mercury	Nickel
9/22/2010	IRCR14							
			Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)
			<0.0100				<0.00020	<0.020
					Dry (mg/L)			
					121			

Count	1	1	1	1	1
Mean	<0.0100		121		<0.00020
Median	<0.0100		121		<0.00020
Maximum	<0.0100		121		<0.00020
Std Dev					
Reporting Limits	0.010		1.0		0.0002
EPA Standard	0.022				0.0014
ADEM Standard	0.022				0.0024
					0.389
					0.389

**Cahaba River
Water Quality Monitoring
2010**

SCREENING SITES

Date	Station	Mileage	Ammonia Nitrogen		Total Nitrogen		TKN		Oil & Grease		Total Phenol		Total Phosphorus	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
9/22/2010	IRCR14	Miles from Headwater	<0.200		<0.50		<0.50		<5.0				<0.050	

Count	1	1	1	1	1	1	7
Mean	<0.200	<0.5	<0.5	<0.5	<5.0	<0.050	<0.050
Median	<0.200	<0.5	<0.5	<0.5	<5.0	<0.050	<0.050
Maximum	<0.200	<0.5	<0.5	<0.5	<5.0	<0.050	<0.050
Std Dev							
Reporting Limits	0.20	0.50	0.50	5.0	0.050	0.05	
EPA Standard					0.300		
ADEM Standard					10.28		

**Cahaba River
Water Quality Monitoring
2010**

SCREENING SITES

Date	Station	Mileage	Total Dissolved Phosphorus		TDS		TSS		Silver		Turbidity	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)
9/22/2010	IRCR14	Miles from Headwater	<0.050		143		5.5		<0.010		3.59	
Count			7		1		1		1		1	
Mean			<0.050		143		5.5		<0.010		3.6	
Median			<0.050		143		5.5		<0.010		3.6	
Maximum			<0.050		143		5.5		<0.010		3.6	
Std Dev												
Reporting Limits			0.05		10.0		Variable		0.010		Variable	
EPA Standard									0.000			
ADEEM Standard									0.000			550 Above Background

**Cahaba River
Water Quality Monitoring
2010**

SCREENING SITES

Date	Station	Mileage	pH	Temperature
		Miles from Headwater	Dry (Units)	Wet (°F)
9/22/2010	IRCR14		8.1	79.5

Count	1	Variable	Variable
Mean	8.1	6.5 - 9.0	Species Dependent
Median	8.1	6.0 - 8.5	586°
Maximum	8.1		
Std Dev			
Reporting Limits			
EPA Standard			
ADEM Standard			

**Little Cahaba
Water Quality Monitoring
2009-2011**

SCREENING SITES

Date	Station	Mileage from Headwater	Arsenic		BOD (5)		COD		Chromium (CR3)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
8/24/2009	CHLCR-9	2.34206	<0.050	<0.050	<5.0	<5.0	26.0	10.5	<0.0100	<0.0100	<0.010	<0.010
8/4/2010	CHLCR-9	2.34206	<0.050	<0.050	<5.0	<5.0	10.5	19.0	<0.0100	<0.0100	<0.010	<0.010
8/18/2011	CHLCR-9	2.34206	<0.010	<0.010	<5.0	<5.0	<10.0	<10.0	<0.0100	<0.0100	<0.010	<0.010
8/24/2009	CHLCR - 10	0.88346	<0.050	<0.050	<5.0	<5.0	15.1	10.1	<0.0100	<0.0100	<0.010	<0.010
8/4/2010	CHLCR - 10	0.88346	<0.050	<0.050	<5.0	<5.0	10.1	<10.0	<0.0100	<0.0100	<0.010	<0.010
8/18/2011	CHLCR - 10	0.88346	<0.010	<0.010	<5.0	<5.0	<10.0	<10.0	<0.0100	<0.0100	<0.010	<0.010
8/24/2009	CHLCR - 11	0	<0.050	<0.050	<5.0	<5.0	<10.0	<10.0	<0.0100	<0.0100	<0.010	<0.010
Count			7	7	7	7	7	6	6	6	7	7
Mean			<0.039	<0.039	<5.0	<5.0	<14.4	<10.5	<0.0100	<0.0100	<0.049	<0.049
Median			<0.050	<0.050	<5.0	<5.0	<10.5	<10.5	<0.0100	<0.0100	<0.010	<0.010
Maximun			<0.050	<0.050	<5.0	<5.0	26.0	26.0	<0.0100	<0.0100	<0.100	<0.100
Std Dev			<0.020	0.0	0.0	<6.2	<6.2	0.000	0.000	<0.048	<0.048	Variable
Reporting Limits			Variable	5.0	10.0	10.0	10.0	0.0100	0.0100	Variable	Variable	Variable
EPA Standard			0.340	0.340	0.462	0.462	0.462	0.462	0.462	0.462	0.462	0.462
ADEM Standard			0.340	0.340	0.462	0.462	0.462	0.462	0.462	0.462	0.462	0.462

**Little Cahaba
Water Quality Monitoring
2009-2011**

SCREENING SITES

Date	Station	Miles from Headwater	Fecal Coliform		Dissolved Cyanide		Dieldrin		Hardness (CaCO3)	
			Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)
8/24/2009	CHLCR-9	2.34206	1,000		<0.0100				177	
8/4/2010	CHLCR-9	2.34206	ND		<0.0100				202	
8/18/2011	CHLCR-9	2.34206	128		<0.0100				194	
8/24/2009	CHLCR - 10	0.88346	600		<0.0100				177	
8/4/2010	CHLCR - 10	0.88346	ND		<0.0100				195	
8/18/2011	CHLCR - 10	0.88346	22		<0.0100				171	
8/24/2009	CHLCR - 11	0	2,200		<0.0100				117	
Count			5		7				7	
Mean			790		<0.0100				176	
Median			600		<0.0100				177	
Maximum			2200		<0.0100				202	
Std Dev			880		0.000				28	
Reporting Limits			Variable		0.010				1.0	
EPA Standard					0.022					
ADEM Standard					0.022					

**Little Cahaba
Water Quality Monitoring
2009-2011**

SCREENING SITES

Date	Station	Mileage from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
8/24/2009	CHLCR-9	2.34206	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/4/2010	CHLCR-9	2.34206	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/18/2011	CHLCR-9	2.34206	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/24/2009	CHLCR - 10	0.88346	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/4/2010	CHLCR - 10	0.88346	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/18/2011	CHLCR - 10	0.88346	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
8/24/2009	CHLCR - 11	0	<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
Count			7	7	7	7	7	7	7	7	7	7
Mean			<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
Median			<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
Maximum			<0.00020	<0.00020	<0.0200	<0.0200	<0.200	<0.200	<0.5	<0.5	<0.5	<0.5
Std Dev			0.0000	0.0000	0.000	0.000	0.000	0.000	0.0	0.0	0.0	0.0
Reporting Limits			0.0002	0.0002	0.020	0.020	0.20	0.20	0.50	0.50	0.50	0.50
EPA Standard			0.0014	0.0014	0.534	0.534						
ADEM Standard			0.0024	0.0024	0.534	0.534						

**Little Cahaba
Water Quality Monitoring
2009-2011**

SCREENING SITES

Date	Station	Mileage from Headwater	Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus		TDS
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	
8/24/2009	CHLCR-9	2.34206	<5.0		<0.050		<0.050		<0.050		157
8/4/2010	CHLCR-9	2.34206	<5.0		<0.050		<0.050		<0.050		338
8/18/2011	CHLCR-9	2.34206	<5.0		<0.050		<0.050		<0.050		271
8/24/2009	CHLCR - 10	0.88346	<5.0		<0.050		<0.050		<0.050		216
8/4/2010	CHLCR - 10	0.88346	<5.0		<0.050		<0.050		<0.050		315
8/18/2011	CHLCR - 10	0.88346	<5.0		<0.050		<0.050		<0.050		255
8/24/2009	CHLCR - 11	0	<5.0		<0.050		<0.050		<0.050		124
Count			7		7		7		7		7
Mean			<5.0		<0.050		<0.050		<0.050		239
Median			<5.0		<0.050		<0.050		<0.050		255
Maximum			<5.0		<0.050		<0.050		<0.050		338
Std Dev			0.0		0.00		0.00		0.00		79
Reporting Limits			5.0		0.050		0.05		0.05		10.0
EPA Standard					0.300						
ADEM Standard					10.28						

**Little Cahaba
Water Quality Monitoring
2009-2011**

SCREENING SITES

Date	Station	Mileage from Headwater	TSS		Silver		Turbidity		pH		Temperature	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)
8/24/2009	CHLCR-9	2.34206	<5.0	<0.010	<0.010	<0.010	3.5	7.0	8.6	77.2		
8/4/2010	CHLCR-9	2.34206	<5.0	<0.010	<0.005	<0.010	3.4	8.6				
8/18/2011	CHLCR-9	2.34206	<5.0	<0.010	<0.005	<0.010	2.0	7.5				
8/24/2009	CHLCR - 10	0.88346	5.0	<0.010	<0.010	<0.010	4.8	9.1			69.1	
8/4/2010	CHLCR - 10	0.88346	<5.0	<0.010	<0.010	<0.010	1.6					
8/18/2011	CHLCR - 10	0.88346	5.5	<0.005	<0.005	<0.010	1.7					
8/24/2009	CHLCR - 11	0	30.0	<0.010	<0.010	<0.010	2.4	7.5				
Count			7	7	7	7	7	5	5	2	2	2
Mean			<8.6	<0.009	<0.009	<0.009	2.8	7.9	7.9	73.1	73.1	73.1
Median			<5.0	<0.010	<0.010	<0.010	2.4	7.5	7.5	73.1	73.1	73.1
Maximum			30.0	<0.010	<0.010	<0.010	4.8	9.1	9.1	77.2	77.2	77.2
Std Dev			<9.4	<0.002	<0.002	<0.002	1.2	0.9	0.9	5.7	5.7	5.7
Reporting Limits			Variable	0.010	0.010	0.010	Variable	Variable	Variable	Variable	Variable	Variable
EPA Standard			0.000	0.000	0.000	0.000	0.000	6.5 - 9.0	6.5 - 9.0	Species Dependent	Species Dependent	Species Dependent
ADEM Standard			0.000	0.000	0.000	0.000	≤50 Above Background	≤50 Above Background	6.0 - 8.5	6.0 - 8.5	586⁰	586⁰

**Little Cahaba
Water Quality Monitoring
2009-2011**

INFLOW SITES

DATE	OUTFALL ID	LAT.	LONG.	TYPE	SIZE (inches)	FLOW (IL/sec)	TEMP (F)	pH	AMMONIA (mg/L)	COPPER, TOTAL (mg/L)	PHENOL (mg/L)	DETERGENTS (mg/L)
6/19/2009	17238072	33.46184998	-86.6710141	Open	48"228"160"	19	75.7	8	0			
6/19/2009	17238073	33.46190257	-86.6720559	Open	24"112"169"	11.94	69.1	8	0			
					Count	2	2	2	2			
					Mean	72.4	72.4	8	0			
					Median	72.4	72.4	8	0			
					Maximum	75.7	75.7	8	0			
					Std Dev	4.7	4.7	0	0			
					Reporting Limit	Variable	Variable	Variable	Variable			
					EPA Standard							
					ADEM Standard	586°	586°	6.0 - 8.5	3.00			

**Lake Purdy
Water Quality Data
2009-2011**

LAKE SITES

6.4

Date	Station	Mileage from Headwater	Arsenic (AS III)		BOD (5)		COD		Chromium (CR3)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
8/18/2011	VALP - 2		<0.01		3.4		47.9		<0.0100		<0.100	
8/4/2010	VALP - 2		<0.05		9.4		33.5		<0.0100		<0.010	
6/3/2009	VALP - 2		<0.05		2.6		18.0		<0.0100		<0.010	
Total Samples			3		3		3		3		3	
Mean			<0.04		5.1		33.1		<0.010		<0.040	
Median			<0.05		3.4		33.5		<0.010		<0.010	
Max/min			<0.05		9.4		47.9		<0.010		<0.100	
Std Dev			<0.02		3.7		15.0		0.000		<0.052	
Reporting Limits			Variable		5.0		10.0		0.0100		Variable	
EPA Standard			0.340						0.341			
ADEM Standard			0.340						0.341			

**Lake Purdy
Water Quality Data
2009-2011**

LAKE SITES

Date	Station	Mileage from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
8/18/2011	VALP - 2		<0.00020		<0.0200		<0.200		1.0		1.0	
8/4/2010	VALP - 2		<0.00020		<0.0200		<0.200		1.5		1.4	
5/2/2009	VALP - 2		<0.00020		<0.0200		<0.200		0.9		0.9	
Total Samples			3	3	3	3	3	3	3	3	3	3
Mean			<0.00020		<0.0200		<0.200		1.1		1.1	
Median			<0.00020		<0.0200		<0.200		1.0		1.0	
Maximum			<0.00020		<0.0200		<0.200		1.5		1.4	
Std Dev			0.000		0.00		0.0		0.3		0.3	
Reporting Limits			0.0002		0.020		0.20		0.50		0.50	
EPA Standard			0.0014		0.391							
ADEM Standard			0.0024		0.391							

**Lake Purdy
Water Quality Data
2009-2011**

LAKE SITES

Date	Station	Mileage Miles from Headwater	TSS		Silver		Turbidity		pH	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)
8/18/2011	VALP - 2		13.0		<0.005		7.21			
8/4/2010	VALP - 2		19.5		<0.010		5.88			8.0
6/3/2009	VALP - 2		10		<0.010		6.20			8.0
Total Samples			3		3		3			2
Mean			14.2		<0.008		6.4			8.0
Median			13.0		<0.010		6.2			8.0
Maximum			19.5		<0.010		7.2			8.0
Std Dev			4.9		<0.003		0.7			0.0
Reporting Limits			Variable		0.010		Variable			Variable
EPA Standard					0.000					6.5 - 9.0
ADEM Standard					0.000		≤50 Above Background			>6.0 - ≤8.5

**Five Mile Creek
Water Quality Data
2009-2013**

IN STREAM

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD		Chromium (CR3)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	FMC-3	17.120								
2/18/2013	FMC-3	17.120			<5.0	<10.0	<5.0	<0.010	<0.010	<0.01
11/1/2012	FMC-3	17.120	0.005		<5.0	<10.0	<0.010	<0.010	<0.010	<0.01
4/27/2011	FMC-3	17.120		<0.0500						
2/15/2011	FMC-3	17.120	<0.05		<5.0	22.2	<0.010	<0.010	<0.010	<0.01
10/19/2010	FMC-3	17.120	<0.05		<5.0	<10.0	<0.010	<0.010	<0.010	<0.01
8/26/2010	FMC-3	17.120	<0.05		<5.0	15.1	<0.010	<0.010	<0.010	<0.01
8/20/2010	FMC-3	17.120	<0.05	<0.0500	<5.0		17.4	<0.010	<0.010	<0.01
4/12/2010	FMC-3	17.120	<0.05		<5.0	12	<0.010	<0.010	<0.010	<0.01
2/9/2010	FMC-3	17.120	<0.05	<0.0500	<5.0	<10.0	12.0	<0.010	<0.010	<0.01
2/3/2010	FMC-3	17.120	<0.05		<5.0	<10.0	40.0	<0.010	<0.010	<0.01
12/18/2009	FMC-3	17.120	<0.05	<0.0500	<5.0	17	<0.010	<0.010	<0.010	<0.01
12/7/2009	FMC-3	17.120	<0.05		<5.0	<10.0		<0.010	<0.010	<0.01
8/26/2009	FMC-3	17.120	<0.05	<0.0500	<5.0		28.0	<0.010	<0.010	<0.01
8/12/2009	FMC-3	17.120	<0.05		<5.0	<10.0		<0.010	<0.010	<0.01
5/21/2009	FMC-3	17.120	<0.05	<0.0500	<5.0		127.0	<0.010	<0.010	0.0300
2/27/2009	FMC-3	17.120	<0.05		<5.0	<10.0		<0.010	<0.010	<0.01
2/25/2009	FMC-3	17.120	<0.05	<0.0500	<5.0	<10.0		<0.010	<0.010	<0.01
Total Samples			15	6	11	11	7	11	7	7
Mean			<0.05	<0.050	<4.6	<12.4	34.3	<0.010	<0.013	<0.013
Median			<0.050	<0.050	<5.0	<10.0	17.4	<0.010	<0.010	<0.010
Maximum			<0.050	<0.050	<5.0	22.2	127.0	<0.010	<0.010	0.0300
Std Dev			<0.01	0.000	<1.2	<4.1	42.5	0.000	<0.01	<0.01
Reporting Limits			<0.050	5.0	10.0	10.0	0.0100	0.0100	0.0100	0.0100
EPA Standard			0.340					0.610	0.519	0.519
ADEM Standard			0.340					0.610	0.519	0.519

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IN STREAM

Date	Station	Mileage Miles from Headwater	Chromium (Hexavalent)		Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin	
			Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)
3/5/2013	FMC-3	17.120	<0.100	<0.100	900							
2/18/2013	FMC-3	17.120	<0.1	<0.100	20					<0.010	<0.10	<0.10
11/1/2012	FMC-3	17.120	<0.1	<0.100	84					<0.010	<0.10	<0.10
4/27/2011	FMC-3	17.120			92					<0.010	<0.10	<0.10
2/15/2011	FMC-3	17.120	<0.1	<0.100	80					<0.010	<0.10	<0.10
10/19/2010	FMC-3	17.120	<0.1	<0.100	ND					<0.010	<0.10	<0.10
8/26/2010	FMC-3	17.120	<0.01	<0.100	350					<0.010	<0.10	<0.10
8/20/2010	FMC-3	17.120	<0.1	<0.100	192					<0.010	<0.10	<0.10
4/12/2010	FMC-3	17.120	<0.1	<0.100	ND					<0.010	<0.10	<0.10
2/9/2010	FMC-3	17.120	<0.1	<0.100	20					<0.010	<0.10	<0.10
2/3/2010	FMC-3	17.120	<0.1	<0.100	ND					<0.010	<0.10	<0.10
12/18/2009	FMC-3	17.120	<0.1	<0.100	10,000					<0.010	<0.10	<0.10
12/17/2009	FMC-3	17.120	<0.1	<0.100	36					<0.010	<0.10	<0.10
8/26/2009	FMC-3	17.120	<0.1	<0.100	880					<0.010	<0.10	<0.10
8/12/2009	FMC-3	17.120	<0.010	<0.100	200					<0.010	<0.10	<0.10
5/21/2009	FMC-3	17.120	<0.01	<0.100	38					<0.010	<0.10	<0.10
2/27/2009	FMC-3	17.120	<0.010	<0.100	8,500					<0.010	<0.10	<0.10
2/25/2009	FMC-3	17.120	<0.01	<0.100	4					<0.010	<0.10	<0.10
Total Samples			11	7	7	8	7	2	2	9	5	1
Mean			<0.075	<0.074	2,843	187	2,843	<0.010	<0.010	<0.010	<0.010	<0.10
Median			<0.100	<0.100	200	59	200	<0.010	<0.010	<0.010	<0.010	<0.10
Maximum			<0.100	<0.100	10,000	880	10,000	<0.010	<0.010	<0.010	<0.010	<0.10
Std Dev			<0.042	<0.044	4,407	301	4,407	0.000	0.000	0.000	0.000	<0.10
Reporting Limits			Variable	Variable	Variable	Variable	Variable	0.010	0.010	0.010	0.010	
EPA Standard												
ADEM Standard												

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IN STREAM

Date	Station	Mileage Miles from Headwater	Hardness (CaCO3)		Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	FMC-3	17.120	166	163.0	<0.00020	<0.00020	<0.0200	<0.02	<0.200	<0.2	2.30	3.40
2/18/2013	FMC-3	17.120	172		<0.00020		<0.0200		<0.200		1.30	
11/1/2012	FMC-3	17.120										
4/27/2011	FMC-3	17.120	263	227	<0.00020	<0.00020	<0.0200	<0.02	<0.200	<0.2	1.10	1.10
2/15/2011	FMC-3	17.120	334		<0.00020		<0.0200		<0.200		<0.5	
10/19/2010	FMC-3	17.120	255		<0.00020		<0.0200		<0.200		<0.5	
8/26/2010	FMC-3	17.120	323		<0.00020		<0.0200		<0.200		<0.5	
8/20/2010	FMC-3	17.120	256		<0.00020		<0.0200		<0.200		<0.5	
4/12/2010	FMC-3	17.120	208		<0.00020		<0.0200		<0.200		<0.5	1.40
2/9/2010	FMC-3	17.120	257		<0.00020		<0.0200		<0.200		<0.5	1.70
2/3/2010	FMC-3	17.120	246	93.0	<0.00020		<0.0200		<0.200		0.60	
12/18/2009	FMC-3	17.120	272		<0.00020		<0.0200		<0.200		<0.5	
12/7/2009	FMC-3	17.120	223		<0.00020		<0.0200		<0.200		<0.5	0.80
8/26/2009	FMC-3	17.120	268		<0.00020		<0.0200		<0.200		<0.5	4.00
8/12/2009	FMC-3	17.120	142		<0.00020		0.0334		0.224		<0.5	
5/21/2009	FMC-3	17.120	280		<0.00020		<0.0200		<0.200		<0.5	
2/27/2009	FMC-3	17.120										
2/25/2009	FMC-3	17.120										
Total Samples			11	7	11	7	11	1	11	7	11	6
Mean			247.6	203.4	<0.00020	<0.00020	<0.0200	<0.022	<0.200	<0.203	<0.80	<1.84
Median			256.0	208.0	<0.00020	<0.00020	<0.0200	<0.020	<0.200	<0.200	<0.50	<1.40
Maximum			334.0	323.0	<0.00020	<0.00020	<0.0200	0.033	<0.200	0.224	2.30	4.00
Std Dev			47.5	78.2	0.0000	0.0000	0.000	<0.005	0.000	<0.009	<0.57	<1.34
Reporting Limits			1.0		0.0002		0.020		0.20		0.50	
EPA Standard					0.0014		0.713		0.603			
ADEM Standard					0.0024		0.713		0.603			

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IN STREAM

Date	Station	Mileage Miles from Headwater	TKN		Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	0.333
2/18/2013	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	0.18	<0.05	0.15	<0.05
11/1/2012	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4/27/2011	FMC-3	17.120	0.6	0.8	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2/15/2011	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
10/19/2010	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	0.06	<0.05	<0.05	<0.05
8/26/2010	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8/20/2010	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4/12/2010	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2/9/2010	FMC-3	17.120	<0.5	0.6	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2/3/2010	FMC-3	17.120	<0.5	1.4	<5.0	<5.0	<0.05	<0.05	<0.05	0.33	<0.05	<0.05
12/18/2009	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
12/7/2009	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8/26/2009	FMC-3	17.120	<0.5	0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8/12/2009	FMC-3	17.120	<0.5	3.7	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
5/21/2009	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
2/27/2009	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	1.08	<0.05	<0.05
2/25/2009	FMC-3	17.120	<0.5	<0.5	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Samples			11	7	11	7	11	7	11	7	11	7
Mean			<0.5	<1.1	<5.0	<5.1	<0.05	<0.05	<0.06	<0.29	<0.06	<0.09
Median			<0.5	<0.6	<5.0	<5.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Maximum			0.6	3.7	<5.0	<5.6	0.05	<0.05	0.18	1.08	0.15	0.33
Std Dev			0.0	<1.2	0.0	<0.2	<0.05	0.00	<0.04	<0.38	<0.03	<0.11
Reporting Limits			0.50		5.0		0.050		0.05		0.05	
EPA Standard												
ADEM Standard												

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IN STREAM

Date	Station	Mileage Miles from Headwater	TDS		TSS		Silver		Turbidity	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)
3/5/2013	FMC-3	17.120		260.0	<5.0	<5.0	<0.005	<0.005	<1.0	2.3
2/18/2013	FMC-3	17.120	194.0		<5	<0.005	<0.005	1.6		
11/1/2012	FMC-3	17.120	392.0		<5	<0.005	<0.005	1.6		
4/27/2011	FMC-3	17.120		413.0	26.5		<0.0100			24.8
2/15/2011	FMC-3	17.120	461.0		<5	<0.0100	<0.0100	1.3		
10/19/2010	FMC-3	17.120	612.0		<5	<0.0100	<0.0100	<1.0		
8/26/2010	FMC-3	17.120	510.0		<5	<0.0100	<0.0100	<1.0		
8/20/2010	FMC-3	17.120	459.0		5.5	<0.0100	<0.0100	1.5		4.5
4/12/2010	FMC-3	17.120	472.0		<5	<0.0100	<0.0100	1.8		7.8
2/9/2010	FMC-3	17.120	387.0		<5	<0.0100	<0.0100	2.3		188.0
2/3/2010	FMC-3	17.120	475.0		<5	284.0	<0.0100	<1.0		
12/18/2009	FMC-3	17.120	472.0		<5	<0.0100	<0.0100	<1.0		
12/7/2009	FMC-3	17.120	447.0		<5	5.0000	<0.0100	<1.0		
8/26/2009	FMC-3	17.120	496.0		6.0	2860.0	<0.0100	<1.0		
8/12/2009	FMC-3	17.120	455.0		<5	<0.0100	<0.0100	<1.0		
5/21/2009	FMC-3	17.120	271.0		<5	<0.0100	<0.0100	<1.0		
2/27/2009	FMC-3	17.120	495.0		<5	<0.0100	<0.0100	<1.0		
2/25/2009	FMC-3	17.120	495.0		<5	<0.0100	<0.0100	<1.0		
Total Samples			11	7	11	7	7.000	1.000	10	7
Mean			453.2	345.6	<5.1	<456.1	<0.0100	<0.0100	<1.4	<225.5
Median			472.0	387.0	<5.0	16.8	<0.0100	<0.0100	<1.4	<7.8
Maximum			612.0	496.0	6.0	2860.0	<0.0100	<0.0100	2.3	1350.0
Std Dev			101.2	129.0	<1.6	<1064.9	0.000	0.000	<0.4	<500.4
Reporting Limits			10.0	<5.0	<5.0	0.010	<1.0	<1.0	<1.0	<1.0
EPA Standard			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ADEM Standard			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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IN STREAM

Date	Station	Mileage Miles from Headwater	pH		Temperature		Chlorine		Chromium		E. Coli	
			Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100mL)
3/5/2013	FMC-3	17.120										
2/18/2013	FMC-3	17.120					<0.20	<0.010	<0.010			14
11/1/2012	FMC-3	17.120					<0.20	<0.010	<0.010			
4/27/2011	FMC-3	17.120		6.9								
2/15/2011	FMC-3	17.120	7.2		51.4							
10/19/2010	FMC-3	17.120	7.82		55.8							
8/26/2010	FMC-3	17.120	8.1		68.5							
8/20/2010	FMC-3	17.120		8.4		74.8						
4/12/2010	FMC-3	17.120	7.9		59.0							
2/9/2010	FMC-3	17.120	8.1		54.1							
2/3/2010	FMC-3	17.120	8.3		50.0							
12/18/2009	FMC-3	17.120	8.6		52.9							
12/7/2009	FMC-3	17.120	8.5									
8/26/2009	FMC-3	17.120		8.5		76.3						
8/12/2009	FMC-3	17.120										
5/21/2009	FMC-3	17.120	8.5		65.3							
2/27/2009	FMC-3	17.120		7.0		56.7						
2/25/2009	FMC-3	17.120	8.0		50.0							
Total Samples			9	6	8	5	2	1	2	1	1	1
Mean			8.1	7.6	56.6	65.7	<0.20	<0.20	<0.01	<0.01	14.0	16.0
Median			8.1	7.6	54.3	66.6	<0.20	<0.20	<0.01	<0.01	14.0	16.0
Maximum			8.6	8.5	68.5	76.3	<0.20	<0.20	<0.01	<0.01	14.0	16.0
Std Dev			0.4	0.9	7.1	10.1	0.00	0.00	0.00	0.00		
Reporting Limits			Variable		Variable		Variable		Variable		Variable	
EPA Standard			6.5 - 9.0		Species Dependent		0.019		Species Dependent		5548 colonies/100mL	
ADEM Standard			>6.0 - 58.5		590 ⁰							

**Five Mile Creek
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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD		Chromium (CR3)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
2/6/2009	IRFMC-1	0.000	<0.05		<5.0		<10.0		<0.010	
7/7/2010	IRFMC-1	0.000	<0.05		<5.0		10.5		<0.010	
5/11/2011	IRFMC-1	0.000	<0.05		<5.0		<10.0		<0.010	
2/6/2009	IRFMC-2	1.016	<0.05		<5.0		11.0		<0.010	
7/7/2010	IRFMC-2	1.016	<0.05		<5.0		<10.0		<0.010	
5/11/2011	IRFMC-2	1.016	<0.05		<5.0		<10.0		<0.010	
7/7/2010	UCTU1	15.647	<0.05		<5.0		17.4		<0.010	
5/12/2011	UCTU1	15.647	<0.05		<5.0		16.8		<0.010	
11/1/2012	BNFMC5	17.547	0.005		<5.0		<10.0		<0.010	
5/12/2011	BNFMC5	17.547	<0.05		<5.0		10.1		<0.010	
Total Samples			11		11		11		11	
Mean			<0.05		<5.0		<12.4		<0.010	
Median			<0.05		<5.0		<10.1		<0.010	
Maximum			<0.05		<5.0		17.4		<0.010	
Std Dev			<0.01		0.0		<4.0		0.000	
Reporting Limits			<0.050		5.0		10.0		0.0100	
EPA Standard			0.340						0.500	
ADEM Standard			0.340						0.500	

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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Chromium (Hexavalent)		Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin	
			Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)
2/6/2009	IRFMC-1	0.000	<0.010		4		<0.010					
7/7/2010	IRFMC-1	0.000	<0.010		48				<0.010			
5/11/2011	IRFMC-1	0.000	<0.100		20				<0.010			
2/6/2009	IRFMC-2	1.016	<0.010		26		<0.010					
7/7/2010	IRFMC-2	1.016	<0.010		ND				<0.010			
5/11/2011	IRFMC-2	1.016	<0.010		ND				<0.010			
7/7/2010	UCTU1	15.647	<0.010		ND				<0.010			
5/12/2011	UCTU1	15.647	<0.010		ND				<0.010			
11/4/2012	BNFMC5	17.547	<0.010		152				<0.010			
5/17/2011	BNFMC5	17.547	<0.010		ND				<0.010			
Total Samples			11		5		2		8			
Mean			<0.018		50		<0.010		<0.010			
Median			<0.010		26		<0.010		<0.010			
Maximum			<0.100		152		<0.010		<0.010			
Std Dev			<0.027		59		0.000		0.000			
Reporting Limits			Variable		Variable		0.010		0.010			
EPA Standard							0.050		0.022			
ADEM Standard									0.022			

**Five Mile Creek
Water Quality Data
2009-2013**

SCREENING SITES

Date	Station	Mileage Miles from Headwater	Hardness (CaCO3)		Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
2/6/2009	IRFMC-1	0.000	191		<0.00020		<0.0200		<0.200		1.2	
7/7/2010	IRFMC-1	0.000	182		<0.00020		<0.0200		<0.200		1.3	
5/11/2011	IRFMC-1	0.000	201		<0.00020		<0.0200		<0.200		1.3	
2/6/2009	IRFMC-2	1.016	178		<0.00020		<0.0200		<0.200		1.0	
7/7/2010	IRFMC-2	1.016	178		<0.00020		<0.0200		<0.200		0.9	
5/11/2011	IRFMC-2	1.016	188		<0.00020		<0.0200		<0.200		1.0	
7/7/2010	UCTU1	15.647	155		<0.00020		<0.0200		<0.200		1.6	
5/12/2011	UCTU1	15.647	171		<0.00020		<0.0200		<0.200		2.4	
11/1/2012	BNFMC5	17.547	278		<0.00020		<0.0200		<0.200		<0.5	
5/12/2011	BNFMC5	17.547	221		<0.00020		<0.0200		<0.200		0.7	
Total Samples			10		11		11		11		11	
Mean			194.3		<0.0020		<0.020		<0.200		<1.2	
Median			185.0		<0.0020		<0.020		<0.200		<1.2	
Maximum			278.0		<0.0020		<0.020		<0.200		2.4	
Std Dev			34.3		<0.0020		0.000		0.00		<0.5	
Reporting Limits			1.0		0.0002		0.020		0.20		0.50	
EPA Standard					0.0014		0.580					
ADEM Standard					0.0024		0.580					

Five Mile Creek
Water Quality Data
2009-2013

SCREENING SITES

Date	Station	Mileage Miles from Headwater	TKN		Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
2/6/2009	IRFMC-1	0.000	<0.5	<6.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050
7/7/2010	IRFMC-1	0.000	<0.5	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
5/11/2011	IRFMC-1	0.000	<0.5	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
2/6/2009	IRFMC-2	1.016	<0.5	<5.6	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.100	<0.050
7/7/2010	IRFMC-2	1.016	<0.5	6.1	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
5/11/2011	IRFMC-2	1.016	<0.5	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
7/7/2010	UCTU1	15.647	<0.5	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
5/12/2011	UCTU1	15.647	0.6	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
11/1/2012	BNFMC5	17.547	<0.5	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
5/12/2011	BNFMC5	17.547	0.6	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Samples			11	11	11	11	11	11	11	11	11	11
Mean			<0.52	<5.3	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Median			<0.50	<5.0	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Maximum			0.60	6.1	0.050	0.050	0.050	0.050	0.050	0.050	0.100	0.050
Std Dev			<0.04	<0.4	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	<0.020
Reporting Limits			0.50	5.0	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
EPA Standard												
ADEM Standard												

**Five Mile Creek
Water Quality Data
2009-2013**

SCREENING SITES

Date	Station	Mileage Miles from Headwater	TDS		TSS		Silver		Turbidity	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)
2/6/2009	IRFMC-1	0.000	208	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	63.3
7/7/2010	IRFMC-1	0.000	223	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	<1.0
5/11/2011	IRFMC-1	0.000	243	5.0	<0.010	<0.010	<0.010	<0.010	<0.010	<1.0
2/6/2009	IRFMC-2	1.016	196	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	<1.0
7/7/2010	IRFMC-2	1.016	206	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	<1.0
5/11/2011	IRFMC-2	1.016	238	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	1.82
7/7/2010	UCTU1	15.647	335	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	1.54
5/12/2011	UCTU1	15.647	337	6.5	<0.005	<0.005	<0.005	<0.005	<0.005	1.62
11/1/2012	BNFMC5	17.547	524	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	1.56
5/12/2011	BNFMC5	17.547	468	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	2.14
Total Samples			10	11	11	11	11	10	10	10
Mean			297.8	<5.2	<5.0	<5.0	<0.009	<7.8	<7.8	<1.6
Median			240.5	<5.0	<5.0	<5.0	<0.010	<1.6	<1.6	63.3
Maximum			524.0	6.5	<0.5	<0.5	<0.002	<19.5	<19.5	<1.0
Std Dev			116.5	10.0	<5.0	<5.0	0.010	0.010	0.010	<1.0
Reporting Limits										
EPA Standard										
ADEM Standard										
										550 Above Background

**Five Mile Creek
Water Quality Data
2009-2013**

SCREENING SITES

Date	Station	Mileage	pH		Temperature		Chlorine		Chromium		E. Coli	
			Miles from Headwater	Dry (Units)	Wet (Units)	Dry (F)	Wet (F)	Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100L)	Dry (col/100mL)
2/6/2009	IRFMC-1	0.000	8.1			48.6						
7/7/2010	IRFMC-1	0.000	7.1									
5/11/2011	IRFMC-1	0.000	7.4									
2/6/2009	IRFMC-2	1.016	8.0			58.6						
7/7/2010	IRFMC-2	1.016	8.2			70.7						
5/11/2011	IRFMC-2	1.016	7.3									
7/7/2010	UCTU1	15.647	7.6			65.1						
5/12/2011	UCTU1	15.647	7.4									
11/1/2012	BNFMC5	17.547										
5/12/2011	BNFMC5	17.547	7.6									<0.010
Total Samples			9			4						1
Mean			7.6			60.8						<0.010
Median			7.6			61.9						<0.010
Maximum			8.2			70.7						<0.010
Std Dev			0.4			9.5						
Reporting Limits			Variable			Variable						
EPA Standard			6.5 - 9.0			Species Dependent						0.019
ADEM Standard			>6.0 - <8.5			590 ⁰						

Five Mile Creek
Water Quality Data
2009-2013

INFLOW SITES

DATE	OUTFALL ID	LATITUDE	LONGITUDE	TYPE	SIZE (inches)	FLOW (1L/sec)	TEMP. (F)	pH	AMMONIA (mg/L)	COPPER, TOTAL (mg/L)	PHENOL (mg/L)	DETERGENTS (mg/L)
4/13/2010	13140096	33.61918403	-86.67945728	Rip-Rap	60"324"300"	5	65.8	8.3	0	0	0	0
4/30/2010	13140047	33.620849	-86.678858	Closed Pipe	18"	4	61.2	6.6	0	0	0	0
4/30/2010	13140053	33.61729	-86.680183	Rip-Rap	12"24"12"	2	70.0	7.6	0	0	0	0
4/30/2010	13140056	33.61497367	-86.68196309	Rip-Rap	24"	3	65.8	7.3	0	0	0	0
4/30/2010	13140057	33.614506	-86.682316	Rip-Rap	12"24"12"	4	64.2	7.8	0	0	0	0
5/11/2010	13140068	33.6129086	-86.68735	Open Drainage	24"	5	65.8	6.9	0	0	0	0
5/11/2010	13140176	33.612903	-86.68714	Closed Pipe	48"	45	66.0	8.5	0	0	0	0
5/12/2010	13140061	33.6135924	-86.68541095	Open Drainage	24"264"	20	51.6	7.9	0	0	0	0
1/17/2011	13140080	33.60799919	-86.69382466	Open Drainage	5"18"15"	3						
6/21/2011	13140160	33.59427237	-86.6767988	Closed Pipe	40"	3						
Total Samples						9	8					
Mean						10	65.8	7.6	0	0	0	0
Median						4	65.8	7.6	0	0	0	0
Maximum						45	70.0	8.5	0	0	0	0
Std Dev						14	5.5	0.6	0	0	0	0
Reporting Limits												
EPA Standard							Species Dependent	6.5 - 9.0				
ADEM Standard							590^o	>6.0 - 88.5				

Shades Creek
Water Quality Data
2009-2013

IN STREAM SITES

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
5/20/2009	SC1	0	<0.050	<0.050	<5.0	<10.0	<10.0	18.0
8/12/2009	SC1	0		<0.050	<5.0			
8/26/2009	SC1	0	<0.050		2.3	33.0		
12/7/2009	SC1	0	<0.050		<5.0	<10.0		
12/18/2009	SC1	0		<0.050	3.0		<10.0	
2/3/2010	SC1	0	<0.050		<5.0	<10.0		
2/9/2010	SC1	0		<0.050	<5.0		<10.0	17.0
4/12/2010	SC1	0	<0.050		<5.0	<10.0		
8/20/2010	SC1	0		<0.050	<5.0		<10.0	35.8
8/26/2010	SC1	0	<0.050		<5.0	12.8		
10/19/2010	SC1	0	<0.050		7.8	38.1		
2/15/2011	SC1	0	<0.050		<5.0	11.0		31.1
4/27/2011	SC1	0		<0.050	8.6		<10.0	
5/29/2011	SC1	0	<0.010		<5.0		<10.0	
9/26/2011	SC1	0	<0.010		<5.0		<10.0	
9/24/2012	SC1	0	<0.010		<5.0	12.2		
1/25/2013	SC1	0	<0.010		<5.0		<10.0	201.0
3/5/2013	SC1	0		<0.010	<5.0			
Total Samples			12	6	12	6	12	6
Average			<0.037	<0.043	<5.01	<5.3	<14.8	<52.2
Median			<0.05	<0.050	<5.0	<5.0	<10.0	<24.6
Max			<0.05	<0.050	<7.8	8.6	38.1	201
S.D.			<0.020	<0.016	<1.2	<1.8	<9.8	<73.5
Reporting Limits				Variable	5.0		10.0	
EPA Standard				0.340				
ADEM Standard				0.340				

Shades Creek
Water Quality Data
2009-2013

IN STREAM SITES

Date	Station	Mileage	Dieldrin		Hardness (CaCO3)		Mercury		Nickel		Ammonia Nitrogen	
			Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
5/20/2009	SC1	0	120				<0.00020	<0.020	<0.020	<0.20	<0.20	
8/12/2009	SC1	0	89.7				<0.00020	<0.020	<0.020	<0.20	<0.20	
8/26/2009	SC1	0	173				<0.00020	<0.020	<0.020	<0.20	<0.20	
12/7/2009	SC1	0	123				<0.00020	<0.020	<0.020	<0.20	<0.20	
12/18/2009	SC1	0	118				<0.00020	<0.020	<0.020	<0.20	<0.20	
2/3/2010	SC1	0	110				<0.00020	<0.020	<0.020	<0.20	<0.20	
2/9/2010	SC1	0	74.8				<0.00020	<0.020	<0.020	<0.20	<0.20	
4/12/2010	SC1	0	126				<0.00020	<0.020	<0.020	<0.20	<0.20	
8/20/2010	SC1	0	156				<0.00020	<0.020	<0.020	<0.20	<0.20	
8/26/2010	SC1	0	161				<0.00020	<0.020	<0.020	<0.20	<0.20	
10/19/2010	SC1	0	142				<0.00020	<0.020	<0.020	<0.20	<0.20	
2/15/2011	SC1	0	174				<0.0002	<0.020	<0.020	<0.20	<0.20	
4/27/2011	SC1	0	156				<0.0002	<0.020	<0.020	<0.20	<0.20	
5/23/2011	SC1	0	103				<0.00020	<0.020	<0.020	<0.20	<0.20	
9/26/2011	SC1	0	169				<0.00020	<0.020	<0.020	<0.20	<0.20	
9/24/2012	SC1	0	115				<0.00020	<0.020	<0.020	<0.20	<0.20	
1/25/2013	SC1	0	105				<0.00020	<0.020	<0.020	<0.20	<0.20	
2/5/2013	SC1	0	105				<0.00020	<0.020	<0.020	<0.20	<0.20	
Total Samples			12	6	12	6	12	6	12	6	6	
Average			143.8	100.9	<0.00020	<0.00020	<0.020	<0.020	<0.20	<0.20	<0.20	
Median			149	104	<0.00020	<0.00020	<0.020	<0.020	<0.20	<0.20	<0.20	
Max			174	118	<0.00020	<0.00020	<0.020	<0.020	<0.20	<0.20	<0.20	
S.D.			23.8	16.2	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00	
Reporting Limits			1.0		0.00002	0.00002	0.020	0.020	0.20	0.20	0.20	
EPA Standard					0.0014	0.0014	0.450	0.333				
ADEM Standard					0.0024	0.0024	0.450	0.333				

Shades Creek
Water Quality Data
2009-2013

IN STREAM SITES

Date	Station	Mileage Miles from Headwater	Total Dissolved Phosphorus			TDS			TSS			Silver	
			Dry (mg/L)	Wet (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	
5/20/2009	SC1	0	<0.05	<0.05	176	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
8/12/2009	SC1	0	<0.05	<0.05	81	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
8/26/2009	SC1	0	<0.05	<0.05	162	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
12/7/2009	SC1	0	<0.05	<0.05	162	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
12/18/2009	SC1	0	<0.05	<0.05	139	<5.0	12	<0.010	<0.010	<0.010	<0.010	<0.010	
2/3/2010	SC1	0	<0.05	<0.05	169	<5.0	14	<0.010	<0.010	<0.010	<0.010	<0.010	
2/9/2010	SC1	0	<0.05	<0.05	108	<5.0	14	<0.010	<0.010	<0.010	<0.010	<0.010	
4/12/2010	SC1	0	<0.05	<0.05	135	<5.0	33	<0.010	<0.010	<0.010	<0.010	<0.010	
8/20/2010	SC1	0	<0.05	<0.05	212	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
8/26/2010	SC1	0	<0.05	<0.05	150	<5.0	<5.0	<0.010	<0.010	<0.010	<0.010	<0.010	
10/19/2010	SC1	0	0.61	<0.05	180	5.5	171	<0.010	<0.010	<0.010	<0.010	<0.010	
2/15/2011	SC1	0	<0.05	<0.05	221	<5.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	
4/27/2011	SC1	0	<0.05	<0.05	231	<5.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	
5/23/2011	SC1	0	<0.05	<0.05	255	<5.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	
9/24/2012	SC1	0	<0.05	<0.05	173	<5.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	
1/25/2013	SC1	0	<0.05	<0.05	199	<5.0	156	<0.005	<0.005	<0.005	<0.005	<0.005	
3/5/2013	SC1	0	<0.05	<0.05	199	<5.0	156	<0.005	<0.005	<0.005	<0.005	<0.005	
Total Samples			12	6	12	12	6	12	6	12	6	6	
Average			<0.10	<0.05	186	<5.0	<65.2	<0.01	<0.01	<0.01	<0.01	<0.01	
Median			<0.05	<0.05	175	<5.0	<23.5	<0.01	<0.01	<0.01	<0.01	<0.01	
Max			0.61	<0.05	255	5.5	171.0	<0.01	<0.01	<0.01	<0.01	<0.01	
S.D.			<0.17	0.000	38	<0.2	<76.9	<0.01	<0.01	<0.01	<0.01	<0.01	
Reporting Limits			0.05	10.0	Variable	0.010	0.010	0.000	0.000	0.000	0.000	0.000	
EPA Standard								0.000	0.000	0.000	0.000	0.000	
ADEM Standard								0.000	0.000	0.000	0.000	0.000	

Shades Creek
Water Quality Data
2009-2012

SCREENING SITES

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
5/20/2009	IRSC-9	1.6	<0.05		<5.0		<10.0	
4/28/2010	IRSC-9	1.6	<0.05		<5.0		<10.0	
2/18/2011	IRSC-9	1.6	<0.05		<5.0		<10.0	
5/20/2009	IRSC-8	0.0	<0.05		<5.0		<10.0	
4/28/2010	IRSC-8	0.0	<0.05		<5.0		<10.0	
2/18/2011	IRSC-8	0.0	<0.05		<5.0		<10.0	
9/24/2012	IRSC-8	0.0	<0.01		<5.0		<10.0	
5/20/2009	IRSC-10	1.9	<0.05		<5.0		<10.0	
4/28/2010	IRSC-10	1.9	<0.05		<5.0		<10.0	
2/18/2011	IRSC-10	1.9	<0.05		<5.0		<10.0	
6/2/2009	BSSC-3	10.4	<0.05		<5.0		11.0	18.0
7/7/2010	BSSC-3	10.4	<0.05		<5.0		15.1	18.0
10/6/2011	BSSC-3	10.4	<0.01		<5.0		16.8	16.8
Total Samples			13		13		13	13
Average			<0.04		<5.0		<11.6	<10.0
Median			<0.05		<5.0		<10.0	18
Max			<0.05		<5.0		18	18
S.D.			<0.02		0.00		<2.9	<2.9
Reporting Limits				Variable		5.0		10.0
EPA Standard				0.340				
ADEM Standard				0.340				

Shades Creek
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SCREENING SITES

Date	Station	Mileage	Chromium (CR3)		Chromium (Hexavalent)		Fecal Coliform		Total Cyanide	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)
5/20/2009	IRSC-9	1.6	<0.01	<0.010	<0.010	440	<0.0100	<0.0100	<0.0100	<0.0100
4/28/2010	IRSC-9	1.6	<0.01	<0.100	<0.100	ND	<0.0100	<0.0100	<0.0100	<0.0100
2/18/2011	IRSC-9	1.6	<0.01	<0.100	<0.100	8120	<0.0100	<0.0100	<0.0100	<0.0100
5/20/2009	IRSC - 8	0.0	<0.01	<0.010	<0.010	140	<0.0100	<0.0100	<0.0100	<0.0100
4/28/2010	IRSC - 8	0.0	<0.01	<0.100	<0.100	4200	<0.0100	<0.0100	<0.0100	<0.0100
2/18/2011	IRSC - 8	0.0	<0.01	<0.100	<0.100	614	<0.0100	<0.0100	<0.0100	<0.0100
9/24/2012	IRSC - 8	0.0	<0.01	<0.010	<0.010	ND	<0.0100	<0.0100	<0.0100	<0.0100
5/20/2009	IRSC - 10	1.9	<0.01	<0.010	<0.010	2400	<0.0100	<0.0100	<0.0100	<0.0100
4/28/2010	IRSC - 10	1.9	<0.01	<0.100	<0.100	ND	<0.0100	<0.0100	<0.0100	<0.0100
2/18/2011	IRSC - 10	1.9	<0.01	<0.010	<0.010	281	<0.0100	<0.0100	<0.0100	<0.0100
6/2/2009	BSSC-3	10.4	<0.01	<0.010	<0.010	TNTC	<0.0100	<0.0100	<0.0100	<0.0100
7/7/2010	BSSC-3	10.4	<0.01	<0.100	<0.100	>2000	<0.0100	<0.0100	<0.0100	<0.0100
10/6/2011	BSSC-3	10.4	<0.01	<0.010	<0.010	200	<0.0100	<0.0100	<0.0100	<0.0100
Total Samples			12	13	9	9	4	9	9	9
Average			<0.01	<0.052	<0.052	>2,044	<0.0100	<0.0100	<0.0100	<0.0100
Median			<0.01	<0.010	<0.010	>614	<0.0100	<0.0100	<0.0100	<0.0100
Max			<0.01	<0.100	<0.100	>8,120	<0.0100	<0.0100	<0.0100	<0.0100
S.D.			0	<0.047	<0.047	>2656	0.000	0.000	0.000	0.000
Reporting Limits			0.0100	Variable	Variable	Variable	0.010	0.010	0.010	0.010
EPA Standard			0.359				0.060		0.022	0.022
ADEM Standard			0.359						0.022	0.022

Shades Creek
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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Dieldrin		Hardness (CaCO3)		Mercury		Nickel		Ammonia Nitrogen	
			Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
5/20/2009	IRSC-9	1.6			125		<0.00020		<0.0200		<0.200	
4/28/2010	IRSC-9	1.6			129		<0.00020		<0.0200		<0.200	
2/18/2011	IRSC-9	1.6			138		<0.00020		<0.0200		<0.200	
5/20/2009	IRSC - 8	0.0			117		<0.00020		<0.0200		<0.200	
4/28/2010	IRSC - 8	0.0			135		<0.00020		<0.0200		<0.200	
2/18/2011	IRSC - 8	0.0			153		<0.00020		<0.0200		<0.200	
9/24/2012	IRSC - 8	0.0			178		<0.00020		<0.0200		<0.200	
5/20/2009	IRSC - 10	1.9			80		<0.00020		<0.0200		<0.200	
4/28/2010	IRSC - 10	1.9			88		<0.00020		<0.0200		<0.200	
2/18/2011	IRSC - 10	1.9			105		<0.00020		<0.0200		<0.200	
6/2/2009	BSSC-3	10.4			146		<0.00020		<0.0200		<0.200	
7/7/2010	BSSC-3	10.4			149		<0.00020		<0.0200		<0.200	
10/6/2011	BSSC-3	10.4			143		<0.00020		<0.0200		<0.200	
Total Samples			13	13	13	13	13	13	13	13	13	13
Average			130		130		<0.00020		<0.0200		<0.200	
Median			135		135		<0.00020		<0.0200		<0.200	
Max			178		178		<0.00020		<0.0200		<0.200	
S.D.			27		27		0.0000		0.00		0.0	
Reporting Limits					1.0		0.0002		0.020		0.20	
EPA Standard							0.0014		0.412			
A/DEM Standard							0.0024		0.412			

Shades Creek
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2009-2012

SCREENING SITES

Date	Station	Miles from Headwater	Total Nitrogen		TKN		Oil & Grease		Total Phenol		Total Phosphorus	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
5/20/2009	IRSC-9	1.6	<0.5		<0.5		<5.6					<0.050
4/28/2010	IRSC-9	1.6	1.0		<0.5		<5.0					<0.050
2/18/2011	IRSC-9	1.6	<0.5		<0.5		<6.2					<0.050
5/20/2009	IRSC-8	0.0	<0.5		<0.5		<5.0					<0.050
4/28/2010	IRSC-8	0.0	<0.5		<0.5		<5.3					<0.050
2/18/2011	IRSC-8	0.0	1.2		0.7		<5.0					0.086
9/24/2012	IRSC-8	0.0	<0.5		<0.5		<5.0					<0.050
5/20/2009	IRSC-10	1.9	<0.5		<0.5		<5.0					<0.050
4/28/2010	IRSC-10	1.9	<0.5		<0.5		<5.0					<0.050
2/18/2011	IRSC-10	1.9	<0.5		<0.5		<5.0					<0.050
6/2/2009	BSSC-3	10.4	1.8		1.5		<5.2					<0.050
7/7/2010	BSSC-3	10.4	<0.5		<0.5		<5.6					<0.050
10/6/2011	BSSC-3	10.4	1.1		0.9		<5.0					<0.050
Total Samples			13		13		13					13
Average			<0.7		<0.6		<5.2					<0.053
Median			<0.5		<0.5		<5.0					<0.050
Max			1.8		1.5		<6.2					0.086
S.D.			<0.4		<0.3		<0.4					<0.010
Reporting Limits				0.50		0.50		5.0		0.050		0.05
EPA Standard												
ADEM Standard												

Shades Creek
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SCREENING SITES

Date	Station	Mileage	Total Dissolved Phosphorus				TDS		TSS		Silver	
			Miles from Headwater	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	
5/20/2009	IRSC-9	1.6	<0.05	181	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
4/28/2010	IRSC-9	1.6	<0.05	189	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
2/18/2011	IRSC-9	1.6	<0.05	108	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
5/20/2009	IRSC-8	0.0	<0.05	165	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
4/28/2010	IRSC-8	0.0	<0.05	190	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
2/18/2011	IRSC-8	0.0	0.06	130	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
9/24/2012	IRSC-8	0.0	<0.05	224	<0.005	<5.0	<0.005	<5.0	<0.005	<0.005	<0.005	
5/20/2009	IRSC-10	1.9	<0.05	115	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
4/28/2010	IRSC-10	1.9	<0.05	134	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
2/18/2011	IRSC-10	1.9	<0.05	105	<0.010	9.5	<0.010	9.5	<0.010	<0.010	<0.010	
6/2/2009	BSSC-3	10.4	<0.05	208	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
7/7/2010	BSSC-3	10.4	<0.05	219	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
10/6/2011	BSSC-3	10.4	<0.05	206	<0.005	<5.0	<0.005	<5.0	<0.005	<0.005	<0.005	
Total Samples			13	13	13	13	13	13	13	13	13	
Average			<0.05	167	<0.009	<5.3	<0.009	<5.3	<0.009	<0.009	<0.009	
Median			<0.05	181	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
Max			0.06	224	<0.010	9.5	<0.010	9.5	<0.010	<0.010	<0.010	
S.D.			<0.002	44	<0.002	<1.2	<0.002	<1.2	<0.002	<0.002	<0.002	
Reporting Limits			0.05	10.0	<0.010	<5.0	<0.010	<5.0	<0.010	<0.010	<0.010	
EPA Standard												
ADEM Standard												

Shades Creek
Water Quality Data
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SCREENING SITES

Date	Station	Mileage	Turbidity		pH		Temperature	
			Miles from Headwater	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (F)
5/20/2009	IRSC-9	1.6	1.4		8.0		64.0	
4/28/2010	IRSC-9	1.6	1.5		7.8		59.4	
2/18/2011	IRSC-9	1.6	<1.0		6.9		56.3	
5/20/2009	IRSC - 8	0.0	6.0		8.0		65.1	
4/28/2010	IRSC - 8	0.0	3.0		7.2		54.9	
2/18/2011	IRSC - 8	0.0	3.1		7.4		55.0	
9/24/2012	IRSC - 8	0.0	<1.0		8.0		60.0	
5/20/2009	IRSC - 10	1.9	2.7		7.5		61.3	
4/28/2010	IRSC - 10	1.9	1.6		7.5		54.9	
2/18/2011	IRSC - 10	1.9	1.5		7.0		54.7	
6/2/2009	BSSC-3	10.4	1.9		8.5		73.2	
7/7/2010	BSSC-3	10.4	1.9		8.0		66.6	
10/6/2011	BSSC-3	10.4	1.2		7.5		66.2	
Total Samples			13		13		13	
Average			<2.1		7.6		60.9	
Median			<1.6		7.5		60.0	
Max			6.0		8.5		73.2	
S.D.			<1.3		0.5		5.8	
Reporting Limits			Variable		Variable		Variable	
EPA Standard			\$50 Above Background		6.5 - 9.0		Species Dependent	
ADEM Standard			>6.0 - \$8.5		>6.0 - \$8.5		\$90⁰	

Shades Creek
Water Quality Data
2009-2012

INFLOW SITES

DATE	OUTFALL ID	LAT.	LONG.	PIPE SIZE (IN.)	FLOW (IL/Sec.)	TEMP. (F)	pH	AMMONIA (mg/L)
1/12/2010	19347077	33.52118	-86.71617	60"x240"x240" (open drainage)	.5 L/ 3.38 s	46.0	7.2	0
1/19/2010	19347339	33.51364	-86.72854	108"		47.8	7.4	0
1/5/2010	19347327	33.52378	-86.71272	24"x36"x34" (open drainage)	.5 L/ 10 s	36.0	7.3	0
1/19/2010	19347090	33.51212	-86.72981	24"		46.8	7.9	0
1/12/2010	19347086	33.51594	-86.72567	60"x312"x312" (open drainage)	.5 L/ 2.2 s	41.5	7.3	0
1/12/2010	19347082	33.51930	-86.71976	48"	.5 L/ 3 s	42.6	6.9	0
1/12/2010	19347067	33.52634	-86.70923	84"x192"x120" (open drainage)	5 L/ 1.48 s	50.5	8.4	0
2/16/2011	19347097	33.50455	-86.73079	60"x108"x72 (open drainage)	1 L/ 3 s		7.6	0
2/14/2011	19347091	33.51125	-86.73016		1 L/62 s		7.5	
1/12/2010	19347084	33.51775	-86.72191	30"		Frozen		
1/12/2010	19347330	33.51820	-86.72139	32"		Low flow		
1/19/2010	19347088	33.51504	-86.72626	12"x30"x20" (open drainage)		Low flow		
1/5/2010	19347074	33.52331	-86.71352	24"		Frozen		
1/5/2010	19347075	33.52236	-86.71467	18"		Frozen		
1/5/2010	19347073	33.52529	-86.71350	60"x108"x48" (open drainage)		Frozen		
2/18/2013	19347316	33.42935	-86.84496	48"x243.6" (open drainage)		49.1	7.2	<0.2
Total Samples								
		Average				8	10	9
		Median				45.1	7.5	<0.2
		Max				46.4	7.4	<0.2
		S.D.				50.5	8.4	<0.2
		Reporting Limits				4.8	0.0	<0.1
		ADEM Std.				5	10	10
		EPA Std.				≤90°	>6.0 - ≤8.5	
						Species Dependent		

**Valley Creek
Water Quality Data
2009-2013**

IN STREAM SITES

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD		Chromium (CR3)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	VC1	0.03		ND	5.5		57.5		<0.01		<0.01	
10/25/2012	VC1	0.03	<0.01		<5.0	16.7		<0.01		<0.01		
4/27/2011	VC1	0.03		<0.0500	4.4		<10.0		<0.01		<0.01	
2/15/2011	VC1	0.03	<0.05		<5.0	<10.0		<0.01		<0.01		
10/19/2010	VC1	0.03	<0.05		<5.0	10.5		<0.01		<0.01		
8/26/2010	VC1	0.03	<0.05		<5.0	<10.0		<0.01		<0.01		
8/20/2010	VC1	0.03		<0.0500	3.3		24.3		<0.01		<0.01	
4/12/2010	VC1	0.03	<0.05		<5.0	12.0		<0.01		<0.01		
2/9/2010	VC1	0.03	<0.05		<0.0500	3.9		44.0		<0.01	<0.01	
2/3/2010	VC1	0.03	<0.05		<5.0	<10.0		<0.01		<0.01		
12/18/2009	VC1	0.03	<0.05		<0.0500		17.0		<0.01		<0.01	
12/7/2009	VC1	0.03	<0.05		<5.0	<10.0		<0.01		<0.01		
8/26/2009	VC1	0.03	<0.05		<5.0	17.0		<0.01		<0.01		
8/12/2009	VC1	0.03		<0.0500	4.3		32.0		<0.01		<0.01	
6/2/2009	VC1	0.03	<0.05		6.90	37.0		<0.00		<0.01		
2/27/2009	VC1	0.03	<0.0500		<5	48.0		<0.01		<0.01		
2/25/2009	VC1	0.03	<0.05		<5.0	16.0		<0.01		<0.01		
Total Samples			10	6	7	9	7	10	7	10	7	
Average			<0.05	<0.05	<4.5	<15.5	<33.3	<0.01	<0.01	<0.01	<0.01	
Median			<0.05	<0.05	<4.4	<12.0	<32.0	<0.01	<0.01	<0.01	<0.01	
Max			<0.05	<0.05	5.5	37.0	57.50	<0.01	<0.01	<0.01	<0.01	
S.D.			<0.01	0.00	<0.6	<8.6	<17.4	0.00	0.00	0.00	0.00	
Reporting Limits			Variable	Variable	5.0	10.0	10.0	0.0100	0.0100	0.00	<0.01	
EPA Standard			0.340					0.598	0.316			
ADEM Standard			0.340					0.598	0.316			

**Valley Creek
Water Quality Data
2009-2013**

IN STREAM SITES

Date	Station	Mileage Miles from Headwater	Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin		Hardness (CaCO3)	
			Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	VCI	0.03		1000				<0.01		ND		98.6
10/25/2012	VCI	0.03	ND				<0.01				203.0	
4/27/2011	VCI	0.03		ND			<0.01					113.0
2/15/2011	VCI	0.03	2000				<0.01				215.0	
10/19/2010	VCI	0.03	ND				<0.01				277.0	
8/26/2010	VCI	0.03	ND				<0.01				193.0	
8/20/2010	VCI	0.03	TNTC	144			<0.01				217.0	171.0
4/12/2010	VCI	0.03		5000			<0.01				211.0	97.6
2/9/2010	VCI	0.03	ND				<0.01				220.0	43.6
2/3/2010	VCI	0.03	ND	140			<0.01				235.0	
12/18/2009	VCI	0.03	ND				<0.01				197.0	
12/7/2009	VCI	0.03	ND				<0.01				136.0	
8/26/2009	VCI	0.03	ND	1300			<0.01				55.1	
8/12/2009	VCI	0.03	ND				<0.01				219.0	
6/2/2009	VCI	0.03	ND				<0.01					
2/27/2009	VCI	0.03	2000				<0.01					
2/25/2009	VCI	0.03	2000				<0.01					
Total Samples			2	5	2	2	5	8	2	5	10	7
Average			2000	1517	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	212.6	110.8
Median			2000	1000	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	216.0	98.6
Max			2000	5000	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	277.0	197.0
S.D.			0	2014	0.00	0.00	0.00	0.00	0.00	0.00	35.1	56.3
Reporting Limits			Variable		0.010	0.010	0.010	0.010	0.010	0.00	1.0	1.0
EPA Standard					0.060	0.060	0.022	0.022	0.022	0.022	0.022	0.022
ADEM Standard												

**Valley Creek
Water Quality Data
2009-2013**

IN STREAM SITES

Date	Station	Miles from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	VC1	0.03	<0.00020	<0.00020	<0.020	<0.020	<0.200	<0.200	2.20			1.40
10/25/2012	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	<1.8		0.60		
4/27/2011	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.80	1.90			1.00
2/15/2011	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.20		0.50		
10/19/2010	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	0.90		0.60		
8/26/2010	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	2.20		<0.50		
8/20/2010	VC1	0.03	<0.00020	<0.00020	<0.020	0.530	0.530	1.30		<0.50		1.20
4/12/2010	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.40				
2/9/2010	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.60				0.90
2/3/2010	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	0.80		<0.50		
12/18/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.60		<0.50		
12/7/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	2.10		0.70		
8/26/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.80				0.80
8/12/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	2.30		1.40		
6/2/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.10				0.80
2/27/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.10				
2/15/2009	VC1	0.03	<0.00020	<0.00020	<0.020	<0.200	<0.200	1.10		<0.50		
Total Samples			10	7	10	7	10	7	9	7	10	7
Average			<0.0020	<0.0020	<0.020	<0.020	<0.200	<0.200	<1.71	1.66	<0.63	0.96
Median			<0.0020	<0.0020	<0.020	<0.020	<0.200	<0.200	<1.50	1.80	<0.50	0.90
Max			<0.0020	<0.0020	<0.020	<0.020	<0.200	0.53	2.30	2.20	1.40	1.40
S.D.			0.00	0.00	0.000	0.000	0.000	<0.125	<0.45	0.53	<0.28	0.2699206
Reporting Limits			0.0002	0.0020	0.020	0.20	0.50	0.50				
EPA Standard			0.0014	0.626	0.361							
ADEM Standard			0.0024	0.626	0.361							

**Valley Creek
Water Quality Data
2009-2013**

IN STREAM SITES

Date	Station	Mileage from Headwater	Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus		TDS	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/5/2013	VC1	0.03	<5.0	<5.0	ND	0.21	0.09	0.09	0.09	121.0		
10/25/2012	VC1	0.03	<5.0	<0.05	0.17	0.15	0.15	0.15	0.15	247.0		
4/27/2011	VC1	0.03	7.9	<0.05	0.17	0.13	0.13	0.13	0.13	237.0		
2/15/2011	VC1	0.03	<5.0	<0.05	0.10	0.09	0.09	0.09	0.09	591.0		
10/19/2010	VC1	0.03	<5.0	<0.05	0.13	0.12	0.12	0.12	0.12	653.0		
8/26/2010	VC1	0.03	<5.0	<0.05	0.21	0.19	0.19	0.19	0.19	331.0		
8/20/2010	VC1	0.03	<5.0	<0.05	0.21	0.13	0.13	0.13	0.13	175.0		
4/12/2010	VC1	0.03	<5.3	<0.05	0.14	0.09	0.09	0.09	0.09	268.0		
2/9/2010	VC1	0.03	<5.0	<0.05	0.12	0.06	0.06	<0.05	<0.05	161.0		
2/3/2010	VC1	0.03	<5.0	<0.05	0.07	0.06	0.06	0.06	0.06	303.0		
12/18/2009	VC1	0.03	<5.0	<0.05	0.09	0.08	0.08	<0.05	<0.05	51.0		
12/7/2009	VC1	0.03	<5.0	<0.05	0.11	0.10	0.10	0.10	0.10	266.0		
8/26/2009	VC1	0.03	<5.0	<0.05	0.11	0.10	0.10	0.10	0.10	248.0		
8/12/2009	VC1	0.03	<5.0	<0.05	0.11	0.08	0.08	0.08	0.08	469.0		
6/2/2009	VC1	0.03	<5.3	<0.05	0.14	0.08	0.08	0.08	0.08	207.0		
2/27/2009	VC1	0.03	<5.6	<0.05	0.13	0.06	0.06	0.06	0.06	51.0		
2/25/2009	VC1	0.03	<6.5	<0.05	0.07	<0.05	<0.05	<0.05	<0.05	315.0		
Total Samples			10	7	10	6	10	7	9	5	10	7
Average			<5.2	<5.5	<0.05	<0.05	0.12	0.16	<0.13	<0.08	342.9	180.7
Median			<5.0	<5.0	<0.05	<0.05	0.12	0.15	<0.09	<0.09	285.5	161.0
Max			<6.5	7.9	0.06	0.06	0.21	0.21	0.19	0.13	653.0	469.0
S.D.			<0.5	<1.1	0.00	<0.00	0.05	0.04	<0.04	<0.03	152.2	143.7
Reporting Limits			5.0		0.050		0.05		0.05		10.0	
EPA Standard												
ADEM Standard												

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IN STREAM SITES

Date	Station	Mileage Miles from Headwater	TSS		Silver		Turbidity		pH		Temperature	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)	
3/5/2013	VC1	0.03		93.0	<0.005		110.0	7.0			70.0	
10/25/2012	VC1	0.03	<5.0		<0.010		<1.0	7.0			70.0	
4/27/2011	VC1	0.03		16.5	<0.01		18.4	7.1				
2/15/2011	VC1	0.03	<5.0		<0.010		1.1	6.5				
10/19/2010	VC1	0.03	<5.0		<0.010		1.2	6.8			70.3	
8/26/2010	VC1	0.03	<5.0		<0.010		1.2	8.2			76.6	
8/20/2010	VC1	0.03	<5.0		<0.01		7.3				79.5	
4/12/2010	VC1	0.03	<5.0		<0.010		<1.0	8.2			68.7	
2/9/2010	VC1	0.03	<5.0	36.5	<0.01		32.3	8.0				
2/3/2010	VC1	0.03	<5.0		<0.010		1.6	8.4			56.8	
12/18/2009	VC1	0.03	<5.0	35.5	<0.01		43.0	6.0				
12/7/2009	VC1	0.03	<5.0		<0.010		1.5				62.4	
8/26/2009	VC1	0.03	<5.0		<0.010		<1.0	8.0				
8/12/2009	VC1	0.03	<5.0		<0.01		2.4	7.5				
6/2/2009	VC1	0.03	22.00		<0.010		23.0	8.0			73.2	
2/27/2009	VC1	0.03	<5.0	47.0	<0.01		30.5	7.0			58.8	
2/25/2009	VC1	0.03	<5.0		<0.010		1.4	8.0			62.1	
Total Samples			10	7	10	7	10	7	10	5	9	2
Average			<6.7	<34.1	<0.010	<0.01	<3.4	34.8	7.6	7.1	67.8	69.2
Median			<5.0	<35.5	<0.010	<0.01	<1.2	30.5	8.0	7.1	70.0	69.2
Max			22.0	93.0	<0.010	<0.01	23.0	110.0	8.4	8.0	76.6	79.5
S.D.			<5.4	<30.7	0.000	<0.01	<6.9	36.1	0.7	0.7	6.2	14.7
Reporting Limits			<5.0		0.010		1.0		Variable		Variable	
IPA Standard					0.000				6.5 - 9.0		Species Dependent	
ADEM Standard					0.000		\$50 Above Background		>6.0 - \$8.5		\$90°	

**Valley Creek
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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Arsenic (AS III)		BOD (5)		COD		Chromium (Cr3)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/6/2009	BNVC - 15	0.82	<0.050		<5.0	12		1		<0.0100		
2/26/2010	BNVC - 15	0.82	<0.050		<5.0	<10		<0.01		<0.0100		
5/12/2011	BNVC - 15	0.82	<0.010		<5.0	10.1		<0.01		<0.0100		
10/25/2012	BNVC - 15	0.82	<0.010		<5.0	14.5		<0.01		<0.0100		
8/6/2009	BNVC - 14	0.03	<0.050		2.2	12		<0.01		<0.0100		
2/26/2010	BNVC - 14	0.03	<0.050		3.5	<10		<0.01		<0.0100		
5/11/2011	BNVC - 14	0.03	<0.050		<5.0	<10		<0.01		<0.0100		
10/25/2012	BNVC - 14	0.03	<0.010		<5.0	21.3		<0.01		<0.0100		
6/2/2009	BEVC - 7	4.10	<0.050		<5.0	16		<0		<0.0100		
8/13/2010	BEVC - 7	4.10	<0.050		<5.0	12.8		<0.01		<0.0100		
5/12/2011	BEVC - 7	4.10	<0.010		<5.0	14.5		<0.01		<0.0100		
3/1/2013	BEVC - 7	4.10	ND		<5.0	<10		<0.01		<0.0100		
Total Samples			11		12	12		12		12		
Average			<0.036		<4.6	<12.8		<0.09		<0.010		
Median			<0.050		<5.0	<12.0		<0.01		<0.010		
Max			<0.050		<5.0	21.3		1.00		<0.010		
S.D.			<0.020		<0.9	<3.4		<0.29		0.000		
Reporting Limits			Variable		5.0	10.0		0.0100		<0.010		
EPA Standard			0.340					0.526				
ADEM Standard			0.340					0.526				

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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin		Hardness (CaCO3)	
			Dry (col/100mL)	Wet (col/100mL)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)
3/6/2009	BNVC - 15	0.82	72	<0.010	<0.010							222
2/26/2010	BNVC - 15	0.82	ND			<0.010						197
5/12/2011	BNVC - 15	0.82	44			<0.010						219
10/25/2012	BNVC - 15	0.82	ND			<0.010				<0.10		265
8/6/2009	BNVC - 14	0.03	TNTC			<0.010						227
2/26/2010	BNVC - 14	0.03	ND			<0.010						192
5/11/2011	BNVC - 14	0.03	ND			<0.010						188
10/25/2012	BNVC - 14	0.03	16			<0.010				<0.10		204
6/2/2009	BEVC - 7	4.10	TNTC			<0.010						200
8/13/2010	BEVC - 7	4.10	122			<0.010						151
5/12/2011	BEVC - 7	4.10	ND			<0.010						210
3/1/2013	BEVC - 7	4.10	42			<0.010				<0.10		202
Total Samples			5		3			5		1		12
Average			59		<0.010			<0.010		<0.10		206
Median			44		<0.010			<0.010		<0.10		203
Max			122		<0.010			<0.010		<0.10		265
S.D.			40		0.000			0.000		0.00		27
Reporting Limits			Variable		0.010			0.010		0.00		1.0
EPA Standard					0.060			0.022				
ADEM Standard								0.022				

**Valley Creek
Water Quality Data
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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	
3/6/2009	BNVC - 15	0.82	<0.00020		<0.0200		<0.200		1.9		<0.5
2/26/2010	BNVC - 15	0.82	<0.00020		<0.0200		<0.200		1.1		<0.5
5/12/2011	BNVC - 15	0.82	<0.00020		<0.0200		<0.200		3		0.8
10/25/2012	BNVC - 15	0.82	<0.00020		<0.0200		<0.200		1.6		<0.5
8/6/2009	BNVC - 14	0.03	<0.00020		<0.0200		<0.200		2.3		0.6
2/26/2010	BNVC - 14	0.03	<0.00020		<0.0200		<0.200		0.8		<0.5
5/11/2011	BNVC - 14	0.03	<0.00020		<0.0200		<0.200		1.9		0.7
10/25/2012	BNVC - 14	0.03	<0.00020		<0.0200		<0.200		2.1		0.7
6/2/2009	BEVC - 7	4.10	<0.00020		<0.0200		<0.200		2.4		1.2
8/13/2010	BEVC - 7	4.10	<0.00020		<0.0200		<0.200		0.5		<0.5
5/12/2011	BEVC - 7	4.10	<0.00020		<0.0200		<0.200		1.6		0.6
3/1/2013	BEVC - 7	4.10	<0.00020		<0.0200		<0.200		1.7		0.6
Total Samples			12		12		12		12		12
Average			<0.00020		<0.020		<0.200		<1.7		<0.5
Median			<0.00020		<0.020		<0.200		<1.8		<0.6
Max			<0.00020		<0.020		<0.200		3.0		1.2
S.D.			0.0000		0.000		0.000		<0.7		<0.2
Reporting Limits			0.0002		0.020		0.20		0.50		0.50
EPA Standard			0.0014		0.611						
ADEM Standard			0.0024		0.611						

**Valley Creek
Water Quality Data
2009-2013**

SCREENING SITES

Date	Station	Mileage Miles from Headwater	Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus		TDS	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
3/6/2009	BNVC - 15	0.82	<5.6				0.13		0.12			292
2/26/2010	BNVC - 15	0.82	<5.0				0.08		0.09			279
5/12/2011	BNVC - 15	0.82	<5.0				0.33		0.34			310
10/25/2012	BNVC - 15	0.82	<5.0				<0.05		<0.05			300
8/6/2009	BNVC - 14	0.03	<5.0				0.14		0.11			300
2/26/2010	BNVC - 14	0.03	<5.0				<0.05		<0.05			239
5/11/2011	BNVC - 14	0.03	<5.0		<0.05		0.13		0.12			276
10/25/2012	BNVC - 14	0.03	<5.0				0.17		0.14			236
6/2/2009	BEVC - 7	4.10	<5.0				<0.05		<0.05			263
8/13/2010	BEVC - 7	4.10	<5.0				0.11		0.15			248
5/12/2011	BEVC - 7	4.10	<5.0				0.11		0.12			297
3/1/2013	BEVC - 7	4.10	<5.0		ND		<0.05		<0.05			270
Total Samples			12		1		12		12.00			12
Average			<5.1		<0.05		<0.12		<0.12			276
Median			<5.0		<0.05		<0.11		<0.11			278
Max			<5.6		<0.05		0.33		0.34			310
S.D.			<0.2		0.00		<0.08		<0.08			25
Reporting Limits			5.0		0.050		0.05		0.05			10.0
EPA Standard												
ADEM Standard												

**Valley Creek
Water Quality Data
2009-2013**

SCREENING SITES

Date	Station	Mileage Miles from Headwater	TSS		Silver		Turbidity		pH		Temperature	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)
3/16/2009	BNVC - 15	0.82	<5.0		<0.01		1.2		8.0		64.0	
2/26/2010	BNVC - 15	0.82	<5.0		<0.01		2.1		7.5		53.0	
5/12/2011	BNVC - 15	0.82	<5.0		<0.005		4.9		7.5			
10/25/2012	BNVC - 15	0.82	<5.0		<0.005		<1.0		8.0		66.0	
8/6/2009	BNVC - 14	0.03	<5.0		<0.01		2.5		8.5			
2/26/2010	BNVC - 14	0.03	<5.0		<0.01		1.9		8.0		58.0	
5/11/2011	BNVC - 14	0.03	6		<0.01		2.4		7.0			
10/25/2012	BNVC - 14	0.03	<5.0		<0.005		<1.0					
6/2/2009	BEVC - 7	4.10	6		<0.01		3.0		8.5		67.3	
8/13/2010	BEVC - 7	4.10	<5.0		<0.01		3.0		8.7		84.2	
5/12/2011	BEVC - 7	4.10	<5.0		<0.005		1.3		8.3			
3/1/2013	BEVC - 7	4.10	<5.0		<0.005		1.3					
Total Samples			12		12		12		10		6	
Average			<5.2		<0.01		<2.1		8.0		65.4	
Median			<5.0		<0.01		<2.0		8.0		65.0	
Max			6.0		<0.01		4.9		8.7		84.2	
S.D.			<0.4		0.00		<1.1		0.5		10.7	
Reporting Limits			Variable		0.010		Variable		Variable		Variable	
EPA Standard					0.000				6.5 - 9.0		Species Dependent	
ADEM Standard					0.000		≤50 Above Background		>6.0 - ≤8.5		≤90°	

Valley Creek
Water Quality Data
2009-2013

INFLOW SITES

DATE	OUTFALL ID	LAT.	LONG.	PIPE SIZE (In.)	FLOW (1L/Sec.)	TEMP. (°F)	pH	COPPER			DETERGENTS (mg/L)					
								AMMONIA (mg/L)	PHENOL (mg/L)	TOTAL (mg/L)						
4/17/2009	23596023	33.50513	-86.83954	36"	6	64.2	7.0	0	0	0	0					
4/17/2009	23596025	33.50514	-86.89008	62"	5	64.2	8.0	0	0	0	0					
4/17/2009	23596032	33.50425	-86.84499	62"	6	65.1	7.5	0	0	0	0					
4/17/2009	23596034	33.50382	-86.8972	78"			7.5	0.25								
4/17/2009	23596055	33.49557	-86.86583	D24",112",856"			8.5									
4/17/2009	23596049	33.49678	-86.86273	18"	13	67.3	7.0	0	0	0	0					
5/22/2009	23596043	33.50018	-86.85637	60"	28.22	70.7	8.0	0	0	0	0					
5/22/2009	23596044	33.49927	-86.8584	D8",113"812	2.9	64.0	7.5	0	0	0	0					
6/12/2009	23596074	33.48684	-86.87413	D65",1147"898"	1.5	71.0	8.0	0	0	0	0					
6/12/2009	23596080	33.48544	-86.87698	D48",1210"8150"	6.65	71.0	8.0	0	0	0	0					
6/24/2009	23596004	33.5087	-86.82832	108"	6		8.0	0	0	0	0					
6/24/2009	23596038	33.50291	-86.84968	D45",1266"8226"	4.97		8.0	0	0	0	0					
6/24/2009	23596039	33.50249	-86.85113	32"	10.99		8.0	0	0	0	0					
6/26/2009	23596088	33.4782	-86.88378	D72",1129"8910"	1.3	73.0	8.0	0	0	0	0					
7/8/2009	23596005	33.50839	-86.82849	D84",1444",8348"	3.12	77.0	8.5	0	0	0	0					
7/16/2010	23596029	33.5048	-86.84197	72"	8.65		7.5	0	0	0	0					
7/16/2010	23596018	33.5062	-86.83458	56"	17	56.7	8.2	0	0	0	0					
8/13/2010	23596154	33.46869	-86.87761	D,1704",8	2	74.0	8.9	0	0	0	0					
4/26/2011	23596096	33.46738	-86.88853	D,148",8	10		7.3	0	0	0	0					
5/17/2011	23596132	33.44425	-86.9224	D,148",8	30		7.3	0	0	0	0					
5/17/2011	23596135	33.44072	-86.92185	D,148",8	6.5		7.1	0	0	0	0					
5/19/2011	23596065	33.49154	-86.87232	120"	4		7.0	0	0	0	0					
10/4/2011	23596057	33.4954	-86.86637	36"	8.46		7.0	0	0	0	0					
10/4/2011	23596062	33.49471	-86.86684	D,1224",8	6.5		7.5	0	0	0	0					
10/23/2012	23596021	33.50597	-86.83594	74"	3.09	66.0	8.4	0	0	0.5	<0.1					
10/23/2012	23596019	33.50603	-86.83472	54"	4.53	70.0	7.8	0	0	0.5	<0.1					
10/25/2013	23596026	33.50495	-86.84031	306"	1.47	66.0	8.4	0	0	0.5	<0.1					
Total Samples											15	27	26	12	12	12
Average											68.1	7.8	0.01	0	0.19	<0.02
Median											68.0	8.0	0.00	0	0.00	<0.1
Max											77.0	8.9	0.25	0	0.50	<0.1
S.D.											5.1	0.5	0.05	0	0.23	<0.04
Reporting Limits											4.000					
EPA Std.											6.5 - 9.0					
ADEM Std.											>6.0 - 58.5					

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IN STREAM

Date	Station	Mileage Miles from Headwater	Arsenic (As III)		BOD (5)		COD		Chromium (III)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
2/27/2009	VIC1	5.4		<0.050		<5.0		48		<0.01		<0.01
3/6/2009	VIC1	5.4	<0.050		<5.0	12			<0.01	<0.01	<0.01	
6/2/2009	VIC1	5.4		<0.050	3.5	21			<0.01	<0.01	<0.01	
8/12/2009	VIC1	5.4	<0.050		<5.0		14		<0.01	<0.01	<0.01	
8/26/2009	VIC1	5.4	<0.050		<5.0	30			<0.01	<0.01	<0.01	
12/7/2009	VIC1	5.4	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
12/18/2009	VIC1	5.4	<0.050		<5.0		42		<0.01	<0.01	<0.01	
2/3/2010	VIC1	5.4	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
2/9/2010	VIC1	5.4	<0.050		<5.0		26		<0.01	<0.01	<0.01	
4/12/2010	VIC1	5.4	<0.050		<5.0	17			<0.01	<0.01	<0.01	
8/20/2010	VIC1	5.4	<0.050		<5.0		29		<0.01	<0.01	<0.01	
8/26/2010	VIC1	5.4	<0.050		<5.0	13			<0.01	<0.01	<0.01	
10/19/2010	VIC1	5.4	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
2/15/2011	VIC1	5.4	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
4/27/2011	VIC1	5.4	<0.050		<5.0	6.4		27	<0.01	<0.01	<0.01	
9/24/2012	VIC1	5.4	<0.010		<5.0				<0.01	<0.01	<0.01	
1/25/2013	VIC1	5.4		<0.050	<5.0	14			<0.01	<0.01	<0.01	
3/5/2013	VIC1	5.4	<0.050		5.0				<0.01	<0.01	<0.01	
2/25/2009	VIC2	11.6	<0.050		<5.0	14		42	<0.01	<0.01	<0.01	
2/27/2009	VIC2	11.6	<0.050		<5.0	13.5		147	<0.01	0.013	<0.01	
6/2/2009	VIC2	11.6	<0.050		<5.0	16			<0.01	<0.01	<0.01	
8/12/2009	VIC2	11.6	<0.050		<5.0			<10	<0.01	<0.01	<0.01	
8/26/2009	VIC2	11.6	<0.050		<5.0	40			<0.01	<0.01	<0.01	
12/7/2009	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
12/18/2009	VIC2	11.6	<0.050		5.3		56		<0.01	<0.01	<0.01	
2/3/2010	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
2/9/2010	VIC2	11.6	<0.050		<5.0		35		<0.01	<0.01	<0.01	
4/12/2010	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
8/20/2010	VIC2	11.6	<0.050		2.9		38		<0.01	<0.01	<0.01	
8/26/2010	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
10/19/2010	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
2/15/2011	VIC2	11.6	<0.050		<5.0	<10			<0.01	<0.01	<0.01	
4/27/2011	VIC2	11.6	<0.050		12.4		102		<0.01	<0.01	<0.01	
9/14/2012	VIC2	11.6	<0.010		<5.0	<10			<0.01	<0.01	<0.01	
1/25/2013	VIC2	11.6		<0.050	<5.0	<10		12	<0.01	<0.01	<0.01	
3/5/2013	VIC2	11.6		<0.050	<5.0				<0.01	<0.01	<0.01	
Total Samples			18	12	22	14	54	14	22	14	22	14
Average			<0.046	<0.050	<5.0	<5.7	<13.2	<45	<0.01	<0.01	<0.01	<0.01
Median			<0.050	<0.050	<5.0	<5.0	<10	<37	<0.01	<0.01	<0.01	<0.01
Max			<0.050	<0.050	5.0	13.5	40.0	147	<0.010	0.013	<0.01	<0.01
S.D.			<0.012	0.000	<0.8	<3.3	<5.7	<37	<0.01	<0.01	0.00	0.000
Reporting Limits			Variable	Variable	5.0	5.0	10.0	10.0	0.0100	0.0100	<0.01	<0.01
EPA Standard			0.340	0.340					0.521	0.399	0.399	0.399
ADEM Standard			0.340	0.340					0.521	0.399	0.399	0.399

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IN STREAM

Date	Station	Mileage Miles from Headwater	Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin		Hardness (CaCO3)	
			Dry (col/100ml)	Wet (col/100ml)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)
2/27/2009	VIC1	5.4		1400								55
3/6/2009	VIC1	5.4	18		< 0.01						219	
6/2/2009	VIC1	5.4	ND		< 0.01						152	
8/12/2009	VIC1	5.4	600			< 0.01					225	173
8/26/2009	VIC1	5.4	380			< 0.01					217	
12/7/2009	VIC1	5.4	ND			< 0.01					209	74
12/18/2009	VIC1	5.4	ND			< 0.01					224	
2/3/2010	VIC1	5.4	ND			< 0.01					153	116
2/9/2010	VIC1	5.4	ND			< 0.01					201	
4/12/2010	VIC1	5.4	ND			< 0.01					215	129
8/20/2010	VIC1	5.4	430			< 0.01					209	
8/26/2010	VIC1	5.4	ND			< 0.01					185	
10/19/2010	VIC1	5.4	ND			< 0.01					201	
2/15/2011	VIC1	5.4	ND			< 0.01					217	92
4/27/2011	VIC1	5.4	ND			< 0.01					178	
9/24/2012	VIC1	5.4	ND			< 0.01					207	291
1/25/2013	VIC1	5.4	9	1000		< 0.01					219	
3/5/2013	VIC1	5.4	9	1500		< 0.01					221	186
2/25/2009	VIC2	11.6	TNTC			< 0.01					234	210
6/2/2009	VIC2	11.6				< 0.01					159	
8/12/2009	VIC2	11.6	520			< 0.01					208	210
8/26/2009	VIC2	11.6	12			< 0.01					212	
12/7/2009	VIC2	11.6	ND			< 0.01					203	119
12/18/2009	VIC2	11.6	ND			< 0.01					221	
2/3/2010	VIC2	11.6	ND			< 0.01					234	134
2/9/2010	VIC2	11.6	ND			< 0.01					159	188
4/12/2010	VIC2	11.6	ND			< 0.01					208	
8/20/2010	VIC2	11.6	480			< 0.01					212	
8/26/2010	VIC2	11.6	ND			< 0.01					203	97
10/19/2010	VIC2	11.6	ND			< 0.01					221	
2/15/2011	VIC2	11.6	ND			< 0.01					221	200
4/27/2011	VIC2	11.6	ND			< 0.01					22	14
9/14/2012	VIC2	11.6	ND			< 0.01					204	147
1/25/2013	VIC2	11.6	700			< 0.01					211	132
3/5/2013	VIC2	11.6	8	6	4	18	10	4	6	4	24	64
Total Samples			306	863	<0.01	<0.01	<0.01	<0.01	<0.10	<0.06	204	147
Average			405	850	<0.01	<0.01	<0.01	<0.01	<0.10	<0.055	211	132
Median			600	1500	<0.01	<0.01	<0.01	<0.01	<0.10	<0.1	234	291
Max			251	557	0.00	0.000	0.00	0.000	0.00	<0.05	24	64
S.D.			Variable	Variable	0.01	0.01	0.01	0.01	0.00	<0.05	24	64
Reporting Limits												1.0
EPA Standard					0.06	0.02	0.02	0.02	0.24	0.24		
ADEM Standard												

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IN STREAM

Date	Station	Mileage Miles from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
2/27/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.7	1.1	<0.5	0.8
3/6/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2	2	1.2	1.2
6/2/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1	1.3	<0.5	0.7
8/12/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.3	1.1	<0.5	<0.5
8/26/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.5	1.5	<0.5	0.8
12/7/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.1	1.1	<0.5	0.7
12/18/2009	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.1	1.2	<0.5	0.6
2/9/2010	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	<0.5	<0.5	<0.5	<0.5
4/12/2010	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.2	1.2	0.7	0.7
8/20/2010	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.4	2.4	1.4	1.4
8/26/2010	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	0.81	2.7	<0.5	2.0
10/19/2010	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	0.9	0.9	<0.5	<0.5
4/27/2011	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.2	1.2	<0.5	<0.5
9/24/2012	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.5	1.5	0.7	1.4
1/25/2013	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.5	2.5	0.7	3.6
3/5/2013	VIC1	5.4	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	4.1	4.1	1.7	1.7
2/25/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.6	1.6	0.5	2.0
2/27/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.9	1.9	<0.5	1.1
6/2/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.8	1.8	<0.5	1.1
8/12/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.3	2.3	0.5	2.0
8/26/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	0.205	0.205	1.6	1.6	0.7	<0.5
12/7/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	0.554	0.554	1.8	1.8	0.7	0.7
12/18/2009	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	0.28	1.6	1.6	0.5	2.0
2/9/2010	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	0.9	0.9	<0.5	1.1
4/12/2010	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	0.31	<0.5	<0.5	<0.5	1.1
8/20/2010	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.7	1.7	0.6	0.6
8/26/2010	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.5	1.5	0.7	1.4
10/19/2010	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.0	2.0	0.8	0.8
2/15/2011	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.9	1.9	0.7	0.7
4/27/2011	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	1.9	1.9	0.8	0.8
9/14/2012	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.0	2.0	0.8	0.8
1/25/2013	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.0	2.0	0.8	0.8
3/5/2013	VIC2	11.6	<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	2.2	2.2	1.4	1.4
Total Samples			22	14	22	14	22	14	22	14	22	14
Average			<0.0002	<0.0002	<0.02	<0.02	<0.22	<0.27	<1.4	1.9	<0.7	<1.3
Median			<0.0002	<0.0002	<0.02	<0.02	<0.20	<0.20	<1.5	1.8	<0.5	<1.0
Max			<0.0002	<0.0002	<0.02	<0.02	0.55	0.81	2.5	4.1	1.7	3.6
S.D.			0.0000	0.0000	0.00	0.00	<0.08	<0.16	<0.6	0.8	<0.3	<0.8
Reporting Limits			0.0002	0.0002	0.020	0.020	0.20	0.50	0.50	0.50	0.50	0.50
EPA Standard			0.0014	0.0014	0.605	0.459	0.605	0.459	0.605	0.459	0.605	0.459
ADEM Standard			0.0024	0.0024	0.605	0.459	0.605	0.459	0.605	0.459	0.605	0.459

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IN STREAM

Date	Station	Mileage from Headwater	Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus		TDS	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)		Dry (mg/L)
2/27/2009	VIC1	5.4	<5.6	<5.6	<0.05	<0.05	0.128	0.06	0.06	51		
3/6/2009	VIC1	5.4	<5.6	<5.6	<0.05	<0.05	<0.050	<0.050	<0.050	277		
6/2/2009	VIC1	5.4	<5.2	<5.2	<0.05	<0.05	0.071	<0.050	<0.050	204		
8/12/2009	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	0.051	<0.050	<0.050	150		
8/26/2009	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	247		
12/7/2009	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	216		
12/18/2009	VIC1	5.4	<5.6	<5.6	<0.05	<0.05	0.186	0.077	0.077	83		
2/3/2010	VIC1	5.4	<5.6	<5.6	<0.05	<0.05	<0.050	<0.050	<0.050	266		
2/9/2010	VIC1	5.4	<5.3	<5.3	<0.05	<0.05	0.084	<0.050	<0.050	162		
4/12/2010	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	0.063	<0.050	<0.050	114		
8/20/2010	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	208		
8/26/2010	VIC1	5.4	<5.0	<5.0	0.09	0.065	0.065	0.052	0.052	162		
10/19/2010	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	178		
2/15/2011	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	0.151	0.07	0.07	139		
4/27/2011	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	304		
9/24/2012	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	263		
1/25/2013	VIC1	5.4	<5.0	<5.0	<0.05	<0.05	0.15	<0.050	<0.050	205		
3/5/2013	VIC1	5.4	<6.2	<6.2	<0.05	<0.05	0.15	<0.050	<0.050	214		
2/25/2009	VIC2	11.6	<5.3	<5.3	<0.05	<0.05	0.511	<0.050	<0.050	159		
2/27/2009	VIC2	11.6	<5.3	<5.3	<0.05	<0.05	0.511	<0.050	<0.050	242		
6/2/2009	VIC2	11.6	<5.3	<5.3	<0.05	<0.05	<0.050	<0.050	<0.050	188		
8/12/2009	VIC2	11.6	<5.3	<5.3	<0.05	<0.05	<0.050	<0.050	<0.050	210		
8/26/2009	VIC2	11.6	<5.3	<5.3	<0.05	<0.05	<0.050	<0.050	<0.050	258		
12/7/2009	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	91		
12/18/2009	VIC2	11.6	<5.0	<5.0	0.07	0.282	0.282	<0.050	<0.050	290		
2/3/2010	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	162		
2/9/2010	VIC2	11.6	<5.6	<5.6	<0.05	<0.05	0.108	<0.050	<0.050	226		
4/12/2010	VIC2	11.6	<5.6	<5.6	<0.05	<0.05	0.108	<0.050	<0.050	179		
8/20/2010	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	247		
8/26/2010	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	198		
10/19/2010	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	304		
2/15/2011	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	111		
4/27/2011	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	0.264	0.059	0.059	270		
9/14/2012	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	281		
1/25/2013	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	242		
3/5/2013	VIC2	11.6	<5.0	<5.0	<0.05	<0.05	<0.050	<0.050	<0.050	242		
Total Samples			22	14	22	14	22	14	22	14	22	14
Average			<5.2	<5.1	<0.052	<0.051	<0.052	<0.156	<0.050	<0.055	241	145
Median			<5.0	<5.0	<0.05	<0.05	<0.05	<0.12	<0.050	<0.050	245	155
Max			<6.2	<5.6	0.09	0.07	0.51	0.51	0.052	0.077	304	242
S.D.			<0.3	<0.2	<0.01	<0.01	<0.13	<0.01	<0.01	<0.01	39	52
Reporting Limits			5.0	5.0	0.050	0.05	0.05	0.05	0.05	10.0	10.0	10.0
EPA Standard /DEM Standard												

Village Creek
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IN STREAM

Date	Station	Mileage Miles from Headwater	TSS		Silver		Turbidity		pH		Temperature	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)
2/27/2009	VIC1	5.4		47.0	<0.0100		30.5				7.50	57.0
3/6/2009	VIC1	5.4	<5.0	<0.0100	<0.0100		1.2	8.50	8.50		62.8	
6/2/2009	VIC1	5.4	22.0	<0.0100	<0.0100		18.8	8.00	8.00		75.9	
8/12/2009	VIC1	5.4	<5.0	<0.0100	<0.0100		<1.0	8.50	8.50			
8/26/2009	VIC1	5.4	<5.0	<0.0100	<0.0100		1.5	74.4	6.50		53.2	
12/7/2009	VIC1	5.4	<5.0	<0.0100	<0.0100		1.4	42.9	7.50		53.1	
12/18/2009	VIC1	5.4	<5.0	70.0	<0.0100		<1.0	8.70	8.70		60.8	
2/3/2010	VIC1	5.4	<5.0	32.0	<0.0100		6.0	8.50	8.50		78.1	79.7
2/9/2010	VIC1	5.4	<5.0	6.0	<0.0100		1.1	7.79	7.79		64.0	
4/12/2010	VIC1	5.4	<5.0	<5.0	<0.0100		1.3	6.90	6.90			
8/26/2010	VIC1	5.4	<5.0	32.5	<0.0100		<1.0	7.80	7.80		53.2	58.2
10/19/2010	VIC1	5.4	<5.0	74.0	<0.0050		1.1	8.00	8.00		51.4	58.0
2/15/2011	VIC1	5.4	<5.0	8.0	<0.0100		2.8	8.50	8.50		78.6	
4/27/2011	VIC1	5.4	<5.0	<5.0	<0.0100		<1.0	8.00	8.00			
9/24/2012	VIC1	5.4	<5.0	580.0	<0.0100		<1.0	8.50	8.50		50.4	
1/25/2013	VIC1	5.4	<5.0	74.0	<0.0050		1.1	40.2	7.50		48.4	
3/5/2013	VIC1	5.4	<5.0	8.0	<0.0100		1.9	43.2	8.13		62.2	79.9
2/25/2009	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	8.50	8.50		76.6	
2/27/2009	VIC2	11.6	<5.0	204.0	<0.0100		2.7	8.00	8.00		62.4	
6/2/2009	VIC2	11.6	8.0	59.5	<0.0100		1.9	8.50	8.50		77.0	70.3
8/12/2009	VIC2	11.6	<5.0	54.5	<0.0100		1.1	94.4	6.50		77.0	
8/26/2009	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	8.00	8.00		53.4	
12/7/2009	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	8.00	8.00			
12/18/2009	VIC2	11.6	5.5	494.0	<0.0100		1.3	11.1	11.1			
2/3/2010	VIC2	11.6	<5.0	11.5	<0.0050		1.4	22	14	19	17	6
2/9/2010	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	<60.3	8.13	8.13	7.50	67.2
4/12/2010	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	<1.0	8.13	8.13	7.50	64.3
8/20/2010	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	18.8	8.77	8.77	8.50	79.9
8/26/2010	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	<82.6	0.50	0.71	10.9	10.9
10/19/2010	VIC2	11.6	<5.0	<5.0	<0.0100		<1.0	Variable	Variable	Variable	Variable	Variable
2/15/2011	VIC2	11.6	<5.0	<5.0	0.010		<1.0	6.5 - 9.0	6.5 - 9.0	6.5 - 9.0	Species Dependent	Species Dependent
4/27/2011	VIC2	11.6	<5.0	<5.0	0.0001		<1.0	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5
9/14/2012	VIC2	11.6	<5.0	<5.0	0.0001		<1.0	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5
1/25/2013	VIC2	11.6	<5.0	<5.0	0.0001		<1.0	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5
3/5/2013	VIC2	11.6	<5.0	<5.0	0.0001		<1.0	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5
Total Samples			22	12	22	14	22	14	19	11	17	6
Average			<5.9	<138.8	<0.010	<0.010	<2.1	<60.3	8.13	7.50	62.4	67.2
Median			<5.0	<57.0	<0.010	<0.010	<1.1	<38.3	8.13	7.50	62.2	64.3
Max			22.0	580.0	<0.010	<0.010	18.8	320.0	8.77	8.50	78.6	79.9
S.D.			<3.6	<193.6	<0.002	<0.002	<3.8	<82.6	0.50	0.71	10.9	10.9
Reporting Limits			<5.0	<5.0	0.010	0.010	<1.0	<1.0	Variable	Variable	Variable	Variable
EPA Standard					0.0001	0.0001			6.5 - 9.0	6.5 - 9.0	Species Dependent	Species Dependent
ADEM Standard					0.0001	0.0001			>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5	>6.0 - <8.5

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SCREENING SITES

Date	Station	Mileage from Headwater	Arsenic (As III)		BOD (5)		COD		Chromium (III)		Chromium (Hexavalent)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
9/14/2012	IRVIC-5	0.0	<0.050		<5.0		<10		<0.010		<0.01	
2/18/2011	IRVIC-5	0.0	<0.050		<5.0		<10		<0.010		<0.01	
1/11/2010	IRVIC-5	0.0	<0.050		<2.0		14		<0.010		<0.01	
2/23/2009	IRVIC-5	0.0	<0.050		<5.0		18		<0.010		<0.01	
12/24/2012	IRVIC-6	1.05										
12/14/2012	IRVIC-4	2.0	<0.010		<5.0		<10		<0.010		<0.01	
5/11/2011	IRVIC-4	2.0	<0.050		<5.0		<10		<0.010		<0.01	
1/11/2010	IRVIC-4	2.0	<0.050		2.0		19		<0.010		<0.01	
6/3/2009	IRVIC-4	2.0	<0.050		<5.0		18		<0.010		<0.01	
10/6/2011	BNVIC-13	4.0	<0.010		<5.0		12		<0.010		<0.01	
1/11/2010	BNVIC-13	4.0	<0.050		2.0		19		<0.010		<0.01	
3/21/2009	BNVIC-13	4.0	<0.050		<5.0		<10		<0.010		<0.01	
3/4/2013	BNVIC-12	5.4	<0.010		<5.0		<10		<0.010		<0.01	
9/24/2012	BNVIC-12	5.4	<0.010		<5.0		<10		<0.010		<0.01	
10/6/2011	BNVIC-12	5.4	<0.010		<5.0		15		<0.010		<0.01	
1/11/2010	BNVIC-12	5.4	<0.050		2.0		23		<0.010		<0.01	
3/6/2009	BNVIC-12	5.4	<0.050		<5.0		<10		<0.010		<0.01	
3/4/2013	BNVIC-11	6.5	<0.010		<5.0		<10		<0.010		<0.01	
5/12/2011	BNVIC-11	6.5	<0.010		<5.0		10		<0.010		<0.01	
1/11/2010	BNVIC-11	6.5	<0.050		<5.0		21		<0.010		<0.01	
5/20/2009	BNVIC-11	6.5	<0.050		<5.0		<10		<0.010		<0.01	
2/17/2011	BNVIC-9	8.4	<0.050		2.9		<10		0.013		<0.01	
9/23/2010	BNVIC-9	8.4	<0.050		<5.0		15		<0.010		<0.01	
8/11/2009	BNVIC-9	8.4	<0.050		<5.0		16		<0.010		<0.01	
2/17/2011	BNVIC-10	8.7	<0.050		<5.0		<10		<0.010		<0.01	
2/26/2010	BNVIC-10	8.7	<0.050		<5.0		<10		<0.010		<0.01	
8/6/2009	BNVIC-10	8.7	<0.050		<5.0		<10		<0.010		<0.01	
3/4/2013	BNVIC-10	8.7	<0.010		<5.0		<10		<0.010		<0.01	
3/4/2013	BNVIC-8	11.0	<0.010		<5.0		<10		<0.010		<0.01	
9/14/2012	BNVIC-8	11.0	<0.010		<5.0		<10		<0.010		<0.01	
2/17/2011	BNVIC-8	11.0	<0.050		<5.0		11		<0.010		<0.01	
2/26/2010	BNVIC-8	11.0	<0.050		<5.0		<10		<0.010		<0.01	
8/6/2009	BNVIC-8	11.0	<0.050		<5.0		<10		<0.010		<0.01	
Total Samples			32	0	4	0	32	0	32	0	54	0
Average			<0.038		<4.6		<13		<0.010		<0.01	
Median			<0.050		<5.0		<10		<0.010		<0.01	
Max			<0.050		2.9		23		0.013		<0.01	
S.D.			<0.019		<1.1		<4		<0.001		0.00	
Reporting Limits			Variable		5.0		10.0		0.0100		<0.01	
EPA Standard			0.340						0.506			
ADEM Standard			0.340						0.506			

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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Fecal Coliform		Total Cyanide		Dissolved Cyanide		Dieldrin		Hardness (CaCO3)	
			Dry (col/100ml)	Wet (col/100ml)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (ug/L)	Wet (ug/L)	Dry (mg/L)	Wet (mg/L)
9/14/2012	IRVIC-5	0.0	ND				<0.01		<0.1		204	
2/18/2011	IRVIC-5	0.0	ND				<0.01		<0.1		198	
1/11/2010	IRVIC-5	0.0	50				<0.01				222	
2/23/2009	IRVIC-5	0.0	10		<0.01						188	
12/24/2012	IRVIC-6	1.05										
12/14/2012	IRVIC-4	2.0										
5/11/2011	IRVIC-4	2.0	24				<0.01		<0.01		195	
1/11/2010	IRVIC-4	2.0	432				<0.01		<0.1		211	
6/3/2009	IRVIC-4	2.0	53		<0.01						183	
10/6/2011	BNVIC-13	4.0	160				<0.01		<0.1		188	
1/11/2010	BNVIC-13	4.0	40				<0.01				214	
5/21/2009	BNVIC-13	4.0	74								186	
3/4/2013	BNVIC-12	5.4	38		<0.01				<0.01		192	
9/24/2012	BNVIC-12	5.4	ND				<0.01		<0.01		205	
10/6/2011	BNVIC-12	5.4	150				<0.01		<0.1		192	
1/11/2010	BNVIC-12	5.4	198				<0.01		<0.1		221	
3/6/2009	BNVIC-12	5.4	45		<0.01				<0.01		209	
3/4/2013	BNVIC-11	6.5	20								184	
5/12/2011	BNVIC-11	6.5	ND				<0.01		<0.01		194	
1/11/2010	BNVIC-11	6.5	120				<0.01		<0.1		216	
5/20/2009	BNVIC-11	6.5	140		<0.01						198	
2/17/2011	BNVIC-9	8.4	1240				<0.01		<0.1		165	
9/23/2010	BNVIC-9	8.4	440				<0.01				162	
8/11/2009	BNVIC-9	8.4	460		<0.01						179	
2/17/2011	BNVIC-10	8.7	450				<0.01		<0.1		186	
2/26/2010	BNVIC-10	8.7	112				<0.01				208	
8/6/2009	BNVIC-10	8.7	300				<0.01				199	
3/4/2013	BNVIC-10	8.7	30				<0.01		<0.01		191	
3/4/2013	BNVIC-8	11.0	16				<0.01		<0.01		206	
9/14/2012	BNVIC-8	11.0	ND				<0.01		<0.1		202	
2/17/2011	BNVIC-8	11.0	2400				<0.01		<0.1		210	
2/26/2010	BNVIC-8	11.0	ND				<0.01				206	
8/6/2009	BNVIC-8	11.0	72		<0.01						203	
Total Samples			25	0	7	0	25	0	16	0	32	0
Average			283		<0.01		<0.01		<0.07		197	
Median			112		<0.01		<0.01		<0.10		198	
Max			2400		<0.01		<0.01		<0.10		222	
S.D.			514		0.00		0.00		<0.04		14	
Reporting Limits				Variable		0.010		0.010			1.0	
EPA Standard					0.060		0.022		0.24			
ADEM Standard							0.022		0.24			

Village Creek
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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Mercury		Nickel		Ammonia Nitrogen		Total Nitrogen		TKN	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
9/14/2012	IRVIC-5	0.0	<0.0002		<0.02		<0.20		1.1		<0.5	
2/18/2011	IRVIC-5	0.0	<0.0002		<0.02		<0.20		1.8		<0.5	
1/11/2010	IRVIC-5	0.0	<0.0002		<0.02		<0.20		1.4		<0.5	
2/23/2009	IRVIC-5	0.0	<0.0002		<0.02		<0.20		1.3		<0.5	
12/24/2012	IRVIC-6	1.05										
12/14/2012	IRVIC-4	2.0	<0.0002		<0.02		<0.20		0.8		<0.5	
5/11/2011	IRVIC-4	2.0	<0.0002		<0.02		<0.20		1.7		0.9	
1/11/2010	IRVIC-4	2.0	<0.0002		<0.02		<0.20		1.1		<0.5	
6/3/2009	IRVIC-4	2.0	<0.0002		<0.02		<0.20		0.8		<0.5	
10/6/2011	BNVIC-13	4.0	<0.0002		<0.02		<0.20		2.1		1.3	
1/11/2010	BNVIC-13	4.0	<0.0002		<0.02		<0.20		1		<0.5	
5/21/2009	BNVIC-13	4.0	<0.0002		<0.02		<0.20		0.8		<0.5	
3/4/2013	BNVIC-12	5.4	<0.0002		<0.02		<0.20		2.0		0.6	
9/24/2012	BNVIC-12	5.4	<0.0002		<0.02		<0.20		1.4		<0.5	
10/6/2011	BNVIC-12	5.4	<0.0002		<0.02		<0.20		1.6		0.6	
1/11/2010	BNVIC-12	5.4	<0.0002		<0.02		<0.20		1		<0.5	
3/6/2009	BNVIC-12	5.4	<0.0002		<0.02		<0.20		1.6		0.5	
3/4/2013	BNVIC-11	6.5	<0.0002		<0.02		<0.20		1.0		<0.5	
5/12/2011	BNVIC-11	6.5	<0.0002		<0.02		<0.20		0.8		<0.5	
1/11/2010	BNVIC-11	6.5	<0.0002		<0.02		<0.20		1.1		<0.5	
5/20/2009	BNVIC-11	6.5	<0.0002		<0.02		<0.20		0.9		<0.5	
2/17/2011	BNVIC-9	8.4	<0.0002		<0.02		<0.20		1.4		0.8	
9/23/2010	BNVIC-9	8.4	<0.0002		<0.02		<0.20		0.7		0.6	
8/11/2009	BNVIC-9	8.4	<0.0002		<0.02		<0.20		1.4		0.7	
2/17/2011	BNVIC-10	8.7	<0.0002		<0.02		<0.20		1.2		<0.5	
2/26/2010	BNVIC-10	8.7	<0.0002		<0.02		<0.20		2.1		0.7	
8/6/2009	BNVIC-10	8.7	<0.0002		0.02		<0.20		2.2		1.4	
3/4/2013	BNVIC-10	8.7	<0.0002		<0.02		<0.20		1.5		0.5	
3/4/2013	BNVIC-8	11.0	<0.0002		<0.02		<0.20		1.1		<0.5	
9/14/2012	BNVIC-8	11.0	<0.0002		<0.02		<0.20		0.9		<0.5	
2/17/2011	BNVIC-8	11.0	<0.0002		<0.02		<0.20		1.7		0.8	
2/26/2010	BNVIC-8	11.0	<0.0002		<0.02		<0.20		0.9		<0.5	
8/6/2009	BNVIC-8	11.0	<0.0002		<0.02		<0.20		1.5		0.6	
Total Samples			32	0	32	0	32	0	31	0	32	0
Average			<0.0002		<0.02		<0.20		1.3		<0.6	
Median			<0.0002		<0.02		<0.20		1.3		<0.5	
Max			<0.0002		<0.02		<0.20		2.2		1.4	
S.D.			0.0000		0.00		0.00		0.4		<0.2	
Reporting Limits			0.0002		0.020		0.20		0.50		0.50	
EPA Standard			0.0014		0.585							
ADEM Standard			0.0024		0.588							

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SCREENING SITES

Date	Station	Mileage from Headwater	Oil & Grease		Total Phenol		Total Phosphorus		Total Dissolved Phosphorus		TDS	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)		Dry (mg/L)
9/14/2012	IRVIC-5	0.0	<5		<0.05		<0.050		<0.050		224	
2/18/2011	IRVIC-5	0.0	<5		<0.05		<0.050		<0.050		142	
1/11/2010	IRVIC-5	0.0	<5.3				<0.050		<0.050		208	
2/23/2009	IRVIC-5	0.0	<5.3				<0.050		<0.050		205	
12/24/2012	IRVIC-6	1.05										
12/14/2012	IRVIC-4	2.0	<5				<0.05		<0.05		214	
5/11/2011	IRVIC-4	2.0	<5				<0.05		<0.050		228	
1/11/2010	IRVIC-4	2.0	<5.3				<0.050		<0.050		193	
6/3/2009	IRVIC-4	2.0	<5.6				<0.050		<0.050		236	
10/6/2011	BNVIC-13	4.0	<5				<0.050		<0.050		230	
1/11/2010	BNVIC-13	4.0	<5				<0.050		<0.050		204	
5/21/2009	BNVIC-13	4.0	<5.6				<0.050		<0.050		283	
3/4/2013	BNVIC-12	5.4	<5				<0.05		<0.05		244	
9/24/2012	BNVIC-12	5.4	<5		<0.05		<0.050		<0.050		257	
10/6/2011	BNVIC-12	5.4	<5				<0.050		<0.050		255	
1/11/2010	BNVIC-12	5.4	<5.3				<0.050		<0.050		211	
3/6/2009	BNVIC-12	5.4	<5.3				<0.050		<0.050		235	
3/4/2013	BNVIC-11	6.5	<5				<0.05		<0.05		224	
5/12/2011	BNVIC-11	6.5	<5				<0.050		<0.050		237	
1/11/2010	BNVIC-11	6.5	<5				<0.050		<0.050		232	
5/20/2009	BNVIC-11	6.5	<5.6				<0.050		<0.050		229	
2/17/2011	BNVIC-9	8.4	<5		<0.05		0.127		0.101		220	
9/23/2010	BNVIC-9	8.4	<5				0.085		0.052		313	
8/11/2009	BNVIC-9	8.4	<5				0.083		<0.050		259	
2/17/2011	BNVIC-10	8.7	<5		<0.05		<0.050		<0.050		142	
2/26/2010	BNVIC-10	8.7	<5				0.111		0.096		268	
8/6/2009	BNVIC-10	8.7	<5				<0.050		<0.050		237	
3/4/2013	BNVIC-10	8.7	<5				<0.05		<0.05		235	
3/4/2013	BNVIC-8	11.0	<5				<0.05		<0.05		244	
9/14/2012	BNVIC-8	11.0	<5		<0.05		<0.050		<0.050		311	
2/17/2011	BNVIC-8	11.0	<5		<0.05		<0.050		<0.050		205	
2/26/2010	BNVIC-8	11.0	<5				<0.050		<0.050		260	
8/6/2009	BNVIC-8	11.0	<5				<0.050		<0.050		252	
Total Samples			32	0	29	0	32	0	32	0	32	0
Average			<5.1		<0.05		<0.056		<0.053		232	
Median			<5.0		<0.05		<0.050		<0.050		234	
Max			<5.6		<0.05		0.127		0.101		313	
S.D.			<0.2		0.0		<0.018		<0.012		37	
Reporting Limits			5.0		0.050		0.05		0.05		10.0	
EPA Standard												
DEM Standard												

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SCREENING SITES

Date	Station	Mileage from Headwater	TSS		Silver		Turbidity		pH		Temperature	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (NTU)	Wet (NTU)	Dry (Units)	Wet (Units)	Dry (°F)	Wet (°F)
9/14/2012	IRVIC-5	0.0	<5.0	<0.0100	<0.0100	<1.0	9.00	70.0				
2/18/2011	IRVIC-5	0.0	5	<0.0100	1.4	7.80	66.0					
1/11/2010	IRVIC-5	0.0	<5.0	<0.0100	2.6	8.00	54.0					
2/23/2009	IRVIC-5	0.0	<5.0	<0.0100	1.2	8.09	58.7					
12/24/2012	IRVIC-6	1.05	<5.0	<0.0100	1.6	7.20	53.2					
12/14/2012	IRVIC-4	2.0	12	<0.0100	1.8	7.50	46.0					
5/11/2011	IRVIC-4	2.0	<5.0	<0.0100	2.3	8.00	71.2					
1/11/2010	IRVIC-4	2.0	<5.0	<0.0100	1.9	8.00	79.5					
6/3/2009	IRVIC-4	2.0	8.5	<0.0050	1.9	7.00	42.3					
10/6/2011	BNVIC-13	4.0	<5.0	<0.0100	3.1	7.50	72.0					
1/11/2010	BNVIC-13	4.0	6.0	<0.0100	2.2	8.50	58.3					
5/21/2009	BNVIC-13	4.0	<5.0	<0.0100	1.4	7.80	67.8					
3/4/2013	BNVIC-12	5.4	<5.0	<0.0100	<1.0	7.00	37.9					
9/24/2012	BNVIC-12	5.4	<5.0	<0.0100	1.5	7.00	61.6					
10/6/2011	BNVIC-12	5.4	<5.0	<0.0050	2.2	7.00	54.7					
1/11/2010	BNVIC-12	5.4	<5.0	<0.0100	<1.0	7.00	37.4					
3/6/2009	BNVIC-12	5.4	<5.0	<0.0100	1.5	8.50	68.5					
3/4/2013	BNVIC-11	6.5	<5.0	<0.0100	2.1	6.70	57.6					
5/12/2011	BNVIC-11	6.5	<5.0	<0.0050	1.4	7.80	81.0					
1/11/2010	BNVIC-11	6.5	7	<0.0100	2.6	7.50	82.0					
5/20/2009	BNVIC-11	6.5	<5.0	<0.0100	1.9	7.10	54.7					
2/17/2011	BNVIC-9	8.4	<5.0	<0.0100	2.4	7.50	50.0					
9/23/2010	BNVIC-9	8.4	<5.0	<0.0100	1.2	8.50	78.1					
8/11/2009	BNVIC-9	8.4	7	<0.0100	1.2	7.20	53.7					
2/17/2011	BNVIC-10	8.7	<5.0	<0.0100	1.0	7.20	53.1					
2/26/2010	BNVIC-10	8.7	<5.0	<0.0100	<1.0	9.00	75.0					
8/6/2009	BNVIC-10	8.7	<5.0	<0.0100	1.3	6.60	55.4					
3/4/2013	BNVIC-10	8.7	<5.0	<0.0100	3.1	7.50	48.0					
3/4/2013	BNVIC-8	11.0	<5.0	<0.0100	1.3	8.50	80.4					
9/14/2012	BNVIC-8	11.0	<5.0	<0.0100	<1.0	9.00	75.0					
2/17/2011	BNVIC-8	11.0	<5.0	<0.0100	1.3	6.60	55.4					
2/26/2010	BNVIC-8	11.0	<5.0	<0.0100	3.1	7.50	48.0					
8/6/2009	BNVIC-8	11.0	<5.0	<0.0100	1.3	8.50	80.4					
Total Samples			32	0	32	0	30	0	29	0		
Average			<5.5	<0.009	<1.7	7.64	61.0					
Median			<5.0	<0.010	<1.5	7.50	58.3					
Max			12.0	<0.010	3.1	9.00	82.0					
S.D.			<1.4	<0.002	<0.6	0.63	13.1					
Reporting Limits			<5.0	0.010	<1.0	Variable	Variable					
EPA Standard			0.0001	0.0001	SSD Above Background	6.5 - 9.0	Species Dependent					
ADEM Standard			0.0001	0.0001	26.0 - 48.5	59.0	59.0					

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SCREENING SITES

Date	Station	Mileage Miles from Headwater	Arsenic (As III)		BOD (5)		COD		Chromium (III)		Chromium (Hex)	
			Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)	Dry (mg/L)	Wet (mg/L)
INFLOW SITES												
DATE	OUTFALL ID	LAT.	LONG.	PIPE SIZE (IN.)	FLOW (1L/Sec.)	TEMP. (°F)	pH (Units)	AMMONIA (mg/L)	COPPER, TOTAL (mg/L)	PHENOL (mg/L)	DETERGENTS (mg/L)	
2/10/2009	14600205	33.534	-86.829	24		59.2	9.0	0.0				
2/23/2009	14600336	33.576	-86.720	48	90	50.0	7.5	0.0				
3/10/2009	14600660	33.568	-86.721	0		65.3	8.5	0.0				
3/20/2009	14600246	33.520	-86.875	24			7.5	0.0				
3/20/2009	14600263	33.520	-86.887	120	84	60.8	8.5	0.0				
4/27/2009	14600132	33.547	-86.783	24								
4/27/2009	14600131	33.548	-86.783	60		62.6	8.5	0.0				
6/19/2009	14600211	33.532	-86.834	24	69	77.7	8.5	0.0				
6/19/2009	14600213	33.531	-86.877	36	46.94	71.7	8.5	0.0				
6/19/2009	14600214	33.530	-86.837	61	18.94	71.4	8.0	0.3				
7/20/2009	14600172	33.545	-86.808	36	3.725	70.0	8.0	0.0				
7/20/2009	14600174	33.545	-86.809	36	2.615	77.0	8.5	0.0				
7/27/2009	14600197	33.537	-86.824	36	2	77.0	7.0	0.0				
7/27/2009	14600195	33.537	-86.823	120	7	76.0	7.0	0.0				
7/27/2009	14600182	33.543	-86.816	24	22	82.0	8.0	3.0				
7/27/2009	14600181	33.543	-86.816	60	4	71.0	7.0	0.0				
7/28/2009	14600204	33.534	-86.829	144	13	74.0	8.0	0.0				
7/28/2009	14600189	33.540	-86.820	48	5.58	78.0	7.0	0.0				
8/4/2009	14600058	33.569	-86.724	36	15	63.7	8.0	0.0				
8/4/2009	14600281	33.524	-86.891	24	10	77.0	8.0	0.0				
8/4/2009	14600079	33.562	-86.735	18	3.3	60.0	8.5	0.0				
11/23/2009	14600135	33.547	-86.785	18	2	60.8	8.3	0.0				
11/23/2009	14600137	33.546	-86.785	48	40	59.0	8.5	0.0				
11/23/2009	14600139	33.546	-86.786	24	3.2	68.0	8.2	0.0				
6/21/2010	14600063	33.567	-86.726	36	3.38	65.5	7.4	0.0	0.0	0.0	0.0	
6/22/2010	14600068	33.563	-86.730	42	3.66	68.4	7.6	0.3	0.0	0.0	0.0	
6/22/2010	14600069	33.565	-86.730	10.25	10.25	68.7	7.8	0.0	0.0	0.0	0.0	
6/22/2010	14600123	33.550	-86.779	48	46.85	70.7	8.5	0.0	0.0	0.0	0.0	
6/22/2010	14600125	33.549	-86.780	48	90	72.5	8.0	0.0	0.0	0.0	0.0	
6/22/2010	14600127	33.549	-86.780	24	4.31	69.8	7.7	0.0	0.0	0.0	0.0	
6/21/2010	14600297	33.567	-86.726	18	14.24	68.9	7.5	0.0	0.0	0.0	0.0	
7/30/2010	14600254	33.518	-86.881	240	6.47	70.0	8.4	0.0	0.0	0.0	0.0	
1/18/2011	14600154	33.543	-86.792	18								
9/26/2012	14600243	33.523	-86.871	257	2.32	66.0	8.0	0.0	0.0	0.5	<0.1	
9/26/2012	14600245	33.521	-86.874	144		68.0	8.0	0.0	0.0	0.0	<0.1	
10/10/2012	14600261	33.519	-86.887	96 x 204in		68.0	7.0	0.0	0.0	0.0	<0.1	
10/10/2012	14600262	33.520	-86.887	60	2.4	69.0	7.0	0.0	0.0	0.0	<0.1	
10/10/2012	14600265	33.521	-86.889	42	2	73.0	7.0	0.3	0.0	0.5	<0.1	
10/10/2012	14600266	33.522	-86.890	36	2.22	71.0	7.0	0.3	0.0	0.5	<0.1	
10/10/2012	14600348	33.522	-86.890	36	36	68.0	9.0	0.3	0.0	0.5	<0.1	
10/11/2012	14600076	33.563	-86.734	48	22.3	66.0	8.4	0.0	0.0	0.0	<0.1	
10/12/2012	14600077	33.563	-86.734	48	17.72	64.0	7.2	0.3	0.0	0.5	<0.1	
10/26/2012	14600274	33.527	-86.894	43	2.69	68.6	7.0	0.0	0.0	0.0	<0.1	
10/26/2012	14600272	33.526	-86.890	96 x 125in	28.91	72.0	7.0	0.0	0.0	0.5	<0.1	
10/26/2012	14600276	33.528	-86.895	36	5.6	75.0	7.0	0.0	0.0	0.5	<0.1	
Total Sampler												
Max												
Min												
Reporting Limits												
ADEM Std.												
EPA Std.												
Specs Dependent												
6.5 - 9.0												
25.0 - 50.5												
0.2												
4.0												
5.0												
<0.1												