

APPENDIX A

Ohio River Dams, Tributaries, and Flow Data

Appendix A. Ohio River Navigation Dams			
Mile Point	Name	Normal Pool Elevation (ft)*	Year Placed in Operation**
6.2	Emsworth	710	1921
13.2	Dashields	692	1929
31.7	Montgomery	682	1936
54.4	New Cumberland	664.5	1959
84.2	Pike Island	644	1963
126.4	Hannibal	623	1972
161.7	Willow Island	602	1972
203.9	Belleville	582	1965
237.5	Racine	560	1967
279.2	Robert C. Byrd	538	1937
341	Greenup	515	1962
436.2	Meldahl	485	1964
531.5	Markland	455	1963
606.8	McAlpine	420	1961
720.7	Cannelton	383	1972
776.1	Newburgh	358	1975
846	Uniontown	342	1975
918.5	Smithland	324	1980
938.9	Lock and Dam 52	302	1928
962.6	Lock and Dam 53	290	1929
964.6	Olmsted	290	2018

* Height of water surface above mean sea level (National Geodetic Vertical Data)

** Year placed in operation defined as when the pool was raised.

Information provided by the United States Corps of Engineers – Ohio River Division

Appendix A: Selected Tributaries to the Ohio River

Enters Ohio River at Mile Point				Stream Name		State		Stream Length (Miles)		Drainage Area (Sq. Miles)		Enters Ohio River at Mile Point		Stream Mile		State		Stream Length (Miles)		Drainage Area (Sq. Miles)	
0.1	ALLEGHENY RIVER	PA	325	11,700	150.0	LEITHS RUN	OH					OH									
0.1	MONONGAHELA RIVER	PA	128	7,400	150.2	SPRING RUN	WV					WV									
2.1	CHARTIERS CREEK	PA		277	151.0	REAS RUN	OH					OH									
9.5	MONTGOUR RUN	PA			154.0	MIDDLE ISLAND CREEK	WV	70	560			WV									
13.7	LITTLE SEWICKLEY CREEK	PA			156.9	DENAS RUN	OH					OH									
15.5	BIG SEWICKLEY CREEK	PA			157.7	FRENCH RUN	WV					WV									
25.4	BEAVER RIVER	PA	21	3,130	168.6	LITTLE MUSKINGUM RIVER	OH		315			OH									
29.6	RACCOON CREEK	PA		200	170.2	DUCK CREEK	OH	52	228			OH									
40.1	LITTLE BEAVER CREEK	PA	51	510	172.2	MUSKINGUM RIVER	OH	112	8,040			OH									
47.3	LITTLE YELLOW CREEK	OH			174.3	WILLIAMS CREEK	WV					WV									
47.6	CONGO RUN	WV			184.8	LITTLE KANAWHA RIVER	WV	160	2,320			WV									
50.6	YELLOW CREEK	OH	34	240	188.7	DAVIS RUN	OH					OH									
60.1	KINGS CREEK	WV			192.0	LITTLE HOCKING RIVER	OH	18	103			OH									
61.7	ISLAND RUN	OH			192.5	SAWER RUN	OH					OH									
65.3	WILLS CREEK	OH			194.0	LITTLE SAND CREEK	WV					WV									
66.5	HARMAN CREEK	WV			199.3	HOCKING RIVER	OH	100	1,190			OH									
71.6	CROSS CREEK	OH	27	128	200.4	INDIAN RUN	OH					OH									
75.2	BUFFALO CREEK	WV		160	201.8	LEE CREEK	WV					WV									
81.4	SHORT CREEK	OH	29	147	203.4	ROCK RUN	OH					OH									
90.2	WHEELING CREEK	OH	30	108	210.2	SHADE RIVER	OH		221			OH									
90.2	WHEELING CREEK	WV		300	217.0	LITTLE SANDY CREEK	WV					WV									
94.9	MCMAHON CREEK	OH	28	91	218.6	GROUNDHOG CREEK	OH					OH									
101.6	LITTLE GRAVE CREEK	WV			220.9	SANDY CREEK	WV		115			WV									
102.4	BIG GRAVE CREEK	WV		75	223.4	CEDAR RUN	WV					WV									
105.0	PIPE CREEK	OH			226.2	OLD TOWN CREEK	OH					OH									
109.5	CAPTINA CREEK	OH	39	181	227.8	TANNERS RUN	OH					OH									
113.7	FISH CREEK	WV		250	231.4	MILL CREEK	WV		230			WV									
117.5	SUNFISH CREEK	OH	31	114	231.5	LITTLE MILL CREEK	WV					WV									
119.8	OPOSSUM CREEK	OH			232.3	JOHNS RUN	OH					OH									
122.2	PROCTOR CREEK	WV			234.9	TOMBLESON RUN	WV					WV									
128.6	FISHING CREEK	WV		220	235.8	SPRING RUN	WV					WV									
137.7	MILLER RUN	OH			236.7	VIVIAN RUN	WV					WV									
141.3	MILL CREEK	OH			240.6	WEST CREEK	WV					WV									
148.8	BENS RUN	WV			241.0	DUNHAM RUN	OH					OH									
149.0	SHEETS RUN	OH			245.0	BROAD CREEK	WV					WV									

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Enters Ohio River at Mile Point				Stream Name		State		Stream Length (Miles)		Drainage Area (Sq. Miles)		Enters Ohio River at Mile Point				Stream Name		State		Stream Length (Miles)		Drainage Area (Sq. Miles)	
253.7	LEADING CREEK	OH	30	151	336.2	LITTLE SANDY RIVER	KY			724													
255.0	STORES RUN	OH			337.4	COAL BRANCH	KY																
255.9	TEN MILE CREEK	WV			338.6	SMITH BRANCH	KY																
258.7	MILL CREEK	WV			338.9	GINAT RUN	OH																
260.6	KYGER CREEK	OH			340.8	FRANKLIN RUN	OH																
262.5	CAMPAIGN CREEK	OH			345.6	PINE CREEK	OH	48	185														
263.2	OLD TOWN CREEK	WV			349.2	LITTLE SCIOTO RIVER	OH	41	233														
264.2	GEORGES CREEK	OH			353.2	TYGARTS CREEK	KY		336														
265.5	KANAWHA RIVER	WV	97	12200	356.4	SCIOTO RIVER	OH	237	6,510														
267.3	TWO MILE CREEK	WV			361.5	TURKEY CREEK	OH																
276.0	GRAB CREEK	WV			363.2	NACE RUN	OH																
276.1	RACCOON CREEK	OH	109	684	368.4	KINNICONICK CREEK	KY		253														
277.4	BURRELS RUN	OH			373.4	UPPER TWIN CREEK	OH																
279.0	TEENS RUN	OH			373.6	LOWER TWIN CREEK	OH																
282.3	SIXTEENMILE CREEK	WV			378.4	SALT LICK CREEK	KY																
284.3	EIGHTEEN MILE CREEK	WV			388.0	OHIO BRUSH CREEK	OH	57	435														
287.4	LITTLE GUYANDOT RIVER	WV			389.4	SPRING RUN	OH																
296.7	TWO MILE CREEK	OH			391.0	LOWER SISTER CREEK	OH																
299.0	NINE MILE CREEK	WV			392.3	DONALDSON CREEK	OH																
303.9	PADDYS CREEK	OH			395.3	ISLAND CREEK	OH																
305.2	GUYANDOTTE RIVER	WV	66	1670	398.4	ISAACS CREEK	OH																
306.9	INDIAN GUYAN CREEK	OH			401.6	CROOKED CREEK	KY																
309.7	SYMMES CREEK	OH	70	356	402.3	ELK RUN	OH																
310.7	BUFFALO CREEK	OH			403.0	CABIN CREEK	KY																
314.0	TWELVEPOLE CREEK	WV		440	405.6	LITTLE THREE MILE CREEK	OH																
317.1	BIG SANDY RIVER	WV	27	4280	406.9	SLEEPY HOLLOW CREEK	KY																
317.4	CATLETTS CREEK	KY			409.0	FISH GUT CREEK	OH																
319.4	KEYES CREEK	KY			412.1	THREE MILE CREEK	OH																
320.1	SALLIDAY CREEK	OH			414.8	LAWRENCE CREEK	KY																
324.0	HOOD CREEK	KY			415.2	EAGLE CREEK	OH	31	154														
324.3	ICE CREEK	OH			417.1	RED OAK CREEK	OH																
328.1	STORMS CREEK	OH			419.1	LEES CREEK	KY																
331.1	POND RUN	KY			422.6	STRAIGHT CREEK	OH																
332.8	UHLANDS RUND	KY			423.6	WHITE OAK CREEK	OH	49	234														

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Enters Ohio River at Mile Point			Stream Length (Miles)		Drainage Area (Sq. Miles)		Enters Ohio River at Mile Point			Stream Length (Miles)		Drainage Area (Sq. Miles)	
Stream Name	State						Stream Name	State					
425.1 HOG RUN	OH						521.4 PAINT LICK CREEK	KY					
426.4 BRACKEN CREEK	KY						522.7 LITTLE SUGAR CREEK	KY					
428.6 BIG TURTLE CREEK	KY						522.9 BIG SUGAR CREEK	KY					
430.5 WRANGLING RUN	KY						527.2 BRYANT CREEK	IN					
431.6 BULL SKIN CREEK	OH						529.1 TURTLE CREEK	IN					
431.7 BYERS RUN	KY						530.3 DAN CREEK	IN					
432.5 LITTLE LOCUST CREEK	KY						530.3 CRAIGS CREEK	KY					
432.8 BIG LOCUST CREEK	KY						532.0 STEPHENS CREEK	KY					
433.2 PATTERSONS RUN	OH						535.7 PLUM CREEK	IN					
433.6 CROOKED CREEK	OH						545.8 KENTUCKY RIVER	KY	255		6970		
434.4 LITTLE SNAG CREEK	KY						546.4 GREEN VALLEY CREEK	IN					
435.7 BIG SNAG CREEK	KY						546.6 LITTLE KENTUCKY RIVER	KY	35		147		
443.8 LITTLE INDIAN CREEK	OH						549.6 LOCUST CREEK	KY					
445.3 BIG INDIAN CREEK	OH						550.5 INDIAN KENTUCK CREEK	IN			150		
451.5 TWELVEMILE CREEK	KY						553.2 BEE CAMP CREEK	IN					
455.1 TEN MILE CREEK	OH						555.5 EAGLE HOLLOW	IN					
455.3 NINE MILE CREEK	OH						556.4 MARILYN CREEK	IN					
456.5 EIGHT MILE CREEK	OH						559.5 CROOKED CREEK	IN					
463.3 LITTLE MIAMI RIVER	OH	90	1670				560.3 BIG CLIFTY CREEK	IN					
470.1 LICKING RIVER	KY	320	3670				563.6 CHAIN MILL CREEK	IN					
472.5 MILL CREEK	OH	28	166				569.5 SALUDA CREEK	IN					
484.2 MUDDY CREEK	OH						570.6 CORN CREEK	KY					
491.1 GREAT MIAMI RIVER	OH	161	5400				573.2 BAREBONE CREEK	KY					
494.8 TANNERS CREEK	IN		136				574.4 MIDDLE CREEK	KY					
498.7 LAUGHERY CREEK	IN	39	350				574.4 KNOB CREEK	IN					
499.8 WOOLPER CREEK	KY						578.4 CAMP CREEK	IN					
501.5 ISLAND BRANCH	IN						580.7 EIGHTEEN MILE CREEK	KY					
504.6 MIDDLE CREEK	KY						584.4 BULL CREEK	IN					
508.7 ARNOLD CREEK	IN						585.6 OWEN CREEK	IN					
509.9 GRANT CREEK	IN						592.8 POND CREEK	KY					
512.2 LICK CREEK	KY						595.9 HARRODS CREEK	KY					
513.6 GUNPOWDER CREEK	KY						596.9 GOOSE CREEK	KY					
514.7 LANDING CREEK	KY						602.2 SOUTH FORK BEARGRASS CREEK	KY					
517.0 BIG BONE CREEK	KY						606.5 SILVER CREEK	IN			225		

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Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
616.3	MILL CREEK CUTOFF	KY			706.3	SAMPLE RUN	IN		
617.5	KNOB CREEK	IN			707.4	ADAMS RUN	IN		
623.5	BRINLEY CREEK	IN			707.5	TOWN CREEK	KY		
624.4	EVERSOLE CREEK	IN			707.7	BULL CREEK	KY		
625.0	MILLS CREEK	KY			709.0	GOEHAGAN CREEK	KY		
629.2	FOURMILE CREEK	IN			710.6	SUCK CREEK	KY		
629.7	SALT RIVER	KY	125	2,890	710.8	CLOVER CREEK	KY		
633.3	ABRAHAM'S RUN	KY			712.4	FAUCETT CREEK	KY		
634.6	MOSQUITO CREEK	IN			714.6	POND RUN	IN		
636.3	OTTER CREEK	KY			716.3	SANDY BRANCH	IN		
641.2	BIG RUN	IN			717.4	MILLSTONE CREEK	IN		
642.2	DOE RUN	KY			718.9	DEER CREEK	IN		
645.9	FLIPPINS RUN	KY			720.2	BLUE WELLS HOLLOW	IN		
647.3	BUCK CREEK	IN			721.4	INDIAN CREEK	KY		
648.1	LICK RUN	IN			724.0	CASSELBURY CREEK	IN		
651.5	FRENCH CREEK	KY			724.1	LEAD CREEK	KY		
656.9	New Amsterdam City Trib	IN			729.8	WINDY CREEK	IN		
657.0	BIG INDIAN CREEK	IN		253	731.3	ANDERSON RIVER	IN		234
659.9	COLD FRIDAY HOLLOW	KY			731.7	MUDDY GUT CREEK	KY		
661.3	POTATO RUN	IN			733.1	CROOKED CREEK	IN		
662.8	BLUE RIVER	IN		435	736.6	YELLOW CREEK	KY		
672.3	CEDAR BRANCH	KY			740.8	BIG SLOUGH	KY		
678.6	LITTLE BLUE RIVER	IN			741.3	LITTLE SANDY CREEK	IN		
684.8	BOONE HOLLOW	KY			742.0	BLACKFORD CREEK	KY		124
686.3	WATSON RUN	KY			742.0	SANDY CREEK	IN		
686.5	SPRING CREEK	KY			744.2	HONEY CREEK	IN		
688.3	MILL CREEK	IN			746.8	HUFFMAN DITCH	IN		
692.5	KNOB CREEK	IN			750.5	PUP CREEK	KY		
698.6	LICK RUN	KY			752.0	YELLOW CREEK	KY		
700.8	SINKING CREEK	KY		154	757.7	PERSIMMONS DITCH	KY		
703.1	BEAR CREEK	IN			763.6	COWHIDE SLOUGH TRIB	KY		
703.9	FANNY CREEK	IN			765.2	COWHIDE SLOUGH			
704.3	BUCK CREEK	IN			769.4	FULKERSON DITCH	KY		
705.3	KINGLEY CREEK	IN			772.8	LITTLE PIGEON CREEK	IN		415

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Enters Ohio River at Mile Point	Stream Name	State	Stream Length (Miles)	Drainage Area (Sq. Miles)	Enters Ohio River at Mile Point	Stream Mile	State	Stream Length (Miles)	Drainage Area (Sq. Miles)
784.0	GREEN RIVER	KY	370	9,230	897.8	BIG GRAND PIERRE CREEK	IL		
787.2	WALKER SLOUGH				901.9	GIVENS CREEK	KY		
792.9	PIGEON CREEK			375	902.3	LUSK CREEK	IL		
796.8	BAYOU CREEK	IN			903.5	MC GILLIGAN CREEK	KY		
800.7	MOUND SLOUGH				910.1	BIG BAY CREEK	IL		
806.6	CANOE CREEK	KY			910.8	BARREN CREEK	IL		
813.2	LOGSDEN-STROOD BRANCH	IN			911.9	BAYOU CREEK	KY		
815.0	BAYOU CREEK	IN			913.7	PHELPS CREEK	KY		
827.7	CYPRESS SLOUGH				919.8	DYER HILL CREEK	KY		
827.8	MCFADDEN CREEK	IN			920.3	CUMBERLAND RIVER	KY	693	17920
832.4	SMITH CREEK	IN			923.2	DAVIS CREEK	KY		
833.6	BEAVERDAM CREEK	IN			926.0	GOODLOW SLOUGH	KY		
840.7	BAYOU DRAIN	IN			927.6	DRAKE BRANCH			
841.9	HIGHLAND CREEK	KY			932.5	TENNESSEE RIVER	KY	652	40910
843.0	LOST CREEK	KY			933.3	ISLAND CREEK	KY		
846.9	SIBLEY CREEK	KY			935.8	BALLARD LAKE	IL		
847.8	WABASH RIVER	IL	474	33100	939.4	PERKINS CREEK	KY		
850.7	RUNNING SLOUGH	IL			940.4	SEVENMILE CREEK	IL		
867.2	SALINE RIVER	IL	27	1170	941.9	MASSAC CREEK	IL		
868.2	CANE CREEK	IL			942.7	MASSAC CREEK	KY		
868.7	DENNIS O'NAN DITCH	KY			947.5	BAYOU CREEK	KY		
873.4	TRADEWATER RIVER	KY	110	1000	947.5	ROCKY BRANCH	IL		
875.9	CAMP CREEK	KY			951.0	BAYOU CREEK			
877.0	CORNSTALK CREEK	KY			953.0	NEWTONS CREEK	IL		
877.6	HANEY CREEK	IL			953.3	BEAN BRANCH	KY		
877.7	ANTHONY CREEK	IL			956.2	REDSTONE CREEK	KY		
886.1	HURRICANE CREEK	KY			957.7	POST CREEK CUTOFF	IL		
886.4	PETERS CREEK	IL			962.9	GAR CREEK	KY		
887.3	FRANKLIN BRANCH				967.6	HUMPHREY'S CREEK	KY		
887.6	HOSICK CREEK	IL			968.9	HODGES BAYOU	IL		
889.5	BIG CREEK	IL			971.9	HESS BAYOU	IL		
892.9	DEER CREEK	KY			973.3	CACHE ISLAND	KY		
893.5	BUCK CREEK	KY			974.7	CACHE RIVER	IL		720
895.8	THREEMILE CREEK	IL			977.7	CROOKED CREEK			

Ohio River Flows

Ohio River Mile 84.2 Wheeling, WV					Ohio River Mile 531.5 Markland L&D					Ohio River Mile 918.5 Smithland L&D				
Month and Year	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average		
January 2012	165700	36500	80267	134%	351600	93100	80267	131%	504800	173700	80267	134%		
February 2012	89200	26900	45573	78%	316100	83300	45573	86%	539800	152800	45573	78%		
March 2012	157700	33500	65045	93%	361700	136300	65045	101%	466700	198400	65045	93%		
April 2012	38200	12100	22183	35%	193600	41100	22183	45%	214500	71300	22183	35%		
May 2012	118100	12100	38577	82%	274600	42800	38577	97%	308600	69300	38577	82%		
June 2012	23600	6700	12357	41%	69700	18100	12357	37%	87500	25600	12357	41%		
July 2012	31500	6000	11643	51%	99900	16100	11643	48%	110400	23000	11643	51%		
August 2012	15700	6100	9803	57%	54700	14200	9803	60%	102400	19400	9803	57%		
September 2012	16900	5600	9320	51%	61900	12800	9320	63%	64000	21600	9320	51%		
October 2012	142900	6800	15281	79%	116000	19200	15281	64%	81900	28200	15281	79%		
November 2012	104400	12400	38141	118%	217100	33500	38141	106%	212300	46600	38141	118%		
December 2012	124400	10700	63194	119%	262800	30200	63194	113%	299100	40200	63194	119%		
January 2013	109300	23600	53990	90%	332400	71000	53990	98%	517900	113400	53990	90%		
February 2013	166200	25100	62150	107%	377100	82700	62150	101%	484000	153000	62150	107%		
March 2013	80200	32200	49935	71%	290800	120400	49935	89%	468400	193700	49935	71%		
April 2013	116600	29100	55393	87%	246600	82400	55393	84%	430900	134800	55393	87%		
May 2013	48200	15200	24594	52%	177600	47100	24594	69%	373400	98800	24594	52%		
June 2013	79000	13300	32103	107%	190600	45300	32103	93%	254000	93800	32103	107%		
July 2013	127800	17000	42090	186%	273700	77400	42090	219%	390100	110100	42090	186%		
August 2013	77200	10500	25129	145%	122100	36800	25129	141%	151800	46500	25129	145%		
September 2013	44900	9600	16519	91%	107100	26000	16519	95%	132200	24400	16519	91%		
October 2013	20300	8700	14220	73%	93800	25200	14220	83%	217000	36800	14220	73%		
November 2013	64300	17000	31776	98%	153000	43000	31776	92%	220100	52600	31776	98%		
December 2013	174800	35600	75034	141%	385600	81900	75034	164%	562300	103800	75034	141%		
January 2014	110800	16600	55878	94%	275200	63200	55878	101%	552800	110300	55878	94%		
February 2014	132100	17900	51523	88%	390700	66400	51523	114%	487200	87100	51523	88%		
March 2014	100500	25000	50125	71%	213900	72400	50125	69%	515000	147300	50125	71%		
April 2014	111100	28600	60528	95%	341900	71000	60528	103%	619900	118500	60528	95%		
May 2014	155400	39300	74591	158%	299000	92000	74591	124%	421800	157200	74591	158%		
June 2014	105200	20900	47255	157%	157600	55400	47255	108%	184600	109200	47255	157%		
July 2014	48600	14100	25842	114%	97500	30600	25842	74%	189800	47400	25842	114%		
August 2014	50600	15100	27984	161%	112000	29200	27984	118%	143700	43800	27984	161%		
September 2014	22800	9300	13807	76%	59000	17600	13807	78%	96800	38600	13807	76%		
October 2014	34200	9400	18929	98%	116500	18300	18929	103%	194500	32200	18929	98%		
November 2014	110800	16600	31177	97%	267600	40900	31177	99%	382300	64600	31177	97%		
December 2014	109100	26800	45606	86%	248600	59400	45606	83%	355600	108600	45606	86%		

Ohio River Flows

Ohio River Mile 84.2 Wheeling, WV				Ohio River Mile 531.5 Markland L&D				Ohio River Mile 918.5 Smithland L&D				
Month and Year	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average	Maximum	Minimum	Average	% long-term Average
January 2015	73600	23800	37306	63%	184700	64300	37306	65%	275800	104400	37306	63%
February 2015	58600	18200	31933	55%	157700	47500	31933	56%	215000	67800	31933	55%
March 2015	190800	17000	99613	142%	553400	61000	99613	162%	821900	134400	99613	142%
April 2015	194400	39600	81188	127%	428900	121000	81188	157%	631900	251300	81188	127%
May 2015	40300	13300	22639	48%	132900	38800	22639	44%	322400	68100	22639	48%
June 2015	127900	18400	59358	198%	227200	36000	59358	124%	376700	71700	59358	198%
July 2015	110000	11700	53081	234%	351900	55700	53081	272%	514600	174500	53081	234%
August 2015	12700	7200	9291	54%	62100	18100	9291	76%	170200	25400	9291	54%
September 2015	47100	6700	9473	52%	39900	13900	9473	52%	54600	28000	9473	52%
October 2015	59000	9500	17845	92%	96200	21600	17845	88%	123000	32000	17845	92%
November 2015	44400	14100	25732	80%	108200	41900	25732	77%	183600	72100	25732	80%
December 2015	149600	19100	47790	90%	437000	49300	47790	110%	548700	83300	47790	90%
January 2016	105500	22300	42745	72%	335700	59200	42745	78%	668700	130900	42745	72%
February 2016	139100	24400	72503	125%	350900	70800	72503	128%	474300	132800	72503	125%
March 2016	97600	24000	53480	76%	280200	93900	53480	88%	503600	189000	53480	76%
April 2016	114300	24700	43126	68%	205100	71700	43126	65%	298200	143100	43126	68%
May 2016	78000	23900	48245	102%	241100	76400	48245	108%	364400	162900	48245	102%
June 2016	39500	11600	21394	71%	233500	32100	21394	90%	250500	62100	21394	71%
July 2016	24200	7600	12087	53%	93200	21400	12087	72%	208100	65300	12087	53%
August 2016	26800	6500	12683	73%	87700	21100	12683	98%	178300	50300	12683	73%
September 2016	22600	6100	10017	55%	41300	12600	10017	55%	81400	35100	10017	55%
October 2016	83200	7700	24637	127%	123000	16700	24637	92%	161500	31500	24637	127%
November 2016	32000	14600	21267	66%	52500	16900	21267	46%	88700	36800	21267	66%
December 2016	166500	23400	61406	115%	252700	40400	61406	88%	285100	78900	61406	115%

APPENDIX B

Bimonthly and Clean Metal Sampling Results

2012-2016

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016																				
Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl- (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std.U)	SpCond (umhos/cm)
New Cumberland	Ohio	54.4	09-Jan-12			24.9		92.8	0.11	0.79	7.1	73	168	0.19	1.9	0.022		6.6	7.03	286
New Cumberland	Ohio	54.4	08-Mar-12			22.4		79.4		0.72	17.7	56.5	152	0.14	2	0.18	15	8.3	7.45	225
New Cumberland	Ohio	54.4	15-May-12			20.9		81		0.62		56.5	134		2.3	0.027				
New Cumberland	Ohio	54.4	23-Jul-12			50.4		135	0.051	1.1		110	248	0.3	2.7	0.045		30.3	7.14	463
New Cumberland	Ohio	54.4	19-Sep-12			47		135		1		100	594	0.12	2.6	0.038	6	22.4	7.03	457
New Cumberland	Ohio	54.4	20-Nov-12			20.5		84.6	0.056	0.71		59.2	131	0.12	2.5			9.5	6.98	264
New Cumberland	Ohio	54.4	09-Jan-13			44.7		107	0.12	0.82		75.6	185		2.1	0.016	8	3.3	7.06	371
New Cumberland	Ohio	54.4	20-Mar-13			42.9		96.2	0.77	0.77		55.2	176	0.44	2.3		13	5.1	6.7	339
New Cumberland	Ohio	54.4	14-May-13			29.8		104		0.63		102	197	0.29	1.9	0.024	8	18.8	6.31	357
New Cumberland	Ohio	54.4	15-Jul-13			22.4		94.5		0.78		62	180	0.48	3.7	0.026	8	27.1	7.27	303
New Cumberland	Ohio	54.4	11-Sep-13			25		100		0.87		50.7	170	0.27	2.8	0.044	5	28.5	7.3	317
New Cumberland	Ohio	54.4	14-Nov-13			25.9		97.1	0.57	0.57	33	55.4	157	0.39	3.1	0.14		13.9	7.35	294
New Cumberland	Ohio	54.4	13-Jan-14			55.6		97.9	0.05	0.78		52.7	265	0.5	2.5	0.033	28	4.8	7.24	380
New Cumberland	Ohio	54.4	31-Mar-14			36		97.8	0.041	0.83		72.5	170	0.35	1.8	0.042		8.2	7.14	325
New Cumberland	Ohio	54.4	14-May-14			32.2		109		0.6		57.8	220	0.29	1.9		12	21.4	7.37	352
New Cumberland	Ohio	54.4	29-Jul-14		0.088	33.3		122	0.04	0.826		67.2	232	0.847	3.86	0.046	7.67	23.8	7.91	330.6
New Cumberland	Ohio	54.4	23-Sep-14		0.102	33		117	0.07	0.888		73.4	228	0.524	3.06	0.051	5.14	25.3	7.98	327.6
New Cumberland	Ohio	54.4	19-Nov-14		0.091	25		100	0.07	0.782		63.5	208	0.369	2.82	0.04	2	9.1		293.6
New Cumberland	Ohio	54.4	13-Jan-15		0.059	26		86.7	0.06	0.942		45.5	120	0.601	2.56	0.04	10.3	2.5	9.03	
New Cumberland	Ohio	54.4	24-Mar-15		0.042	30		76.7	0.05	0.997		44	132	0.445	2.34	0.061	16	4.3	9.46	253.2
New Cumberland	Ohio	54.4	12-May-15		0.063	30		100		0.723		59.2	256	0.308	2.08	0.035	3.71	28.3	7.91	330.6
New Cumberland	Ohio	54.4	28-Jul-15		0.063	24		96		0.648		53.8	188	0.403	3.03	0.072	7.14	28.8	7.7	298.2
New Cumberland	Ohio	54.4	01-Sep-15		0.093	43.3		150		0.923		84.8	304	0.548	3.03	0.046	3.78	32.8	7.51	461
New Cumberland	Ohio	54.4	17-Nov-15		0.076	26		100		0.899		67	285	0.344	2.67	0.031	1.67	16.5	8.02	299.9
New Cumberland	Ohio	54.4	26-Jan-16		0.066	33.3	0.027	116	0.12	0.977		68	180	0.503	2.1	0.04	1.28	5.4	8.66	300.7
New Cumberland	Ohio	54.4	22-Mar-16		0.044	28.3		128	0.04	0.787		59.5	192	0.111	2.23	0.028	3.79			
New Cumberland	Ohio	54.4	10-May-16		0.092	16.1		83.5	0.04	0.538	0.01	55.6	116		2.29	0.0288	8.2			
New Cumberland	Ohio	54.4	06-Jul-16		0.13	39		115	0.041	0.966		77	248	0.587	3.1	0.0328	2.8			
New Cumberland	Ohio	54.4	07-Sep-16			27.8		106	0.106	0.861		49.8	199	0.422	3.05	0.0867	3.4			
New Cumberland	Ohio	54.4	21-Nov-16			23.7		93.8	0.11	0.74	7.8	61.8	172	0.19	1.8		12	4.6	7.06	291
Pike Island	Ohio	84.2	09-Jan-12			42.6		77.6		0.7	7.3	56	152	0.15	2	0.026	14	8.8	7.59	224
Pike Island	Ohio	84.2	08-Mar-12			70.4		77.6		0.63		64.5	123		2.3		6	28.3	7.15	483
Pike Island	Ohio	84.2	15-May-12			46.5		81.3		0.95		130	268	0.38	2.6	0.028		22.2	7.03	478
Pike Island	Ohio	84.2	23-Jul-12		14	48.7		140	0.052	1.2		102	277		2.6	0.042	6	8.8	7.07	284
Pike Island	Ohio	84.2	19-Sep-12		12.5	48.8		89.7	0.051	0.75		68	159		2.5		6	5.9	7.3	349
Pike Island	Ohio	84.2	20-Nov-12		22.1	20		110		0.78		79	199		2.1	0.024		4.9	6.75	294
Pike Island	Ohio	84.2	09-Jan-13		26.6	48.7		90.5		0.71		56.2	137	0.38	2		9	16.4	6.35	401
Pike Island	Ohio	84.2	20-Mar-13		68.8	31		121		0.82	40	117	234	0.22	1.8	0.028	9	27.9	7.27	304
Pike Island	Ohio	84.2	14-May-13		42.3	30.7		94.7		0.67		58.9	181	0.52	4.1	0.043		27	7.74	296
Pike Island	Ohio	84.2	15-Jul-13		40.7	24.2		121		0.8		53.3	167	0.35	2.7	0.019	6	9.5	7.28	361
Pike Island	Ohio	84.2	11-Sep-13		11.4	21		105	0.058	0.79	48	65.3	281	0.54	2.6	0.057	36	4.1	7.21	391
Pike Island	Ohio	84.2	14-Nov-13		25.3	32.4		121		0.7		64	188	0.35	3.2	0.25	6	9.5	7.28	361
Pike Island	Ohio	84.2	13-Jan-14		105.2	52.7		105		0.76		68.2	155	0.43	1.8		9	8.4	7.09	311
Pike Island	Ohio	84.2	31-Mar-14		62	31.2		91.9	0.051	0.7	0.011	60.2	224	0.26	1.8	0.012	10	21.4	7.5	347
Pike Island	Ohio	84.2	14-May-14		61.1	29		108		0.59		74.8	240	0.382	3.86	0.068	8.33	25.1	7.59	369
Pike Island	Ohio	84.2	29-Jul-14		32.5	31.7		130	0.04	0.816		94.6	252	0.506	3	0.044	8	24	7.75	385.3
Pike Island	Ohio	84.2	23-Sep-14		11.5	40		140	0.06	0.734		48	120	0.492	2.31	0.022	6.75	2.1	8.2	
Pike Island	Ohio	84.2	13-Jan-15		37.4	25		100	0.08	0.734		65.8	172	0.354	2.75	0.031	2.8	2.1		
Pike Island	Ohio	84.2	19-Nov-14		25.7	0.076		100	0.06	0.831		43.2	132	0.373	2.63	0.088	38.3			
Pike Island	Ohio	84.2	24-Mar-15		82.5	0.035	30	76	0.04	0.704		64.3	256	0.424	2.37	0.069	6	20.9	7.02	345.4
Pike Island	Ohio	84.2	12-May-15		19.9	0.067	31.7	112		0.66		56.2	188	0.516	2.87	0.032	4.25	28.8	7.79	310.7
Pike Island	Ohio	84.2	01-Sep-15		15.3	0.122	38.3	160		0.782		100	316	0.617	2.88	0.043	3.25	29.5	8.32	482
Pike Island	Ohio	84.2	17-Nov-15		30.7	0.073	27	104		0.818		54	170	0.408	2.86	0.048	2.29	13.2	8	298.9
Pike Island	Ohio	84.2	26-Jan-16		24.9	0.065	31.7	108	0.15	0.949		76.8	195	0.312	2.2	0.036	2.98	2.9		342.4
Pike Island	Ohio	84.2	22-Mar-16		39.3	0.051		124	0.04	0.741		66.8	165	0.322	2.1	0.028	3.62			
Pike Island	Ohio	84.2	10-May-16		48.7	16.4		85.5	0.059	0.525		58.9	131		2.32	0.0254	8			
Pike Island	Ohio	84.2	06-Jul-16		13.2	0.092	22.4	126	0.045	0.724		103	256	0.238	2.04	0.0211	4.8			
Pike Island	Ohio	84.2	07-Sep-16		6.9	0.12		124		0.806		80.7	259	0.724	3	0.0426	3.4			
Pike Island	Ohio	84.2	21-Nov-16		15.7	24.9		106	0.05	0.867		53.9	180	0.506	3.33	0.0987		6.8	7.06	284
Hannibal	Ohio	126.4	10-Jan-12		39.7	25.2		98.5	0.098	0.78	6.2	57.8	194	0.18	1.8	0.017	8	7.9	7.5	294
Hannibal	Ohio	126.4	12-Mar-12		61.7	33.4		98		0.75		68.5	198	0.19	2	0.051				
Hannibal	Ohio	126.4	16-May-12		45.6	19.7		84.5		0.63		69.2	135		2.2	0.034	10	21.1	7.31	268

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016

Bimonthly Steelame	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl ⁻ (mg/L)	CN (ug/L)	Hardness (mg/L)	NH ₃ -N (mg/L)	NO ₂ -NO ₃ -N (mg/L)	Phenols (ug/L)	SO ₄ (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std. U)	SpCond (umhos/cm)
Hannibal	Ohio	126.4	24-Jul-12			54.2		139	0.036	0.97		144	281	0.33	2.7	0.014				515
Hannibal	Ohio	126.4	27-Sep-12	9.3		59.8		150	0.045	1.1		120	306		2.6	0.028	7	29.6	7.42	526
Hannibal	Ohio	126.4	19-Nov-12	20.6		28.3		93.3	0.047	0.9		67	187		3					
Hannibal	Ohio	126.4	14-Jan-13	99.6		48.5		122	0.038	0.94		85.9	216	0.33	2.1	0.065	19	5.5	6.86	394
Hannibal	Ohio	126.4	19-Mar-13	62.5		32		107		0.67		70.6	207	0.41	1.9		5	5.9	6.71	340
Hannibal	Ohio	126.4	21-May-13	20.6		28.7		117		0.28	31		202	0.29	1.7		7	23	7.65	363
Hannibal	Ohio	126.4	18-Jul-13	25.1		25.5		101		0.81		63.4	187	0.42	3.9	0.028	9	27.6	7.16	325
Hannibal	Ohio	126.4	05-Sep-13	20.3		20.5		99		0.65		64.4	185	0.23	2.7	0.025		25.3	7.17	315
Hannibal	Ohio	126.4	11-Nov-13	29		37.4		121		0.67		64.2	201	0.31	3.2	0.21		11	6.99	390
Hannibal	Ohio	126.4	20-Jan-14	56.6		29.4		82.6		0.69		52.9	154	0.29	2	0.031	13	2.5	7.18	287
Hannibal	Ohio	126.4	10-Mar-14	25.6		39.3		105	0.12	1		60	200	0.46	1.9	0.025	7	5.6	6.9	367
Hannibal	Ohio	126.4	19-May-14	132.8		18.7		84.5		0.53		44.6	164	0.48	2.7	0.048	72	18	7.33	269
Hannibal	Ohio	126.4	21-Jul-14	24.8	0.077	46.2		122	0.07	0.805		70.7	236	0.538	2.81	0.034	5.33	27.1	8.04	253.3
Hannibal	Ohio	126.4	24-Sep-14	10.5	0.108	26.2		130	0.05	0.919		88.2	296	0.526	3.04	0.066	4.29	21.2	7.53	358
Hannibal	Ohio	126.4	19-Nov-14	26.4	0.099	35		104	0.06	0.771		69.8	240	0.385	2.72	0.062	2.6		8.21	393.8
Hannibal	Ohio	126.4	13-Jan-15	39.1	0.055	30		93.3	0.05	0.842		48	152	0.477	2.27	0.034	10	1.4	7.77	
Hannibal	Ohio	126.4	24-Mar-15	83.2	0.034	28		84	0.05	0.927		45	132	0.419	2.36	0.106	30.4	5.5	8.96	253.3
Hannibal	Ohio	126.4	12-May-15	20.1	0.054	30		112		0.641		72.2	272	0.327	2.09	0.036	6	20.5	8.04	353.7
Hannibal	Ohio	126.4	28-Jul-15	15.4	0.057	28		102		0.679		60.6	232	0.434	3.03	0.041	3.33	28.7	8	319
Hannibal	Ohio	126.4	01-Sep-15	8.6	0.08	55		152		0.743		92.5	336	0.544	3.22	0.03	3.33	28.7	8.28	503
Hannibal	Ohio	126.4	17-Nov-15	31	0.08	28.3		104		0.753		63	180	0.479	3.02	0.029	3.47	12.6	8.08	321.6
Hannibal	Ohio	126.4	27-Jan-16	30.6	0.06	35		104	0.08	0.891		61.5	205	0.479	2.2	0.04	5.96	2.3	8.38	344.4
Hannibal	Ohio	126.4	22-Mar-16	40	0.046	28.3		136	0.03	0.709		76.2	224	0.548	2.08	0.032				
Hannibal	Ohio	126.4	10-May-16	49.4		20.1		98.2	0.032	0.584		67.1	144		2.09	0.0347	7.2			
Hannibal	Ohio	126.4	06-Jul-16	13.3	0.079	36.6		120		0.919		79	258	0.249	2.2	0.0229	4.4			
Hannibal	Ohio	126.4	07-Sep-16	7	0.11	46.8		116	0.07	0.761		79	272	0.361	2.6	0.0294	6			
Hannibal	Ohio	126.4	21-Nov-16	15.8		35.3		105	0.045	0.907		54.3	208	0.405	3.15	0.0338	4.2	4.9	7.07	282
Willow Island	Ohio	161.8	10-Jan-12	41		24.8		96.3	0.097	0.75		51.5	191	0.18	1.9	0.013	14	7.7	7.43	250
Willow Island	Ohio	161.8	12-May-12	64.5		21.2		82.6		0.62		73.8	143		2.2	0.029	9	20.6	7.33	267
Willow Island	Ohio	161.8	24-Jul-12	46.8		52		134		0.87		136	269	0.2	2.5	0.01	6	29.3	7.03	483
Willow Island	Ohio	161.8	27-Sep-12	9.5		54.8		141	0.074	1.1		116	288		2.8	0.014	5	22.5	6.94	500
Willow Island	Ohio	161.8	19-Nov-12	20.9		23.2		89.7	0.036	0.92		59.5	176	0.12	3.6		5			
Willow Island	Ohio	161.8	14-Jan-13	101.6		52.4		118		0.86		84.5	198		2	0.063	20	4.8	6.8	380
Willow Island	Ohio	161.8	19-Mar-13	71		35.8		109		0.65		70.7	209	0.45	1.8		6	6.2	6.72	355
Willow Island	Ohio	161.8	21-May-13	21		30.7		120		0.61		96.6	207	0.24	1.9		5	21.8	7.82	380
Willow Island	Ohio	161.8	18-Jul-13	26.4		25.1		105		0.91		58.6	198	0.41	3.9	0.028		27.2	7.15	333
Willow Island	Ohio	161.8	05-Sep-13	20.6		29.9		111		0.76	30	69	211	0.23	2.4	0.025	6	24.6	7.14	364
Willow Island	Ohio	161.8	11-Nov-13	29.2		38.5		127		0.74		68	238	0.37	3	0.29	8	11.1	6.98	410
Willow Island	Ohio	161.8	20-Jan-14	58.5		32.3		84		0.67	0.02	53.7	151	0.3	2.1	0.027	15	2.5	7.17	298
Willow Island	Ohio	161.8	10-Mar-14	28.5		40.2		99.5	0.1	0.98		55	179	0.3	2	0.019	9	5.3	7.04	352
Willow Island	Ohio	161.8	19-May-14	141.6		22.5		97.2		0.53		56.4	185	0.69	2.8	0.082	96	17.1	7.33	313
Willow Island	Ohio	161.8	21-Jul-14	25.2	0.074	52		116	0.06	0.848		68.8	232	0.595	2.8		7.27	26.2	7.61	350
Willow Island	Ohio	161.8	24-Sep-14	10.7	0.083	47.5		132		1.05		94.4	272	0.638	3.49	0.049	12.6	22	7.86	409.7
Willow Island	Ohio	161.8	20-Nov-14	24.4	0.087	35		104	0.05	0.813		70	244	0.39	2.95	0.044	5.41		7.79	
Willow Island	Ohio	161.8	14-Jan-15	50.5	0.054	36		90	0.04	0.815		46	100	0.269	2.16	0.066	5.14	0.2	8.74	246.2
Willow Island	Ohio	161.8	24-Mar-15	86.5	0.032	26		80	0.05	0.962		43	120	0.497	2.54	0.098	40.3	6.9	8.9	349.9
Willow Island	Ohio	161.8	13-May-15	20.3	0.053	28		116		0.644		65.2	276	0.343	2.16	0.03	4.86	17.4	8.9	349.9
Willow Island	Ohio	161.8	29-Jul-15	14	0.054	25		100		0.707		53.6	196	0.469	2.94		3	27.5	8.48	307.9
Willow Island	Ohio	161.8	02-Sep-15	8.2	0.06	46.6		133	0.03	0.695		88	320	0.534	3.2	0.035	5	26.4	8.68	465.7
Willow Island	Ohio	161.8	18-Nov-15	27.3	0.082	40		100		0.746		66.2	212	0.408	2.93	0.039	5.87	12.2	7.98	327.2
Willow Island	Ohio	161.8	27-Jan-16	36.4	0.057	30		104	0.08	0.896		58.8	190	0.546	2.2	0.034	1.49	0.4	5.98	
Willow Island	Ohio	161.8	22-Mar-16	41.6	0.044	30		132		0.667		70.2	188	1.39	2.15	0.038	4.84			
Willow Island	Ohio	161.8	10-May-16	51.2		21.2		96.9		0.568		71.2	150		2.1	0.0294	11.4			
Willow Island	Ohio	161.8	06-Jul-16	14.7	0.075	35.3		110	0.07	0.867		74.1	223	0.409	2.2	0.0241	6.2			
Willow Island	Ohio	161.8	07-Sep-16	9	0.15	39.7		130	0.033	0.678		93	266	0.108	2.5	0.0234	6.6			
Willow Island	Ohio	161.8	22-Nov-16	16.7		30.6		95.4	0.045	0.828		43.2	173	0.436	3.52	0.0327				
Belleville	Ohio	203.9	24-Jan-12	128.9		26.5		109	0.99	0.82	6.9	61.5	189	0.23	2.1	0.038	30	11.4	7.59	320
Belleville	Ohio	203.9	14-Mar-12	82.5		31.4		120		0.9	8.7	74	206	0.15	2.6	0.031	11	21.6	7.38	298
Belleville	Ohio	203.9	21-May-12	24.9		22.1		97.5		0.72		78.5	182	0.23	2.2	0.011	5			
Belleville	Ohio	203.9	18-Jul-12	12		60.4		145	0.049	0.8		127	300	0.32	2.5	0.036		30.2	7.05	518

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016

Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl ⁻ (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std.u)	SpCond (umhos/cm)
Bellevue	Ohio	203.9	17-Sep-12	8.1		58.4		145		0.78		106	326	0.2	2.8	0.014				
Bellevue	Ohio	203.9	13-Nov-12	42.3		23.8		103	0.051	1.1		56.8	183		4.3	0.034	6	10.6	6.98	309
Bellevue	Ohio	203.9	17-Jan-13	132.3		64.7		118		1.1		80.9	213	0.18	2.6	0.071	43	4.6	6.57	356
Bellevue	Ohio	203.9	27-Mar-13	74.8		38.3		110	0.76			57	210	0.33	2.4		10	5.4	6.58	252
Bellevue	Ohio	203.9	16-May-13	40.6		32.7		125	0.65		14	82.1	216	0.35	2.2			19.2	6.54	391
Bellevue	Ohio	203.9	24-Jul-13	66.1		23.5		140	0.81			72.1	231	0.29	4	0.042	23	25.8	7.62	367
Bellevue	Ohio	203.9	09-Sep-13	14.5		34.5		136	0.74		33	80.1	235	0.32	2.4			25.8	7.78	424
Bellevue	Ohio	203.9	18-Nov-13	45.6		37.2		125	0.035	0.75		65.2	227	0.32	3.2	0.035	5	11.3	7.46	410
Bellevue	Ohio	203.9	20-Mar-14	76.9		37.7		104		0.86		63.7	208	0.42	2.4	0.016	17	5.3	7.07	361
Bellevue	Ohio	203.9	27-May-14	70.2		21.6		104	0.13	0.67		44.3	160	0.38	2.6	0.029	16	21.8	6.72	303
Bellevue	Ohio	203.9	16-Jul-14	45.2	0.051	25		104	0.07	0.72		51.5	216	0.505	3.66	0.063	11.2	25.5		330
Bellevue	Ohio	203.9	24-Sep-14	12.8	0.084	44		158	0.07	0.805		94.8	304	0.576	3.62	0.045	3.14	22.7	7.96	424.8
Bellevue	Ohio	203.9	20-Nov-14	32.5	0.082	36.2		120	0.04	0.847		69.8	284	0.445	3.07	0.049	2			
Bellevue	Ohio	203.9	14-Jan-15	66.4	0.057	36		108	0.05	1.06		49.2	168	0.522	2.79	0.034	11	0.5	8.19	292.7
Bellevue	Ohio	203.9	25-Mar-15	100.7	0.032	30		107	0.04	1.17		51.2	200	0.561	2.77	0.125	33	7.4	8.81	382.4
Bellevue	Ohio	203.9	13-May-15	26.5	0.054	30		126		0.555		77	288	0.415	2.27	0.054	4.75	19.1	8.67	356
Bellevue	Ohio	203.9	29-Jul-15	22.6	0.051	26		124	0.785	0.759		59.8	252	0.477	3.25	0.031	2.25	28.8	7.91	
Bellevue	Ohio	203.9	02-Sep-15	10.5	0.064	46.6		150	0.558			87.2	328	0.627	2.97	0.034	3.5	27.2	8.48	481
Bellevue	Ohio	203.9	18-Nov-15	32.9	0.074	28.3		120		0.759		68.5	185	0.514	3.35	0.04	2.29	13.1	8.07	346.2
Bellevue	Ohio	203.9	27-Jan-16	50	0.054	36.7		120	0.1	1.09		64.8	210	0.293	2.5	0.041	1.06	1.5	8.12	
Bellevue	Ohio	203.9	23-Mar-16	51.1	0.037	26.7		148	0.05	1.01		64.5	216	0.508	2.57	0.043	5.47	9.9	7.67	361.3
Bellevue	Ohio	203.9	11-May-16	67.7		21.8		118	0.032	0.833		86.8	189		2.35	0.0367	14.4			
Bellevue	Ohio	203.9	07-Jul-16	33.5	0.07	34.6		123	0.134	1.01		65.4	249	0.624	2.78	0.0413	15.6			
Bellevue	Ohio	203.9	08-Sep-16	8.7	0.11	44.3		146	0.098	0.806		97.5	315	0.229	2.5	0.0418	10.6			
Bellevue	Ohio	203.9	22-Nov-16	19.8		37.8		111	0.04	0.962		62.2	198	0.476	3.51	0.0397	7.2			
R.C. Byrd	Ohio	279.2	14-Mar-12	113.4		15.4		69.6		0.67	6.2	42	120	0.28	1.6	0.06	29	10.8	7.57	237
R.C. Byrd	Ohio	279.2	21-May-12	41.3		14.7		89.2		0.75	6.9	57.5	152	0.1	1.9	0.026	18	23.8	7.36	231
R.C. Byrd	Ohio	279.2	18-Jul-12	17.2		34.9		128		0.47		100	222	0.4	2.2	0.034	13	30.4	7.11	413
R.C. Byrd	Ohio	279.2	17-Sep-12	12.1		45		141	0.51			104	276		2.6		13			
R.C. Byrd	Ohio	279.2	13-Nov-12	54.9		23.3		101	0.051	0.95		57.8	182		3.5	0.03	5	10.4	6.95	305
R.C. Byrd	Ohio	279.2	17-Jan-13	218.4		15		71.5		0.62		32.1	112	0.23	2	0.032	79	6	6.77	202
R.C. Byrd	Ohio	279.2	27-Mar-13	117.5		20.8		81.6		0.66		43.1	166	0.52	2	0.02	28	5.3	6.67	357
R.C. Byrd	Ohio	279.2	16-May-13	66.5		20		87.7		0.53		46.1	154	0.33	2	0.038	13	19.2	6.58	277
R.C. Byrd	Ohio	279.2	24-Jul-13	101.6		16.4		106		0.79		46.3	167	0.24	3.8	0.045	18	25.8	7.51	280
R.C. Byrd	Ohio	279.2	09-Sep-13	22.2		23.5		109		0.67		53.3	176	0.35	2.3	0.04	10	26.2	7.17	335
R.C. Byrd	Ohio	279.2	18-Nov-13	58		36		134		0.77	70	70.2	219	0.29	2.8	0.033	13	10.8	7.32	411
R.C. Byrd	Ohio	279.2	04-Feb-14	147.1		24.7		105	0.037	0.76		57.1	190	0.53	1.9	0.044	15	1	7.1	168
R.C. Byrd	Ohio	279.2	20-Mar-14	101.4		34		110	0.031			48.1	197	0.37	2.1	0.01	14	5.8	7.12	209
R.C. Byrd	Ohio	279.2	27-May-14	82.3		19.1		90.8		0.62		37.4	140	0.37	2.6	0.048	16	20.7	6.78	268
R.C. Byrd	Ohio	279.2	16-Jul-14	51.8	0.05	21		116	0.07	1.06		58.2	216	0.567	3.62	0.086	24.8	26		360
R.C. Byrd	Ohio	279.2	24-Sep-14	17.1	0.065	30		130		0.77		81.2	212	0.454	3.21	0.045	7.69	23.7	8.08	201.6
R.C. Byrd	Ohio	279.2	20-Nov-14	51.9	0.056	22.5		100	0.04	0.657		57.5	216	0.448	2.62	0.058	4.67	1.9	8.08	
R.C. Byrd	Ohio	279.2	14-Jan-15	90.3	0.045	26		90	0.05	0.899		37.5	136	0.477	2.6	0.084	19.7	11.4	8.76	238.1
R.C. Byrd	Ohio	279.2	25-Mar-15	134.4	0.023	20		86.7	0.03	0.923		68.5	252	0.543	2.15	0.123	11.2	19.4	8.65	326.9
R.C. Byrd	Ohio	279.2	13-May-15	37.2	0.042	22		117		0.519		72.5	276	0.531	2.84	0.035	5.25	29.2	7.89	303.9
R.C. Byrd	Ohio	279.2	29-Jul-15	30.2	0.042	20		108		0.752		64.2	208	0.431	3.06	0.045	7.64	14.5	7.97	311.9
R.C. Byrd	Ohio	279.2	02-Sep-15	13.5	0.048	30		137		0.348		72.5	276	0.531	2.84	0.035	5.25	30	8.45	383.2
R.C. Byrd	Ohio	279.2	18-Nov-15	43.8	0.064	25		108		0.743		64.2	208	0.431	3.06	0.045	7.64	14.5	7.97	311.9
R.C. Byrd	Ohio	279.2	27-Jan-16	66	0.042	21.7	0.013	108	0.08	0.945		55.5	165	0.349	2	0.059	5.96	4	8.03	302.6
R.C. Byrd	Ohio	279.2	23-Mar-16	78.4	0.033	23.3		120	0.04	0.884		62	180	0.438	2.34	0.103	28.5	10.8	7.54	297.1
R.C. Byrd	Ohio	279.2	11-May-16	96.3		13.4		80.2		0.558		56.8	137		2.2	0.042	21.6			
R.C. Byrd	Ohio	279.2	07-Jul-16	65.3	0.051	19.6		93.9	0.048	0.795		52.7	184	0.471	2.88	0.0483	68.4			
R.C. Byrd	Ohio	279.2	08-Sep-16	12.3	0.098	33.3		127		0.564		75.3	253	0.276	2.6	0.0468	9.6			
R.C. Byrd	Ohio	279.2	22-Nov-16	25.3		25.2		102	0.052	0.839		49.8	180	0.441	3.17	0.0378	1			
Greenup	Ohio	341	05-Jan-12	117.8		16.2		102	0.1	0.75	7	57	172	0.23	2	0.024	23	5.3	9.3	284.1
Greenup	Ohio	341	07-Mar-12	209.5		14.2		84.8		0.62	6.9	69.5	145	0.34	2	0.034	63	10.2	9.37	756.9
Greenup	Ohio	341	17-May-12	118.8		16.7		98.3	0.93			70	173	0.33	2.1	0.026	30			
Greenup	Ohio	341	09-Jul-12	16.5		34.4		127	0.07	0.5		120	245	0.42	2.2	0.015				
Greenup	Ohio	341	08-Sep-12	30.4		38		144	0.041	0.51		120	275		2.4		5			
Greenup	Ohio	341	28-Nov-12	91.5		25.3		119	0.034	0.94		74.2	218	0.14	3.4	0.059	33	11.2	6.95	177
Greenup	Ohio	341	07-Jan-13	69.1		73.6		103	0.83			78.5	266		2.1		6	5.9	5.39	102.2

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016																				
Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl- (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std U)	SpCond (umhos/cm)
Greenup	Ohio	341	30-May-13	40.2		20.3		113		0.57		66.9	173	0.7	1.9					
Greenup	Ohio	341	25-Jul-13	121.7		16.9		114		0.78		62.6	178	0.26	3.8		0.036	35		
Greenup	Ohio	341	05-Sep-13	35.2		25.2		127		0.68		82.1	241	0.22	2.4		0.063	10		
Greenup	Ohio	341	25-Nov-13	55.1		32.2		141		0.65		76.3	273	0.41	3		0.053	10	8.9	8.14
Greenup	Ohio	341	13-Jan-14	193.3		20.5		96.1		0.55		43.7	204	0.31	2.7		0.027	115		
Greenup	Ohio	341	19-Mar-14	123.6		36.8		132	0.058			71	221	0.39	2		0.023	16		
Greenup	Ohio	341	21-May-14	199.9		23.2		133		1			183	0.61	3		0.1	67	18.1	6.57
Greenup	Ohio	341	09-Jul-14	34.3	0.044	20		124		1.3		55.2	183	0.703	3.67		0.188	10	26.7	6.47
Greenup	Ohio	341	24-Sep-14	21.6	0.068	31		140	0.04	0.785		89.6	256	0.531	3.07		0.057	5.67		
Greenup	Ohio	341	04-Nov-14	44.8	0.095	33.3		133		0.869		91	256	0.409	3.54		0.047	12.2		
Greenup	Ohio	341	20-Jan-15	58.1	0.051	28		107	0.05	0.857		50.2	164	0.308	2.85		0.177	5.5	4.6	5.22
Greenup	Ohio	341	11-Mar-15	287	0.025	23.3		92	0.07	0.703		51.8	192	0.873	3.83		0.513	126	7.9	4.09
Greenup	Ohio	341	20-May-15	66	0.057	22		130		0.436		78.5	296	0.471	2.04		0.048	10.2	21.4	9.37
Greenup	Ohio	341	29-Jul-15	37.6	0.041	16		110		0.733		57	180	0.41	3.09		0.048	6.29	27.8	315.7
Greenup	Ohio	341	02-Sep-15	15	0.044	28.7		140		0.438		84.8	283	0.304	2.68		0.033	1.5	27.9	7.94
Greenup	Ohio	341	04-Nov-15	53	0.1	38		148		0.822		97.5	268	0.521	2.54		0.049	7	17.3	7.14
Greenup	Ohio	341	21-Jan-16	66.8	0.045	20		100	0.1	0.911		60.8	184	0.425	2.1		0.052	5.68	2	5.24
Greenup	Ohio	341	22-Mar-16	92.2	0.034	18.3		120	0.03	0.781		54.2	160	0.578	2.43		0.083	27.4		
Greenup	Ohio	341	18-May-16	98.3		14.8		108	0.035	0.568	0.019		149	0.187	2.23			12		
Greenup	Ohio	341	27-Jul-16	19.4	0.066	20.8		107	0.05	0.573		66.7	198	0.13	2.45		0.0247	30		
Greenup	Ohio	341	12-Sep-16	21.9	0.096	33		142		0.419		92.2	281	0.226	2.6		0.0232	14.2		
Greenup	Ohio	341	02-Nov-16	40.8		38.4		138	0.036	0.965		86.2	264	0.426		0.0547	12.8	6.1	9.86	213.6
Meidahl	Ohio	436.2	05-Jan-12	134.1		18		112		0.92	7.4	66.5	160	0.25	2.2		0.024	19		
Meidahl	Ohio	436.2	07-Mar-12	276.1		21.2		95		0.74	9.1	62.5	171	0.13	2.6		0.056	86	10.9	8.87
Meidahl	Ohio	436.2	17-May-12	144.1		17.4		114	0.12	0.87		82	199	0.28	2.4		0.033	21		
Meidahl	Ohio	436.2	09-Jul-12	18.9		32.6		127	0.12	0.38		102	238	0.38						
Meidahl	Ohio	436.2	24-Sep-12	33.6		50.5		170	0.04	0.53		138	326		2.8		0.028	5		
Meidahl	Ohio	436.2	08-Nov-12	101.2		33.1		129		1			76	224	3.2	0.042	26	11.3	7.25	299.6
Meidahl	Ohio	436.2	07-Jan-13	73.3		28.1		103		1.8		66.5	186		2.6		10	7.6	5.9	108.6
Meidahl	Ohio	436.2	27-Mar-13	146.9		22.5		111		0.8		55.5	177	0.15	2.4		32			
Meidahl	Ohio	436.2	30-May-13	45.6		20.4		114		0.53		64.8	186	0.65		0.022	5			
Meidahl	Ohio	436.2	25-Jul-13	128		19.5		120		1		54.1	182		3.6	0.059	18			
Meidahl	Ohio	436.2	05-Sep-13	42.3		25.7		127		0.65		74.7	237	0.29	3.5	0.042	20			
Meidahl	Ohio	436.2	25-Nov-13	57.9		35.7		161		0.88		83.2	279	0.57	3.8	0.087	33	9.8	8.42	429.7
Meidahl	Ohio	436.2	14-Jan-14	221.4		23.5		111		0.74		36.4	234	0.33	3	0.069	88	5	9.21	193.9
Meidahl	Ohio	436.2	19-Mar-14	129.5		34.1		136	0.066	0.87		62.3	237	0.49	2.3	0.04	49			
Meidahl	Ohio	436.2	21-May-14	238.9		24.3		144		0.92		45.8	198		3.2	0.11	72	18.4	6.43	275
Meidahl	Ohio	436.2	09-Jul-14	34.9	0.073	22.7		128		1.69		56.5	192	0.554	4.31	0.101	8	27.6	7.45	352.1
Meidahl	Ohio	436.2	24-Sep-14	21.8	0.102	25.6		131		0.804		77.8	268	0.644	3.36	0.087	7.67			
Meidahl	Ohio	436.2	04-Nov-14	49.2	0.13	38.3		144		1.03		91.2	244	0.527	3.84	0.058	10.8			
Meidahl	Ohio	436.2	20-Jan-15	61.4	0.064	30		110	0.05	1.13		54.2	180	0.495	2.89	0.083	6.86	4.5	6.7	345.1
Meidahl	Ohio	436.2	11-Mar-15	385.6	0.037	38		96	0.07	0.905			240	1.18	5.9	0.321	141			
Meidahl	Ohio	436.2	20-May-15	64.8	0.06	25		130		0.442		74.5	276	0.455	2.15	0.044	7	21.7	6.77	353.8
Meidahl	Ohio	436.2	29-Jul-15	43.6	0.055	15		122		0.81		49	173	0.441	3.52	0.054	8.17	28.3	8.3	330.4
Meidahl	Ohio	436.2	02-Sep-15	16.5	0.139	27.5		150		0.936		70.5	277	0.474	2.77		0.038	4	29	7.93
Meidahl	Ohio	436.2	04-Nov-15	54.4	0.133	41		160	0.07	1.09		102	288	0.749	2.71		0.082	21.7	17.9	7.58
Meidahl	Ohio	436.2	21-Jan-16	72.3	0.061	20		116		0.96			277	0.474	3		0.066	9.41	2.5	6.13
Meidahl	Ohio	436.2	22-Mar-16	104.1	0.035	20		136	0.04	0.812	0.017	54.3	184	0.241	2.57		0.095	17.3		
Meidahl	Ohio	436.2	18-May-16	111.4		15.9		107					165		3.06		23.2			
Meidahl	Ohio	436.2	27-Jul-16	30.5	0.088	20.6		109		0.61		59.7	200	0.161	2.96		0.03	23.2		
Meidahl	Ohio	436.2	12-Sep-16	22.9	0.16	29.6		130		0.572		77.4	239		2.6		0.0325	12.4		
Meidahl	Ohio	436.2	02-Nov-16	41.7		40.2		143	0.037	0.842		90.6	281	0.456		0.0654	16.8			
Markland	Ohio	531.5	25-Jan-12	269.4		26.1		118		1		49.2	214	0.44	2.6	0.13	64		8.8	8.81
Markland	Ohio	531.5	07-Mar-12	335.7		18.3		99.7		0.76	7.4	63.5	170	0.6	2.6	0.097	15	19.2	8.87	263.2
Markland	Ohio	531.5	17-May-12	154.7		17.9		116		0.94		71.5	180	0.28	3.2		0.058	27	19.2	8.87
Markland	Ohio	531.5	17-Jul-12	20.7		34.7		143		0.6		96	211	0.47	3		0.042	6	30.7	7.87
Markland	Ohio	531.5	20-Sep-12	28.2		44.5		173		0.68		116	301	0.22	2.7		0.024	23	24.4	8.17
Markland	Ohio	531.5	08-Nov-12	109.3		34.5		132		1		94.5	234	0.12	3.6	0.055	423.6	10.66	6.39	423.6
Markland	Ohio	531.5	10-Jan-13	71		35.6		119		0.96		65.5	191		2.3	0.018	9	5.2	7.86	200.8
Markland	Ohio	531.5	26-Mar-13	154.4		26.6		126		1		52	240	0.71	3.1	0.08	57	4.9	7.81	337
Markland	Ohio	531.5	09-May-13	128.5		17.7		120		0.77		49.5	198	0.39	4.1	0.09	10	16.4	8.03	299.5
Markland	Ohio	531.5	17-Jul-13	133		13.2		103		1.1		49.4	175	0.45	4	0.063	28	26	7.77	270.6

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016

Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl ⁻ (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std.u)	SpCond (umhos/cm)
Markland	Ohio	531.5	13-Nov-13	51.6		44.9		172		0.9		81	298	0.41	2.9	0.023	16	12.8	8.54	490.4
Markland	Ohio	531.5	14-Jan-14	246		29.1		124		0.97		50.4	171	0.56	2.9	0.12	68	2.9	8.5	339.4
Markland	Ohio	531.5	11-Mar-14	128.9		29.9		127	0.032	0.87		51.3	184	0.35	2	0.033	24	4.9	8.13	334.2
Markland	Ohio	531.5	28-May-14	99.3		22.3		119		1.1	0.0064	31.1	166	0.49	2.9	0.053	11	20.8	6.75	304.1
Markland	Ohio	531.5	08-Jul-14	45.5	0.058	25.3		132		1.48		57.5	184	0.68	4.13	0.11	19	26.1	7.04	345.7
Markland	Ohio	531.5	10-Sep-14	39.3	0.095	33.3		158		0.932		82.2	240	0.636	3.07	0.075	7.43	9	7.52	380.5
Markland	Ohio	531.5	24-Nov-14	96.3	0.092	30		140		0.822		89.8	240	0.467	2.47	0.143	4.4	2.4	7.65	348.1
Markland	Ohio	531.5	28-Jan-15	111.8	0.068	34		143	0.07	1.15		56	244	0.483	2.57	0.097	6.5	2.4	7.55	348.1
Markland	Ohio	531.5	24-Mar-15	111.8	0.035	28		117		1.15		27.8	184	0.483	2.57	0.148	57	10.5	4.98	216.7
Markland	Ohio	531.5	14-May-15	52.7	0.046	20		124		0.556		64.7	216	0.627	2.72	0.047	6.86	19.1	8.4	306.2
Markland	Ohio	531.5	28-Jul-15	56.7	0.046	16.2		134		1.02		43.1	172	0.558	4.09	0.074	6.33	26.1	7.82	314.7
Markland	Ohio	531.5	01-Sep-15	33	0.072	32		160		0.717		65.2	296	1.29	3.35	0.134	4.25	27.1	7.66	403.8
Markland	Ohio	531.5	05-Nov-15	55.7	0.106	36		160		0.828		97.5	272	0.508	2.77	0.048	8	5.8	7.64	297.8
Markland	Ohio	531.5	11-Jan-16	110.3	0.034	16.7		128	0.08	1.5		52.8	176	0.702	2.81	0.085	15.7			
Markland	Ohio	531.5	08-Mar-16	176.9	0.038	22		109	0.05	1.25		44.2	248	0.862	2.4	0.099	40.4			
Markland	Ohio	531.5	18-May-16	135.6		14		109		0.807		47.8	166		2.71		23			
Markland	Ohio	531.5	19-Jul-16	34.3	0.065	21.6		105		0.916		55.6	206	0.274	3.01	0.0454	10.8			
Markland	Ohio	531.5	20-Sep-16	28.7	0.09	29.4		151	0.036	0.827	0.018	70.8	259	0.216	3	0.0932	20.2			
Markland	Ohio	531.5	29-Nov-16	36.1		32.7		159	0.032	0.85		71.2	235	0.232	2.85	0.0576	10.4			
McAlpine	Ohio	606.8	25-Jan-12			22		122	1.7	0.84	6.6	43.2	227	0.11	2.8	0.24	139	42	11.38	461
McAlpine	Ohio	606.8	07-Mar-12			16.2		103		0.74	9	56.5	166	0.87	2.8	0.13	247	10.6	8.5	256.4
McAlpine	Ohio	606.8	17-May-12			17.3		122		0.93		69.5	174	0.37	3.5	0.079	45	19.6	8.22	317.6
McAlpine	Ohio	606.8	17-Jul-12			33.7		144	0.75	0.75		100	209	0.33	2.9	0.029	30.2	20.9	7.8	414.1
McAlpine	Ohio	606.8	20-Sep-12			44.9		165		0.82		110	289	0.15	2.7	0.032	5	23.1	8.05	492
McAlpine	Ohio	606.8	08-Nov-12			41		143		1.1		95.2	265		3.4	0.051	6	11.38	7.27	461
McAlpine	Ohio	606.8	10-Jan-13			23.6		123		0.94		65.8	197		2.4		177	4.5	8.05	177
McAlpine	Ohio	606.8	26-Mar-13			24.6		124		0.97		52.1	209	0.91	2.8	0.092	88	6.4	7.4	381.6
McAlpine	Ohio	606.8	09-May-13			17.6		137		0.95		57.3	210	0.4	3.1	0.096	16	17.2	7.85	337.4
McAlpine	Ohio	606.8	11-Sep-13			31.1		116		1.1		20.4	197	0.42	3.7	0.075	14	26.2	7.73	304.9
McAlpine	Ohio	606.8	17-Jul-13			15.4		137		0.9		72.7	258	0.38	2.7	0.042	7	27.2	7.56	398.9
McAlpine	Ohio	606.8	13-Nov-13			45.7		179		1.2		78.3	295	0.27	2.9	0.04	7	12.9	8.24	497.1
McAlpine	Ohio	606.8	14-Jan-14			30.8		142	0.03	0.97		43.4	162	0.58	3.1	0.18	110	3.4	8.55	345.3
McAlpine	Ohio	606.8	11-Mar-14			26.1		139		0.82		55.4	195	0.42	2.1	0.072	83	4.8	7.71	334.9
McAlpine	Ohio	606.8	28-May-14			20.9		140		1		43.5	197	0.55	2.8	0.091	38	21.8	7.05	328.3
McAlpine	Ohio	606.8	08-Jul-14		0.06	25.8		140		1.77		57.7	204	0.382	3.56	0.084	8	26.5	7.66	372.6
McAlpine	Ohio	606.8	10-Sep-14		0.083	27.1		150		1.04		75.6	272	0.691	3.31	0.113	6.86			
McAlpine	Ohio	606.8	24-Nov-14		0.081	32		140		0.842		92.2	244	0.479	2.52	0.094	7.6	10.1	6.68	381
McAlpine	Ohio	606.8	28-Jan-15		0.058	34		143	0.04	1.35		51.8	236	0.316	2.38	0.115	7.25	2.7	7.9	341.5
McAlpine	Ohio	606.8	24-Mar-15		0.031	26		120		0.567		43.8	180	0.519	3.64	0.191	94.5	8.7	6.22	302.2
McAlpine	Ohio	606.8	14-May-15		0.046	20		128		0.745		55.7	216	0.672	2.63	0.05	7.71	19.2	8.73	304.1
McAlpine	Ohio	606.8	28-Jul-15		0.042	13.8		132		1.04		36.7	160	0.488	4.02	0.087	6.33	26.6	7.75	294.9
McAlpine	Ohio	606.8	01-Sep-15		0.078	28.3		153		0.736		53.5	276	0.453	3.15	0.046	8.67	27.7	7.99	370.6
McAlpine	Ohio	606.8	05-Nov-15		0.122	30		144		0.745		90.8	244	0.575	2.74	0.059	7.43			
McAlpine	Ohio	606.8	11-Jan-16		0.03	16.7		128	0.06	1.49		51.8	136	0.647	2.97	0.099	24.4	5.8	7.78	291.5
McAlpine	Ohio	606.8	08-Mar-16		0.035	24		143	0.04	1.22		43.5	228	1.17	2	0.161	60.4			
McAlpine	Ohio	606.8	18-May-16			15		120		0.744	0.014	46.1	165	0.197	3.08		51			
McAlpine	Ohio	606.8	19-Jul-16		0.054	14.5		107	0.03	0.914		51.5	190	0.433	3.01	0.0432	5.6			
McAlpine	Ohio	606.8	20-Sep-16		0.11	31.6		147		0.921		70.4	257		2.7	0.0664	19.4			
McAlpine	Ohio	606.8	29-Nov-16			44.6		162	0.046	1.11		81.9	266	0.494	2.92	0.0637	9.2			
Cannelton	Ohio	720.7	09-Jan-12	134.1		16.4		132	0.11	0.86		47	177	0.13	2.3	0.054	26			
Cannelton	Ohio	720.7	14-Mar-12	243.5		17.4		110		0.84	6.8	64	180	0.37	2.5	0.092	75	10.3	8.04	281.8
Cannelton	Ohio	720.7	31-May-12	57.1		20.1		130		0.98		83.5	221		2.2	0.017	24.2	24.2	8.31	349.1
Cannelton	Ohio	720.7	10-Jul-12	21.4		27.5		128	0.14	0.71		79.5	201	0.41	2.8	0.031	380	29.5	8.25	380
Cannelton	Ohio	720.7	12-Sep-12	33.8		43.1		157		1		84	268		2.9	0.018	6	27.2	6.9	478.2
Cannelton	Ohio	720.7	14-Nov-12	67.9		35.8		145		1.1		102	252	0.14	3.6		10			
Cannelton	Ohio	720.7	29-Jan-13			19.5		109		1		54.8	164		2.7	0.059	13	4.2	6.91	278.8
Cannelton	Ohio	720.7	26-Mar-13	197.1		26.3		119		0.97		48.1	197	0.53	3.1	0.11	95	7.1	6.91	359.8
Cannelton	Ohio	720.7	07-May-13	172.1		19.3		137		1.1		58	186	0.38	2.9	0.071	28	16.3	8.27	338.7
Cannelton	Ohio	720.7	16-Jul-13	245.2		15.2		109		1.2		19.1	183	0.56	3.3	0.12	78	26.4	7.67	284.6
Cannelton	Ohio	720.7	24-Sep-13	54.5		30.9		141		0.95		77.7	234	0.47	3.1	0.05	11	24.3	8.58	401
Cannelton	Ohio	720.7	19-Nov-13	188.4	0.12	38.5		170	1.1	1.1		65.6	279	0.48	3.5	0.084	38	11	9.17	450
Cannelton	Ohio	720.7	20-Jan-14	230.9		28.8		123	0.94	0.94		58.6	179	0.54	2.6	0.072	68	5.8	8.19	494.8

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016

Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromine (mg/L)	Cl ⁻ (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std. u)	SpCond (umhos/cm)
Cannelton	Ohio	720.7	28-May-14	135.8		31.9		126		1.2		44.8	193	0.36	2.9	0.089	28	20.3	7.15	335
Cannelton	Ohio	720.7	23-Jul-14	43.7	0.061	30		155		1.37		61.7	256	0.649	3.55	0.071	5	26.4	7.06	812
Cannelton	Ohio	720.7	17-Sep-14	41.1	0.079	26.7		150	0.04	1.21		71	272	0.54	3.72	0.132	7.2	24.3	7.58	355.8
Cannelton	Ohio	720.7	18-Nov-14	44.9	0.093	32.5		152		0.977		89.2	300	0.444	2.62	0.071	4.4	9.9	8.56	383.4
Cannelton	Ohio	720.7	20-Jan-15	78.7	0.058	28		128	0.05	1.16		55	196	0.415	2.54	0.067	6.75	3	8.61	318.8
Cannelton	Ohio	720.7	25-Mar-15	295.3	0.027	26		120		1.19		39.2	208	0.674	3.28	0.243	120	8.5	6.39	306.6
Cannelton	Ohio	720.7	19-May-15	61.5	0.047	1.9		130	0.07	0.656		50	224	0.491	2.32	0.047	6	20.6	8.19	306.6
Cannelton	Ohio	720.7	07-Jul-15	202.7	0.034	16.7		173		1.33		49.5	256	0.747	4.2	0.257	105	23.7	7.41	334.2
Cannelton	Ohio	720.7	29-Sep-15	20.9	0.089	30		173		0.96		80	292	0.507	3.36	0.037	3.75			
Cannelton	Ohio	720.7	12-Nov-15	56.2	0.11	29		456		0.997		83.8	252	0.981	2.92	0.072	8.86	15.9	7.95	408.8
Cannelton	Ohio	720.7	05-Jan-16	238.7	0.027	15		124		1.39		49	230	1.53	3.7	0.218	136	7.7	8.46	279.8
Cannelton	Ohio	720.7	22-Mar-16	165.1	0.034	21.7		152		1.12		49.8	230	0.655	2.82	0.136	59.7	11	7.98	331.8
Cannelton	Ohio	720.7	10-May-16	206.7		14.1		112		0.78		56.8	162	0.283	3.01	0.0881	67.6			
Cannelton	Ohio	720.7	05-Jul-16	65.2		21.5		102	0.049	0.876	0.011	54.7	189	0.208	3.01	0.0569	12			
Cannelton	Ohio	720.7	13-Sep-16	32.3	0.09	25.5		159		0.842		35.4	243	0.321	3.13	0.0801	11.6			
Cannelton	Ohio	720.7	21-Nov-16	20.3		53.4		158		1.35		83.6	308	0.467	2.8	0.0583	7.8			
Cannelton	Ohio	776	05-Jan-12	264.1		16		121	0.16	1	7.1	47.2	196	0.32	2.8	0.081	76	9	7.9	312
Newburgh	Ohio	776	01-Mar-12	164.8		27.4		155		1	5.7	95	233	0.18	2	0.038	26	12	8.2	315
Newburgh	Ohio	776	03-May-12	193.3		28.3		152		0.73		98.5	237	0.24	1.9	0.07	42	31	8.2	410
Newburgh	Ohio	776	12-Jul-12	25.4		26.2		133		0.73		77	205	0.26	2.7	0.022	7			
Newburgh	Ohio	776	05-Sep-12	21.5		40		149	0.11	0.82		89	276	0.21	2.8	0.01	5			
Newburgh	Ohio	776	01-Nov-12	85		51.3		191		1.1		134	345		2.7	0.053	30	15	8.1	580
Newburgh	Ohio	776	29-Jan-13			19.8		146		1.1		57.1	166	1.14	2.7	0.088	19	5.6		288.1
Newburgh	Ohio	776	26-Mar-13	296.6		24.8		124		0.98		53.5	216	0.7	3.2	0.15	150	7.2	9.11	336.5
Newburgh	Ohio	776	07-May-13	199.5		17.1		126		1.2		64	205	0.51	3.5	0.11	57	17.1	7.67	317.9
Newburgh	Ohio	776	11-Jul-13	314.8		13.2		123		1.1		49.4	366	0.94	4.3	0.26	143			
Newburgh	Ohio	776	25-Sep-13	66.6		28.9		137	0.088	0.98		74.7	245	0.66	2.7	0.063	17	25.7	8.18	462.7
Newburgh	Ohio	776	19-Nov-13	194.5	0.11	40.3		175		1.1		71.6	274	0.59	4.2	0.21	103	11.9	8.41	386.6
Newburgh	Ohio	776	20-Jan-14	304.1		29.6		129		0.97		61.2	210	0.59	2.6	0.063	79	6.5	8.66	
Newburgh	Ohio	776	18-Mar-14	216.2		41.4		141	0.032	0.94		52	194	0.49	2.1	0.057	51			
Newburgh	Ohio	776	28-May-14	153.9		23.7		139		1.47		52.3	205	0.45	2.9	0.12	71	21.2	7.5	365.5
Newburgh	Ohio	776	23-Jul-14	45.9	0.057	26		152		1.3		63.7	272	0.585	3.65	0.075	6.29	26.9	7.34	893
Newburgh	Ohio	776	17-Sep-14	42.9	0.083	30		160		1.14		88.2	264	0.687	3.3	0.188	6	25.1	7.89	381.6
Newburgh	Ohio	776	18-Nov-14	51.2	0.082	33.7		148		1.13		84.2	300	0.369	2.9	0.061	2.75	9.8	8.13	376.9
Newburgh	Ohio	776	20-Jan-15	86.7	0.052	24		100	0.05	1.16		66	212	0.436	2.74	0.075	10.8	4.4	8.1	326.9
Newburgh	Ohio	776	25-Mar-15	428.4	0.024	25		113		1.11		37.5	180	0.732	3.83	0.203	95.5	9.5	6.84	292.4
Newburgh	Ohio	776	19-May-15	74.5	0.042	18		140		0.908		66.2	248	0.404	2.5	0.046	10.8	21.1	7.85	322.1
Newburgh	Ohio	776	07-Jul-15	279.2	0.034	17.5		167	0.03	1.5		62	260	0.935	4.3	0.32	204	24.6	7.61	355.6
Newburgh	Ohio	776	29-Sep-15	21.5	0.099	30		152		0.954		79.5	280	0.601	3.41	0.045	5			
Newburgh	Ohio	776	12-Nov-15	65.8	0.112	32		152		0.979		80	300	0.674	3.33	0.08	15.7	16	7.84	415.8
Newburgh	Ohio	776	05-Jan-16	377.8	0.025	11.7		120		1.3		52	252	1.3	4.1	0.214	115	7.6	7.93	277.1
Newburgh	Ohio	776	22-Mar-16	235.8	0.038	21.7		176		1.17		63.8	220	0.836	2.94	0.221	109	11.4	7.75	357.2
Newburgh	Ohio	776	10-May-16	233.7		12.8		119		0.916		77	211	0.408	3.17	0.162	138			
Newburgh	Ohio	776	05-Jul-16	81	0.053	19.4		118	0.05	1.28		74.9	203	0.354	2.81	0.0869	29.8			
Newburgh	Ohio	776	13-Sep-16	36.3	0.091	24		161		0.776		77.8	248	0.226	2.9	0.0689	9.6			
Newburgh	Ohio	776	21-Nov-16	24.3		53.4		165		1.19		83.1	314	0.49	2.95	0.0497				
J.T. Myers	Ohio	846	05-Jan-12	369.8		15.4		115	0.096	1	7.7	45	219	0.25	2.8	0.069	66	7	7.9	296
J.T. Myers	Ohio	846	01-Mar-12	192.9		25.6		144		1	5.8	85.5	219	0.21	1.9	0.056	23	10	8	255
J.T. Myers	Ohio	846	03-May-12	209.4		27.6		149		0.78		84.5	235	0.34	1.9	0.056	45			
J.T. Myers	Ohio	846	12-Jul-12	25.3		28.1		136	0.12	0.7		83	213	0.32	2.9	0.029		30	7.8	430
J.T. Myers	Ohio	846	05-Sep-12	27.4		40.2		146		0.58		89.5	258	0.17	2.7		5			
J.T. Myers	Ohio	846	01-Nov-12	71.4		46		190		1.1		120	305	0.12	2.6	0.049	31	10	8	550
J.T. Myers	Ohio	846	30-Jan-13	143.8		20.3		113		1.1		57.1	178	0.85	2.8	0.12	42	6.1		286.1
J.T. Myers	Ohio	846	27-Mar-13	346.4		26.1		121		0.95		62.7	243	0.85	3.4	0.17	156	7.6	5.85	330.2
J.T. Myers	Ohio	846	08-May-13	348.3		16.3		122		1.2		50.9	190	0.4	3.2	0.14	75	17.3	7.75	305.5
J.T. Myers	Ohio	846	23-Jul-13	140.4		16.4		130		1.2		52.2	189	0.24	3.4	0.063	24	27.82	7.62	320
J.T. Myers	Ohio	846	19-Sep-13			27.1		149	0.08	0.84		99.6	252	0.49	3.3	0.025	9			
J.T. Myers	Ohio	846	20-Nov-13	220.2	0.1	38.5		172		1		70.9	263	0.49	3.8	0.18	78	11.8	8.28	428.1
J.T. Myers	Ohio	846	21-Jan-14	371.8		25.8		123		0.97		50.1	172	0.6	2.8	0.042	11	3.6	8.18	272.6
J.T. Myers	Ohio	846	19-Mar-14	270.1		29.4		131	0.04	0.98		46.5	203	0.52	2.2	0.012	13	8.6		333.3
J.T. Myers	Ohio	846	29-May-14	193.2		22.9		132		1.1		49	213	0.59	2.8	0.11	77	21.2	7.67	339.2
J.T. Myers	Ohio	846	17-Jul-14	79.8	0.06	24.4		64	0.09	0.053		11.6	100	0.601	3.33	0.1	18.4	27.73	7.78	398

Appendix B: Ohio River Bimonthly Monitoring Data, January 2012 through December 2016																				
Bimonthly Schemaname	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl ⁻ (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/l)	TDS (mg/L)	TKN (mg/L)	TOC (mg/l)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std U)	SpCond (umhos/cm)
J.T. Myers	Ohio	846	19-Nov-14	65.3	0.088	30		136	0.05	1.06		72	268	0.416	2.69	0.076	4	8.9	8.22	366.2
J.T. Myers	Ohio	846	21-Jan-15	111.3	0.053	25.7		133	0.04	1.09		58.2	196	0.36	2.37	0.143	9	3.9	7.95	327.1
J.T. Myers	Ohio	846	26-Mar-15	565.8	0.024	23.3		107		1.13		44	256	0.879	4.12	0.175	59.5	9.2	7.25	285.8
J.T. Myers	Ohio	846	20-May-15	119	0.038	20		130		0.914		60	272	0.556	2.74	0.064	20.8	20.6	7.83	304.9
J.T. Myers	Ohio	846	07-Jul-15	431	0.034	17.1		165		1.58		49.8	272	0.743	5.52	0.222	147			
J.T. Myers	Ohio	846	14-Sep-15	37.1	0.059	22.5		170		0.772		54.5	207	0.757	2.43	0.05	6.75			
J.T. Myers	Ohio	846	09-Nov-15	98.5	0.105	32		196		0.982		92	268	0.602	2.61	0.079	10			
J.T. Myers	Ohio	846	06-Jan-16	607.6	0.023	12		116	0.04	1.28		43.5	210	0.922	3.9	0.176	96.8	7.4	7.67	261.9
J.T. Myers	Ohio	846	23-Mar-16	283	0.033	20		168				46.5	245	0.791	3.34	0.226	93.3	11.5	7.78	338.9
J.T. Myers	Ohio	846	11-May-16	295		13.1		115		0.775		60.9	206	0.506	3.35	0.221	196			
J.T. Myers	Ohio	846	05-Jul-16	99.2	0.057	22.4		126		0.869		70.4	243	0.695	2.26	0.0749	38.8			
J.T. Myers	Ohio	846	14-Sep-16	54.3	0.083	21.8		157	0.032	0.824		72.9	241	0.182	3	0.069	16.2			
J.T. Myers	Ohio	846	22-Nov-16	41.3		39.9		149		0.945		75.3	276	0.528	2.83	0.0373				
Smithland	Ohio	918.5	10-Jan-12	204.3		21		175	0.11	1.7		49	209	0.31	3	0.072	28	13.3	8.62	255.5
Smithland	Ohio	918.5	13-Mar-12	410.6		19.8		137		1.2	10.4	62.8	412	0.59	3.1	0.11	125	25.6	8.1	323.8
Smithland	Ohio	918.5	30-May-12	70.2		21.8		146	0.071	1.1		65.8	232		3	0.033	7	8.28	8.28	369.1
Smithland	Ohio	918.5	11-Jul-12	26.9		33.7		156	0.052	0.48		78	245	0.11	2.8	0.088		30.2	8.29	440.7
Smithland	Ohio	918.5	13-Sep-12	51.2		38.1		159		0.51		95	272	0.33	3.1	0.032		25.9444444	7.79	485
Smithland	Ohio	918.5	15-Nov-12	89.4		48.5		175		1.1		120	316	0.56	2.8	0.032	11			
Smithland	Ohio	918.5	30-Jan-13	156.7		20.2		136		1.7		61.1	220	0.24	3.9	0.12	61	5.2		319.9
Smithland	Ohio	918.5	27-Mar-13	437		25		139		1.5		46.4	274	0.69	4.2	0.21	96	7.3	5.33	348.5
Smithland	Ohio	918.5	08-May-13	335.1		17.9		157	0.15	2.6		49.4	222	1.1	4.5	0.15	46	16.7	7.81	363
Smithland	Ohio	918.5	23-Jul-13	124.9		17.9		148		1.4		56.1	213	0.33	3.4	0.067	12	28.24	6.27	360
Smithland	Ohio	918.5	19-Sep-13	208.8		32.4		170		0.61		86.5	275	0.5	3.5	0.019	6			
Smithland	Ohio	918.5	20-Nov-13	403.1		32.4		160		0.95		45.8	283	0.49	3.7	0.18	40	11.4	8.48	410.1
Smithland	Ohio	918.5	21-Jan-14	281		26.5		143		1.5		44.7	231	0.72	3	0.12	113	2.7	8.23	257.2
Smithland	Ohio	918.5	19-Mar-14	232		27.6		161		1.3		49.5	233	1.8	3	0.18	202	8.6	8.23	354
Smithland	Ohio	918.5	29-May-14	78	0.058	30.7		188	0.11	1.47		46	222	0.59	3.2	0.12	61	21.5	7.51	363.9
Smithland	Ohio	918.5	16-Sep-14	74.7	0.082	34		177	0.06	0.931		72.3	344	0.715	2.92	0.069	5.2	27.55	7.81	466
Smithland	Ohio	918.5	19-Nov-14	64.6	0.077	28.7		164		1.22		82.2	288	0.603	3.93	0.101	11.6		7.28	
Smithland	Ohio	918.5	21-Jan-15	116.6	0.054	26		172		1.62		78.5	226	0.39	2.82	0.052	1.4	8.5	8.01	399.9
Smithland	Ohio	918.5	26-Mar-15	695.3	0.023	21.7		110		1.33		57.5	228	0.34	2.94	0.099	8	3.2	8.02	369.5
Smithland	Ohio	918.5	20-May-15	122.3	0.058	18		163	0.03	1.73		30.5	268	1.01	5.35	0.187	52	10		288.6
Smithland	Ohio	918.5	07-Jul-15	439.7	0.034	17.1		152		1.79		50.7	290	0.701	3.98	0.101	15.1	20.8	7.73	337.6
Smithland	Ohio	918.5	14-Sep-15	37.3	0.067	25		203		0.497		41	268	0.787	5.82	0.244	110	25.4		344.5
Smithland	Ohio	918.5	09-Nov-15	110.8	0.093	35		248		1.05		58.2	280	0.58	3.57	0.074	9			
Smithland	Ohio	918.5	06-Jan-16	668.7	0.016	10		108	0.04	1.39		91.8	268	0.753	3.01	0.081	7	5.6	7.98	229.9
Smithland	Ohio	918.5	23-Mar-16	379.1	0.03	18.3		192	0.03	2.01		52.5	260	1.12	4.03	0.315	180	11.7	7.77	368
Smithland	Ohio	918.5	11-May-16	323.9		17.4		150		1.69	0.014	58.4	221	0.436	3.69	0.164	107			
Smithland	Ohio	918.5	06-Jul-16	134.3	0.067	19.4		134	0.056	1.49		71.2	239	0.913	3.16	0.0866	22.6			
Smithland	Ohio	918.5	14-Sep-16	55.1	0.075	22.2		168	0.082	0.66		58.4	274	0.393	3.5	0.128	27.4			
Smithland	Ohio	918.5	22-Nov-16	38.1		44.2		178	0.063	0.884		72.4	290	0.462	2.88	0.0468	5.4			
Smithland	Ohio	938.9	10-Jan-12	20.7		20.7		159		1.5	5.3	37.2	223	0.29	3.5	0.11	67		8.55	230.4
Smithland	Ohio	938.9	13-Mar-12	20.1		20.1		131		1.1	7.8	67.2	204	0.64	3	0.097	118	11.2	7.79	315.8
Smithland	Ohio	938.9	30-May-12	19.4		19.4		128		0.86		53	198	0.24	2.8	0.031	7	26.1	8.66	328.9
Smithland	Ohio	938.9	11-Jul-12	19.1		19.1		98.3		0.23		45	139	0.16	2.4	0.051	8	29.6	8.51	301.2
Smithland	Ohio	938.9	12-Sep-12	38.3		38.3		154		0.57		89.5	260		3	0.038	8	27.1666667	7.77	475.4
Smithland	Ohio	938.9	15-Nov-12	45.7		45.7		178		1.2		110	336		2.9	0.012	19			
Smithland	Ohio	938.9	30-Jan-13	17.1		17.1		126		1.5		68.6	154		4.7	0.46	199	5.9		290.7
Smithland	Ohio	938.9	27-Mar-13	23.7		23.7		125		1.4		41	240	0.53	4.7	0.18	103	5.2	5.04	319.2
Smithland	Ohio	938.9	08-May-13	16.9		16.9		154		2.5	24	47.5	224	1.1	4.3	0.14	62	18.4	8.24	386.7
Smithland	Ohio	938.9	23-Jul-13	16.7		16.7		137		1.2		46.6	194	0.63	3.9	0.14	50	28.7	7.62	325.8
Smithland	Ohio	938.9	24-Sep-13	31.5		31.5		169		0.6		93.5	298	0.68	3.1	0.044	14			
Smithland	Ohio	938.9	20-Nov-13	32.1		32.1		161		0.93		52.9	268	0.59	3.8	0.21	96	10.1	8.69	414.8
Smithland	Ohio	938.9	21-Jan-14	36.4		36.4		144		1.4		43.9	222	0.68	3.2	0.17	133	3	8.69	181.4
Smithland	Ohio	938.9	19-Mar-14	27.1		27.1		153	0.062	1.3		47.2	248	0.62	3.2	0.1	87	7.5		362
Smithland	Ohio	938.9	29-May-14	21.7		21.7		152		1.9		43.9	231	0.68	2.9	0.15	107	21.6	7.62	334.3
Smithland	Ohio	938.9	17-Jul-14	30	0.061	30		184	0.12	1.66		70.5	320	0.599	2.91	0.101	11.2	27.1	7.98	463
Smithland	Ohio	938.9	17-Sep-14	28.7	0.07	28.7		154	0.04	0.795		69	256	0.684	3.58	0.193	11.7	23.8	7.72	360.4
Smithland	Ohio	938.9	19-Nov-14	164	0.076	27.5		164		1.13		77.5	252	0.503	2.79	0.071	8.6	8.1	8.2	388.6
Smithland	Ohio	938.9	21-Jan-15	22	0.055	22		164	0.04	1.5		58.2	224	0.545	3.08	0.206	21.3	3.2	8.09	363

Appendix B. Ohio River Bimonthly Monitoring Data, January 2012 through December 2016

Bimonthly SiteName	River	Confluence Mile Point	Date	Flow	Bromide (mg/L)	Cl- (mg/L)	CN (ug/L)	Hardness (mg/L)	NH3-N (mg/L)	NO2-NO3-N (mg/L)	Phenols (ug/L)	SO4 (mg/L)	TDS (mg/L)	TKN (mg/L)	TOC (mg/L)	TP (mg/L)	TSS (mg/L)	Temp (Deg C)	pH (std U)	SpCond (umhos/cm)
L&D 52	Ohio	938.9	20-May-15		0.043	18		157	0.03	1.59		46.8	316	0.628	3.88	0.102	33.7	20.7	7.94	343.3
L&D 52	Ohio	938.9	07-Jul-15		0.034	16		140		1.63		39.8	228	0.611	4.3	0.164	32	25.7	7.58	328
L&D 52	Ohio	938.9	29-Sep-15		0.044	16.7		120		0.329		38.5	204	0.606	3.13	0.057	12.6			
L&D 52	Ohio	938.9	09-Nov-15		0.092	35		188		1.04		92.2	280	0.757	3.16	0.086	16.3			
L&D 52	Ohio	938.9	05-Jan-16		0.023	10		100		0.848		32.5	190	0.868	5.2	0.151	7.66			
L&D 52	Ohio	938.9	23-Mar-16		0.029	18.3		180		1.93		43.2	245	0.901	3.97	0.219	87.9	11.8	7.95	311.2
L&D 52	Ohio	938.9	11-May-16			17.2		155	0.035	1.72		76.1	225	0.495	3.51	0.155	86.5			
L&D 52	Ohio	938.9	06-Jul-16		0.061	19.3		131	0.039	1.63		51	226	0.881	3.04	0.105	46.4			
L&D 52	Ohio	938.9	14-Sep-16		0.062	19.3		147	0.04	0.428		44	227	0.363	2.7	0.0793	13.8			
L&D 52	Ohio	938.9	22-Nov-16			34.3		152	0.034	0.654		48.2	297	0.41	2.57	0.0444				

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016																							
Sample Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)
New Cumberland	54.4	9-Jan-12	<0.1	210	0.7	35.24		25.84	<0.1	0.96	1.51	469.54	<1.5		7.21	112	4.05	0.29	<0.5	<0.5		<0.1	6.45
New Cumberland	54.4	8-Mar-12	<0.1	592	0.77	36.9		21.2	<0.1	0.97	2.02	1090	4.29		5.87	117	3.54	0.99	<0.5	<0.5		<0.1	10.58
New Cumberland	54.4	15-May-12	<0.1	399	0.56	37.16		21.5	<0.1	1.37	3.77	553.4	2.1		6.17	62.4	2.86	0.73	<0.5	<0.5		<0.1	6.7
New Cumberland	54.4	23-Jul-12	<0.1	150.75	0.95	50.83		34.67	<0.1	<0.1	6.24	235.68	<1.5		10.61	57.63	2.75	0.53	<0.5	1.05		<0.1	5.87
New Cumberland	54.4	19-Sep-12	<0.1	123.09	0.82	50.41		35.09	<0.1	0.42	2.49	218.47	<1.5		10	45.38	2.42	0.5	<0.5	1.35		<0.1	5.07
New Cumberland	54.4	20-Nov-12	<0.1	107.24	0.49	34.41		23.93	<0.1	0.29	2.57	264.1	<1.5		6.02	77.25	3.06	0.32	<0.5	0.57		<0.1	5.29
New Cumberland	54.4	9-Jan-13	<0.1	164	0.81	36.38		29.56	<0.1	0.56	2.4	380.98	<1.5		7.78	110	3.77	0.37	<0.5	0.58		<0.1	6.79
New Cumberland	54.4	20-Mar-13	<0.1	268	0.73	34.6		25.47	<0.1	0.51	1.6	537.13	1.53		6.6	95.7	3.61	0.63	<0.5	0.63		<0.1	7.85
New Cumberland	54.4	14-May-13	<0.1	93.8	0.21	38.45		29.27	<0.1	0.6	3.35	224.19	<1.5		8.43	48.7	2.39	0.38	<0.5	0.63		<0.1	5.84
New Cumberland	54.4	15-Jul-13	<0.1	214	0.91	39.58		27.07	<0.1	0.88	3.6	507.7	1.79		6.79	52.8	2.41	0.93	<0.5	0.71		<0.1	5.36
New Cumberland	54.4	11-Sep-13	<0.1	144	0.99	38.49		25.95	<0.1	<0.7	5.42	275.79	<1.5		6.96	49.1	2.16	0.43	<0.5	0.62		<0.1	5.38
New Cumberland	54.4	14-Nov-13	<0.1	114	0.69	35.16		26.45	<0.1	<0.5	3.45	264.84	<1.5		6.61	33.5	1.72	0.37	<0.5	<0.5		<0.1	3.54
New Cumberland	54.4	13-Jan-14	0.33	656	2.13	44.7		27.2	1.29	2.57	4.33	1490	8.2		7.32	176	6.03	3.11	0.27	1.75		0.15	14.17
New Cumberland	54.4	31-Mar-14	<0.1	354	<1	36.4		27.1	<1	<1	1.96	502	<5		7.81	123	3.34	<1	<0.1	<1		<0.1	6.55
New Cumberland	54.4	14-May-14	<0.1	179	<1	38.9		30	<1	<1	2.15	367	<5		8.33	65.8	2.28	<1	<0.1	<1		<0.1	4.26
New Cumberland	54.4	29-Jul-14	<0.1	153	1.42	44.7		31.1	<1	<1	3.84	315	2.8		8.05	47.8	1.92	<1	0.13	1.06		<0.1	3.67
New Cumberland	54.4	23-Sep-14	<0.1	140	<1	46.8		32.7	<1	<1	4.78	277	1.6		8.89	89.1	2	<1	0.15	1.02		<0.1	5.92
New Cumberland	54.4	19-Nov-14	<0.1	78.1	<1	37.5		28	<1	<1	2.7	228	<1.5		7.39	53.6	1.85	<1	<0.1	<1		<0.1	3.56
New Cumberland	54.4	13-Jan-15	<0.1	316	<1	34.7		24.5	<1	1.14	3.04	691	2.9		6.26	106	3.24	<1	<0.1	<1		<0.1	7.33
New Cumberland	54.4	24-Mar-15	<0.1	601	<1	36.2		19.9	<1	1.02	2.31	1050	2.9		5.34	140	4.2	1.02	<0.1	<1		<0.1	9.6
New Cumberland	54.4	12-May-15	<0.1	83.4	<1	39.4		28.6	<1	<1	3.34	160	<1.5		8.16	43.6	2.63	<1	0.1	<1		<0.1	4.26
New Cumberland	54.4	28-Jul-15	<0.1	153	<1	40		26.1	<1	<1	3.91	239	<1.5		6.8	37.9	1.81	<1	0.1	<1		<0.1	7.1
New Cumberland	54.4	1-Sep-15	<0.1	91.3	<1	49.5		38.8	<1	<1	6.44	137	<1.5		10.9	34.7	1.87	<1	0.19	1.17		<0.1	4.36
New Cumberland	54.4	17-Nov-15	<0.1	97	<1	37.7		29.6	<1	<1	3.43	251	1.9		7.76	52	1.91	<1	<0.1	<1		<0.1	4.26
New Cumberland	54.4	26-Jan-16	<0.1	126	<1	35.6		28.2	<1	<1	2.19	293	1.6		8.07	96	2.96	<1	<0.1	<1		<0.1	4.95
New Cumberland	54.4	22-Mar-16	<0.1	150	<1	33.5		26.3	<1	<1	1.9	312	1.8		7.76	80.6	2.47	<1	<0.1	<1		<0.1	4.06
New Cumberland	54.4	10-May-16	<0.1	191	<1	32.4		22.2	<1	<1	1.96	385	1.8		6.07	50.2	1.96	<1	<0.1	<1		<0.1	5.16
New Cumberland	54.4	6-Jul-16	<0.1	162	1.1	44.3		32.4	<1	<1	3.65	242	<1.5		8.87	74.7	1.75	<1	0.12	<1		<0.1	4.43
New Cumberland	54.4	7-Sep-16	<0.1	104	1.06	43.6		32.4	<1	<1	5.89	134	<1.5		9.58	31.3	1.84	<1	0.18	1.32		<0.1	5.44
New Cumberland	54.4	21-Nov-16	<0.1	150	<1	38		27.4	<1	<1	2.63	303	<1.5		7.14	65	1.78	<1	0.1	<1		<0.1	3.7
Pike Island	84.2	9-Jan-12	<0.1	307	0.73	37.15		27.07	<0.1	1.16	1.64	669	2.68		7.27	124	4.38	0.58	<0.5	0.57		<0.1	8.32
Pike Island	84.2	8-Mar-12	<0.1	572	0.79	35.47		21.45	<0.1	1.34	1.76	1020	4.71		5.44	101	3.39	0.92	<0.5	<0.5		<0.1	8.53
Pike Island	84.2	15-May-12	<0.1	312	0.56	36.18		21.82	<0.1	1.1	1.75	394.28	2.29		5.89	42.4	2.3	0.5	<0.5	0.56		<0.1	3.7
Pike Island	84.2	23-Jul-12	<0.1	130.43	1.17	48.54		36.64	<0.1	0.45	3.53	165.89	<1.5		11.04	35.63	2.56	0.3	<0.5	1.05		<0.1	3.82
Pike Island	84.2	19-Sep-12	<0.1	128.1	1.11	48.66		35.55	<0.1	0.54	3.22	219.75	<1.5		10.6	44.09	2.74	0.32	<0.5	1.49		<0.1	4.17
Pike Island	84.2	20-Nov-12	<0.1	100.59	0.49	34.38		25.52	<0.1	0.11	1.92	268.91	<1.5		6.45	65.46	2.97	0.37	<0.5	0.57		<0.1	5.4
Pike Island	84.2	9-Jan-13	<0.1	142	0.81	35.81		30.77	<0.1	<0.1	1.75	319.2	<1.5		7.81	92.5	3.19	0.25	<0.5	0.55		<0.1	5.94
Pike Island	84.2	20-Mar-13	<0.1	368	0.76	36.58		24.01	<0.1	0.69	1.72	761.22	2.42		6.14	118	4.48	0.8	<0.5	0.51		<0.1	9.54
Pike Island	84.2	14-May-13	<0.1	92.7	0.95	41.56		34.46	<0.1	0.55	1.76	204.52	<1.5		9.73	42.3	2.26	0.35	<0.5	0.66		<0.1	3.27
Pike Island	84.2	15-Jul-13	<0.1	303	0.94	40.35		28.41	<0.1	<0.5	2.96	195.44	<1.5		6.59	48.5	2.54	1.08	<0.5	0.68		<0.1	5.85
Pike Island	84.2	11-Sep-13	<0.1	94.7	0.99	36.6		24.76	<0.1	<0.5	2.58	195.44	<1.5		6.6	55.8	1.6	0.26	<0.5	0.88		<0.1	2.86
Pike Island	84.2	14-Nov-13	<0.1	110	0.9	37.5		31.7	<0.1	<0.5	2.23	246.45	1.88		7.81	32.7	2.1	0.41	<0.5	0.77		<0.1	4.23
Pike Island	84.2	13-Jan-14	<0.1	1140	1.09	48.4		29.7	<1	1.95	3.56	2090	12.5		7.64	205	5.17	2.57	0.11	<1		<0.1	18.77
Pike Island	84.2	31-Mar-14	<0.1	301	<1	35.7		26.5	<1	<1	1.62	495	<5		6.9	118	3.28	<1	<0.1	<1		<0.1	6.87
Pike Island	84.2	14-May-14	<0.1	144	<1	38.7		29.6	<1	<1	1.66	280	<5		7.93	64.4	2.37	<1	<0.1	<1		<0.1	3.85
Pike Island	84.2	29-Jul-14	<0.1	288	1.46	45.3		33	<1	<1	2.56	503	1.8		8.61	56.4	2.18	<1	0.14	1.18		<0.1	4.89
Pike Island	84.2	23-Sep-14	<0.1	189	1.17	49.3		38.2	<1	<1	2.66	372	2.8		7.7	11	69.9	2.16	<1	0.16		<0.1	4.54
Pike Island	84.2	19-Nov-14	<0.1	108	<1	35.8		27.6	<1	<1	1.6	570	<1.5		7.48	53.6	1.72	<1	<0.1	<1		<0.1	3.36
Pike Island	84.2	13-Jan-15	<0.1	245	<1	35.6		25.2	<1	<1	1.61	597	2		8.11	63.9	93.2	2.87	1.75	<0.1		<0.1	6.47
Pike Island	84.2	24-Mar-15	<0.1	1020	1.22	42.1		19.8	<1	1.55	2.6	1900	8.2		1.66	5.2	23.4	5.52	2.16	<1		<0.1	19.1
Pike Island	84.2	12-May-15	<0.1	151	<1	40.2		29.7	<1	<1	1.72	265	<1.5		8.37	72.1	2.82	<1	0.12	<1		<0.1	5.52
Pike Island	84.2	28-Jul-15	<0.1	162	<1	39.3		27.4	<1	<1	2.27	241	<1.5		7.58	38.3	1.72	<1	0.1	<1		<0.1	7.95
Pike Island	84.2	1-Sep-15	<0.1	59.2	<1	51.2		42.4	<1	<1	3.07	63	<1.5		12.5	16.7	1.78	<1	0.18	1.21		<0.1	2.72
Pike Island	84.2	17-Nov-15	<0.1	94.5	<1	37.6		29.2	<1	<1	2.04	234	2		7.75	38.7	1.87	<1	0.11	<1		<0.1	3.04
Pike Island	84.2	26-Jan-16	<0.1	136	<1	35.8		29.6	<1	<1	1.59	319	2.1		8.01	89.8	3.05	<1	<0.1	<1		<0.1	6.39
Pike Island	84.2	22-Mar-16	<0.1	151	<1	35.1		28.5	<1	<1	1.61	296	<1.5		7.69	74.4	2.51	<1	<0.1	<1		<0.1	7.88
Pike Island	84.2	10-May-16	<0.1	205	<1	33.7		36.7	<1	<1	1.53	437	1.8		6.1	53.3	1.97	<1	<0.1	<1		<0.1	4.94
Pike Island	84.2	6-Jul-16	<0.1	157	<1	46.9		36.7	<1	<1	2.56	221	<1.5		10.3	63.6	1.7	<1	0.13	1		<0.1	4.11
Pike Island	84.2	7-Sep-16	<0.1	97.7	1.29	42.5		33.5															

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016

Sample/Str	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)
Hannibal	126.4	10-Jan-12	<0.1	190	0.7	35.25		27.91	<0.1	1.06	1.37	409.34	<1.5		7.71	84.08	3.76	0.28	<0.5	0.53		<0.1	6
Hannibal	126.4	12-Mar-12	<0.1	447	0.76	35.76		26.83	<0.1	1.22	2.14	737.47	2.74		7.01	75.3	3.16	0.9	<0.5	0.51		<0.1	8
Hannibal	126.4	16-May-12	<0.1	466	0.65	36.84		23.58	<0.1	1.38	2.02	477.39	1.9		6.46	49.4	2.51	0.61	<0.5	<0.5		<0.1	4.47
Hannibal	126.4	24-Jul-12	<0.1	121.04	0.98	48.84		36.3	<0.1	0.63	2.76	126.87	<1.5		10.95	23.31	2.77	0.17	<0.5	1.17		<0.1	5.56
Hannibal	126.4	27-Sep-12	<0.1	161.8	0.99	49.54		38.41	<0.1	0.32	2.89	242.35	<1.5		11.3	61.07	2.64	0.44	<0.5	1.34		<0.1	4.17
Hannibal	126.4	19-Nov-12	<0.1	101.03	0.65	36.97		26.68	<0.1	0.15	1.83	288.31	<1.5		7.11	51.52	2.87	0.35	<0.5	0.64		<0.1	3
Hannibal	126.4	14-Jan-13	<0.1	562	1.12	43.88		34.99	0.11	0.74	3	120.8	4.95		9.07	193	5.38	1.7	<0.5	0.81		<0.1	16.4
Hannibal	126.4	19-Mar-13	<0.1	226	0.59	37.32		29.47	0.27	0.67	1.67	532.66	2.71		7.58	98.6	4.61	0.76	<0.5	0.57		<0.1	6.52
Hannibal	126.4	21-May-13	<0.1	97.9	0.41	37.81		29.02	<0.1	<0.5	1.57	174.44	<1.5		8.47	53.9	2.23	0.24	<0.5	0.77		<0.1	2.72
Hannibal	126.4	18-Jul-13	<0.1	256	1.07	39.2		28.36	<0.1	0.68	2.99	546	2.59		7.08	45.7	2.4	0.86	<0.5	0.72		<0.1	5.12
Hannibal	126.4	5-Sep-13	<0.1	183	0.65	40.08		27.74	<0.1	0.97	2.2	347.52	1.64		6.87	47.4	1.9	0.52	<0.5	0.53		<0.1	3.52
Hannibal	126.4	11-Nov-13	<0.1	131	1.07	38.77		32.84	<0.1	<0.5	2.09	275.74	1.51		8.55	38.6	1.96	0.44	<0.5	0.92		<0.1	3.56
Hannibal	126.4	20-Jan-14	<0.1	467	<1	37.7		24.4	<1	<1	1.86	916	<5		6.69	103	3.81	<1	<0.1	<1		<0.1	8.3
Hannibal	126.4	10-Mar-14	<0.1	173	<1	36.7		30.3	<1	<1	1.81	441	<5		8.47	111	3.59	<1	<0.1	<1		<0.1	7.03
Hannibal	126.4	19-May-14	<0.1	1360	1.14	51.3	<1	24.9	<1	1.14	4.96	3030	10.7		6.26	282	7.24	4.3	0.12	<1		<0.1	25.4
Hannibal	126.4	21-Jul-14	<0.1	118	1.32	43.8	<1	30.5	<1	<1	1.97	243	<1.5		8.31	52	1.63	<1	0.12	<1		<0.1	4.07
Hannibal	126.4	24-Sep-14	<0.1	133	1.67	44.8	<1	34.5	<1	<1	2.46	239	<1.5		9.6	39	1.9	<1	0.17	1.39		<0.1	3.54
Hannibal	126.4	19-Nov-14	<0.1	97.5	<1	37.7	<1	29.3	<1	<1	1.69	264	<1.5		7.88	47.7	1.72	<1	0.11	<1		<0.1	2.83
Hannibal	126.4	13-Jan-15	<0.1	302	<1	36.3	<1	25	<1	<1	3.23	722	2.6		6.37	97.8	3.31	<1	<0.1	<1		<0.1	7.05
Hannibal	126.4	24-Mar-15	<0.1	1010	<1	39.6	<1	20.4	<1	2.05	2.92	1760	2.8		5.4	190	5.83	2.04	0.11	<1		<0.1	16.6
Hannibal	126.4	12-May-15	<0.1	29.4	<1	35.8	<1	29.4	<1	<1	1.01	<50	<1.5		8.45	24.4	1.86	<1	<0.1	<1		<0.1	2.23
Hannibal	126.4	28-Jul-15	<0.1	303	<1	40.6	<1	27.1	<1	<1	2.16	411	1.7		7.49	69	1.84	<1	0.12	<1		<0.1	4.36
Hannibal	126.4	1-Sep-15	<0.1	90.7	<1	50.1	<1	40.5	<1	<1	2.81	120	<1.5		8.24	30.6	1.84	<1	0.22	1.2		<0.1	2.6
Hannibal	126.4	17-Nov-15	<0.1	118	<1	37.1	<1	30.9	<1	<1	1.85	258	2.5		8.24	41.3	1.64	<1	0.1	<1		<0.1	3.87
Hannibal	126.4	26-Jan-16	<0.1	191	<1	36.4	<1	29.1	<1	<1	1.82	438	2		8	103	2.93	<1	<0.1	<1		<0.1	6.69
Hannibal	126.4	22-Mar-16	<0.1	185	<1	35.6	<1	32.1	<1	<1	1.45	383	1.6		8.75	65	2.26	<1	<0.1	<1		<0.1	6.52
Hannibal	126.4	10-May-16	<0.1	202	<1	35.7	<1	25.7	<1	<1	1.6	394	2		7.11	43.1	2	<1	<0.1	<1		<0.1	5.02
Hannibal	126.4	6-Jul-16	<0.1	152	<1	44.6	<1	33.9	<1	<1	1.99	186	<1.5		9.84	47.8	1.63	<1	0.14	<1		<0.1	3.45
Hannibal	126.4	7-Sep-16	<0.1	242	1.1	46.9	<1	35.1	<1	<1	2.89	309	<1.5		11.3	50.3	2.08	<1	0.19	1.2		<0.1	5.33
Willow Island	161.8	10-Jan-12	<0.1	184	0.7	34.78		27.43	<0.1	1.04	1.16	389.11	<1.5		7.53	69.11	3.35	0.25	<0.5	0.54		<0.1	3.98
Willow Island	161.8	12-Mar-12	<0.1	467	0.72	34.92		24.62	<0.1	1.21	1.81	785.32	3.27		6.55	77.9	3.06	0.82	<0.5	0.57		<0.1	8.84
Willow Island	161.8	16-May-12	<0.1	439	0.68	36.69		23.56	<0.1	1.64	2.15	505.31	1.95		6.23	42.6	2.46	0.69	<0.5	<0.5		<0.1	4.72
Willow Island	161.8	24-Jul-12	<0.1	59.61	0.81	47.72		34.66	<0.1	0.19	2.44	72.27	<1.5		10.77	22.48	2.02	0.13	<0.5	1.26		<0.1	2.04
Willow Island	161.8	27-Sep-12	<0.1	155.52	1.1	49.97		36.68	<0.1	0.31	2.82	230.13	<1.5		11.11	40.06	2.39	0.4	<0.5	1.4		<0.1	4.07
Willow Island	161.8	19-Nov-12	<0.1	126.84	0.61	34.97		25.42	<0.1	0.2	1.92	337.49	1.62		6.46	48.49	2.89	0.5	<0.5	0.57		<0.1	3.59
Willow Island	161.8	14-Jan-13	<0.1	423	0.86	40.74		33.03	<0.1	1.7	2.11	896.5	3.01		8.57	152	4.31	0.99	<0.5	0.79		<0.1	9.2
Willow Island	161.8	19-Mar-13	<0.1	300	0.77	39.31		29.78	<0.1	0.55	1.66	629.39	4.25		7.68	96	3.81	0.55	<0.5	0.53		<0.1	6.9
Willow Island	161.8	21-May-13	<0.1	88.1	0.36	39.59		30.6	<0.1	<0.5	1.66	164.26	<1.5		8.79	29.3	2	0.26	<0.5	<0.5		<0.1	2.98
Willow Island	161.8	18-Jul-13	<0.1	149	1.02	38.31		29.61	<0.1	<0.5	2.93	308.07	2.15		7.13	22.8	1.95	0.5	<0.5	0.66		<0.1	2.87
Willow Island	161.8	5-Sep-13	<0.1	135.32	0.74	43.6		30.75	<0.1	<0.5	2.06	213.47	2.07		8.04	41.5	1.55	0.35	<0.5	0.69		<0.1	3.18
Willow Island	161.8	11-Nov-13	<0.1	154	1.11	40.63		33.97	<0.1	<0.5	2.33	284.84	<1.5		8.92	42.5	1.94	0.45	<0.5	0.61		<0.1	3.52
Willow Island	161.8	20-Jan-14	<0.1	465	<1	39.4		25	<1	<1	2.46	1100	<5		6.61	127	3.79	1.09	<0.1	<1		<0.1	13.84
Willow Island	161.8	10-Mar-14	<0.1	215	1.38	37		29	<1	<1	1.74	498	<5		7.97	108	3.16	<1	<0.1	<1		<0.1	5.48
Willow Island	161.8	19-May-14	<0.1	2260	1.69	65.7	<1	28	<1	2.75	8.12	4690	19.1		7.17	462	11.5	7.46	0.17	<1		<0.1	42.4
Willow Island	161.8	21-Jul-14	<0.1	104	1.12	42	<1	28.9	<1	<1	2.07	224	<5		7.58	42.8	1.64	<1	0.14	<1		<0.1	4.08
Willow Island	161.8	24-Sep-14	<0.1	216	1.03	47.6	<1	35.6	<1	<1	2.54	428	9.2		9.89	63.8	2.19	<1	0.18	1.1		<0.1	5.07
Willow Island	161.8	20-Nov-14	<0.1	185	<1	39.3	<1	30	<1	<1	2.14	426	2.3		8.04	54.6	2.13	<1	0.11	<1		<0.1	4.43
Willow Island	161.8	14-Jan-15	<0.1	205	<1	35.1	<1	24.8	<1	<1	1.94	505	2		6.36	65.2	2.51	<1	0.1	<1		<0.1	5.3
Willow Island	161.8	24-Mar-15	<0.1	1100	1.02	41	<1	19.8	<1	1.88	2.67	1860	5.3		5.38	169	5.08	1.79	<0.1	<1		<0.1	17.1
Willow Island	161.8	13-May-15	<0.1	134	<1	38.1	<1	30.3	<1	<1	1.41	223	<1.5		8.88	45.9	2.26	<1	<0.1	<1		<0.1	4.1
Willow Island	161.8	29-Jul-15	<0.1	110	<1	37.9	<1	26.6	<1	<1	1.88	143	<1.5		7.2	23.1	1.41	<1	0.11	<1		<0.1	2.32
Willow Island	161.8	2-Sep-15	<0.1	181	<1	49.5	<1	36.3	<1	<1	2.56	278	1.6		11.2	54.9	1.78	<1	0.21	1.13		<0.1	7.09
Willow Island	161.8	18-Nov-15	<0.1	164	<1	37.5	<1	30.8	<1	<1	2.1	339	2.1		8.3	43.5	1.89	<1	0.1	<1		<0.1	2.8
Willow Island	161.8	27-Jan-16	<0.1	131	<1	35.6	<1	29.4	<1	<1	1.63	299	1.5		7.86	73	2.52	<1	<0.1	<1		<0.1	6.31
Willow Island	161.8	22-Mar-16	<0.1	196	<1	34.9	<1	30.5	<1	<1	1.63	412	1.7		8.31	56.3	2.33	<1	0.1	<1		<0.1	5.19
Willow Island	161.8	10-May-16	<0.1	192	<1	36	<1	26.8	<1	<1	1.6	377	1.8		7.34	43.9	1.79	<1	<0.1	<1		<0.1	5.4
Willow Island	161.8	6-Jul-16	<0.1	224	1.04	43.7	<1	31.4	<1	<1	2.04	309	1.5		8.94	49.6	1.86	<1	0.15	<1		<0.1	4.45
Willow Island	161.8	7-Sep-16	<0.1	188	1.15	45.4	<1	34.1	<1	1.7	3.14	280	<1.5		10.1	60.8	1.9	<1	0.21	1.56		<0.1	4.24
Willow Island	161.8	22-Nov-16																					

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016

SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)
Belleville	203.9	21-May-12	<0.1	306	0.71	40.21		27.67	<0.1	1.13	1.71	312.29	<1.5		8.18	57.6	1.92	0.36	<0.5	0.58		<0.1	4.33
Belleville	203.9	18-Jul-12	<0.1	22.02	0.75	50.17		35.67	<0.1	0.49	2.06	<50	<1.5		11.98	20.24	2.07	<0.1	<0.5	0.83		<0.1	1.11
Belleville	203.9	17-Sep-12	<0.1	48.65	0.77	49.47		34.94	<0.1	0.35	2.07	70.28	<1.5		11.83	24.46	2.95	0.11	<0.5	1.11		<0.1	3.27
Belleville	203.9	13-Nov-12	<0.1	190.25	0.8	34.19		27.48	<0.1	0.57	2.04	396.59	1.94		7.2	41.3	2.71	0.6	<0.5	0.66		<0.1	3.36
Belleville	203.9	17-Jan-13	<0.1	972	1.36	45.97		32.3	<0.1	1.32	3.37	195.71	8.03		8.84	247	5.25	2.23	<0.5	0.71		<0.1	15.55
Belleville	203.9	27-Mar-13	<0.1	404	0.85	36.94		29.74	<0.1	0.71	1.62	639.09	1.63		7.98	66.9	2.73	0.7	<0.5	<0.5		<0.1	6.06
Belleville	203.9	16-May-13	<0.1	99.7	0.58	40.79		35.76	<0.1	<0.5	1.7	177.64	<1.5		10.59	35.8	1.78	0.29	<0.5	0.57		<0.1	5.97
Belleville	203.9	9-Sep-13	<0.1	872	1.4	46.42		36.35	<0.1	0.93	2.77	1106.1	4.05		9.93	70	2.83	0.98	<0.5	0.51		<0.1	5.73
Belleville	203.9	24-Jul-13	<0.1	142	0.82	48.18		36.41	<0.1	0.62	1.77	208.65	1.89		10.5	87.1	1.45	0.22	<0.5	0.65		<0.1	2.2
Belleville	203.9	18-Nov-13	<0.1	124	0.74	38		36.66	<0.1	0.61	2.32	224.79	<1.5		9.92	32.9	1.99	0.4	<0.5	0.61		<0.1	4.27
Belleville	203.9	20-Mar-14	<0.1	978	<1	41.5		32	<1	<1	2.08	1230	<5		8.91	99.4	3.99	<1	<0.1	<1		<0.1	8.97
Belleville	203.9	27-May-14	<0.1	231	<1	36.8	<1	28.4	<1	<1	1.53	432	<5	1.82	8.03	44	1.92	<1	<0.1	<1		<0.1	6.01
Belleville	203.9	16-Jul-14	<0.1	297	1.24	42.5	<1	27.9	<1	<1	1.91	450	<5	2.28	7.56	42.4	1.66	<1	0.12	<1		<0.1	2.76
Belleville	203.9	24-Sep-14	<0.1	160	1.43	46.4	<1	39.2	<1	<1	1.98	252	<1.5	2.92	12.1	72.3	1.86	<1	0.17	1.11		<0.1	4.36
Belleville	203.9	20-Nov-14	<0.1	69	<1	37.4	<1	34.2	<1	<1	1.64	168	<1.5	2.56	9.47	35.4	1.76	<1	0.12	<1		<0.1	2.9
Belleville	203.9	14-Jan-15	<0.1	441	<1	37.1	<1	28.9	<1	1.13	2.35	870	2.4	2.2	7.91	83.2	2.88	<1	0.1	<1		<0.1	6.42
Belleville	203.9	25-Mar-15	<0.1	1120	1.28	41.9	<1	25.4	<1	2.19	3.68	2130	6.4	2.06	7.07	175	6.19	2.48	0.1	<1		<0.1	25.8
Belleville	203.9	13-May-15	<0.1	85.4	<1	39.1	<1	34.7	<1	<1	1.24	131	<1.5	2.06	10.7	39	1.9	<1	0.1	<1		<0.1	5.66
Belleville	203.9	29-Jul-15	<0.1	83.8	<1	38.4	<1	37.9	<1	<1	1.72	88.4	<1.5	2.55	9.19	17.2	1.3	<1	0.15	<1	155	<0.1	1.89
Belleville	203.9	2-Sep-15	<0.1	76.4	<1	51.1	<1	37.9	<1	<1	1.76	111	<1.5	2.89	13.1	50	1.53	<1	0.16	<1	203	<0.1	2.17
Belleville	203.9	18-Nov-15	<0.1	121	<1	37.8	<1	34.5	<1	<1	2.21	236	1.7	2.83	9.59	30.3	2.12	<1	0.11	<1	170	<0.1	2.42
Belleville	203.9	27-Jan-16	<0.1	126	<1	36.4	<1	33.8	<1	<1	1.28	274	<1.5	2.05	9.77	69.4	2.32	<1	<0.1	<1	160	<0.1	7.12
Belleville	203.9	23-Mar-16	<0.1	232	<1	34	<1	34.1	<1	<1	1.63	419	1.6	2.16	9.63	34	2.16	<1	0.11	<1	159	<0.1	3.17
Belleville	203.9	11-May-16	<0.1	162	<1	36.3	<1	31.9	<1	1.59	1.47	307	<1.5	1.88	9.25	40.4	1.72	<1	<0.1	<1	159	<0.1	3.23
Belleville	203.9	7-Jul-16	<0.1	569	1.08	46.9	<1	34.2	<1	1.02	2.4	657	1.7	2.74	10	84.9	2.16	<1	0.21	<1	179	<0.1	5.92
Belleville	203.9	8-Sep-16	<0.1	314	1.21	53.8	<1	39.5	<1	<1	2.33	459	<1.5	3.04	12.7	141	2.32	<1	0.21	1.34	233	<0.1	8.5
Belleville	203.9	22-Nov-16	<0.1	209	<1	36.6	<1	31.1	<1	<1	2.17	329	1.5	2.62	8.73	36.9	2.07	<1	0.11	<1	143	<0.1	4.84
R.C. Byrd	279.2	24-Jan-12	<0.1	795	0.95	36.05		19.57	<0.1	1.65	2.08	1332.2	3.72		6.72	142	3.44	1.32	<0.5	0.6		<0.1	8.35
R.C. Byrd	279.2	14-Mar-12	<0.1	534	0.68	36.95		22.32	<0.1	1.3	1.76	885	3.66		6.91	99.5	2.58	0.91	<0.5	<0.5		<0.1	6.32
R.C. Byrd	279.2	21-May-12	<0.1	729	0.62	40.2		20.95	<0.1	1.49	1.66	695.71	1.5		6.59	142	2.03	0.69	<0.5	<0.5		<0.1	4.46
R.C. Byrd	279.2	18-Jul-12	<0.1	109.6	0.78	52.57		29.81	<0.1	0.21	1.58	186.79	<1.5		11.9	80.89	1.71	0.27	<0.5	0.63		<0.1	2.16
R.C. Byrd	279.2	17-Sep-12	<0.1	169.37	0.83	53.22		33.95	<0.1	0.68	2.16	294.39	<1.5		13	60.16	2.62	0.39	<0.5	0.94		<0.1	2.79
R.C. Byrd	279.2	13-Nov-12	<0.1	231.06	0.71	37.32		26.33	<0.1	0.34	2.11	480.17	1.87		7.9	49.91	2.59	0.72	<0.5	0.72		<0.1	4.61
R.C. Byrd	279.2	17-Jan-13	<0.1	896	0.63	43.64		17.12	<0.1	1.18	2.67	1648.6	5.55		6.23	174	3.89	2.08	<0.5	0.5		<0.1	9.72
R.C. Byrd	279.2	27-Mar-13	<0.1	457	0.89	35.1		21.7	<0.1	0.84	1.54	753.07	2.13		6.42	126	2.64	0.8	<0.5	0.52		<0.1	5.24
R.C. Byrd	279.2	16-May-13	<0.1	269	0.38	38.39		24.25	<0.1	0.57	1.68	474.75	1.64		7.44	114	1.83	0.58	<0.5	<0.5		<0.1	4.2
R.C. Byrd	279.2	24-Jul-13	<0.1	848	1.22	43.37		27.03	<0.1	0.87	2.66	1028.1	2.66		7.83	80.6	2.65	0.96	<0.5	<0.5		<0.1	5.11
R.C. Byrd	279.2	9-Sep-13	<0.1	295	0.91	46.54		29.02	<0.1	0.67	2.01	488.61	<1.5		8.52	106	1.84	0.63	<0.5	0.83		<0.1	3.5
R.C. Byrd	279.2	18-Nov-13	<0.1	296	0.95	41.64		35.31	<0.1	0.5	2.24	559.96	4.05		10.5	61.6	2.21	0.71	<0.5	0.65		<0.1	5.13
R.C. Byrd	279.2	4-Feb-14	<0.1	336	<1	37.7		26.9	<1	<1	2.03	692	<5		9.39	98.9	2.58	<1	<0.1	<1		<0.1	5.73
R.C. Byrd	279.2	20-Mar-14	<0.1	1010	<1	43.3		30.2	<1	1.6	2.16	1100	<5		9.07	88.4	3.19	<1	<0.1	<1		<0.1	6.53
R.C. Byrd	279.2	27-May-14	<0.1	257	<1	35.5	<1	24.6	<1	1.43	1.76	532	<5	1.68	6.81	62.2	2	<1	<0.1	<1		<0.1	4.6
R.C. Byrd	279.2	16-Jul-14	<0.1	415	1.59	48.4	<1	29.2	<1	<1	2.14	835	<5	2.42	8.43	208	2.51	<1	0.2	<1		<0.1	5.11
R.C. Byrd	279.2	24-Sep-14	<0.1	261	1	46	<1	33.6	<1	<1	2.09	427	1.8	2.79	10.8	66.6	1.88	<1	0.21	<1		<0.1	5.32
R.C. Byrd	279.2	20-Nov-14	<0.1	154	<1	36.8	<1	25.9	<1	<1	1.51	315	<1.5	2.47	8.59	38.5	1.56	<1	0.1	<1		<0.1	3.96
R.C. Byrd	279.2	14-Jan-15	<0.1	410	<1	35.7	<1	23.9	<1	1.66	2.31	830	2.9	1.98	6.89	89.6	2.91	1.15	0.11	<1		<0.1	7.52
R.C. Byrd	279.2	25-Mar-15	<0.1	1580	1.38	45.7	<1	29.3	<1	2.68	4.37	2790	7.5	1.86	6.38	251	6.92	3.68	0.12	<1		<0.1	20
R.C. Byrd	279.2	13-May-15	<0.1	202	<1	39.4	<1	20.7	<1	<1	1.45	350	<1.5	1.89	9.4	64.3	2.09	<1	0.1	<1		<0.1	5.4
R.C. Byrd	279.2	29-Jul-15	<0.1	362	<1	43.4	<1	28.5	<1	<1	1.92	445	<1.5	2.37	9.03	46.4	1.86	<1	0.1	<1	156	<0.1	2.79
R.C. Byrd	279.2	2-Sep-15	<0.1	153	<1	49.5	<1	32	<1	<1	1.91	213	<1.5	2.85	12	50.6	1.56	<1	0.14	<1	194	<0.1	2.55
R.C. Byrd	279.2	18-Nov-15	<0.1	229	<1	38.4	<1	30.5	<1	<1	1.93	418	3	2.78	9.32	42.8	1.9	<1	<0.1	<1	156	<0.1	4.14
R.C. Byrd	279.2	27-Jan-16	<0.1	315	<1	32.9	<1	27.5	<1	<1	1.63	531	2.6	1.95	8.56	70.1	2.08	<1	<0.1	<1	140	<0.1	8.77
R.C. Byrd	279.2	23-Mar-16	<0.1	631	<1	37.5	<1	27.5	<1	2.3	2.58	1160	5.6	1.86	8.1	92.8	3.83	1.44	0.14	<1	139	<0.1	10.6
R.C. Byrd	279.2	11-May-16	<0.1	416	<1	35.8	<1	20.6	<1	<1	1.84	825	3.4	1.58	6.77	79.8	2.18	1.06	<0.1	<1	127	<0.1	8.56
R.C. Byrd	279.2	7-Jul-16	<0.1	1470	1.39	60.2	<1	27.5	<1	2.13	3.64	2260	7.7	2.29	8.87	136	4.12	2.06	0.14	<1	163	<0.1	10.2
R.C. Byrd	279.2	8-Sep-16	<0.1	161	1.07	50.3	<1	33.3	<1	1.27	1.89	219	<1.5	2.76	11.9	46.2	1.57	<1	0.18	1.08	208	<0.1	2.66
Greenup	341	5-Jan-12	<0.1	225	<1	37.2	<1	26.5	<1	<1	1.89	352	1.5	2.54	8.31	37.6	1.73	<					

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016

Sample/site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)	
Greenup	341	24-Sep-12	<0.1	148.7	0.86	51.05		32.86	<0.1	0.18	2.06	218.91	<1.5		14.03	30.72	2	0.28	<0.5	1.13			<0.1	7.56
Greenup	341	8-Nov-12	<0.1	625.18	1.11	45.55		30.93	<0.1	1.27	3.42	1316.2	6.06		9.9	152.53	4.61	2.12	<0.5	0.76			<0.1	15.12
Greenup	341	7-Jan-13	<0.1	215	0.56	33.99		25.57	<0.1	0.54	1.34	438.28	<1.5		8.92	52.4	1.94	0.67	<0.5	0.55			<0.1	40.7
Greenup	341	27-Mar-13	<0.1	535	0.79	35.38		23.08	<0.1	0.94	1.81	1006.4	2.73		8.23	62.4	2.72	0.96	<0.5	0.57			<0.1	6.11
Greenup	341	30-May-13	<0.1	174	0.77	40.15		29.14	<0.1	<0.5	1.58	330.55	1.66		10.79	48.9	1.63	0.46	<0.5	<0.5			<0.1	3.15
Greenup	341	25-Jul-13	<0.1	972	1.5	47.05		28.88	<0.1	1.66	3.48	1542.8	7		8.65	105	3.31	1.76	<0.5	0.6			<0.1	11.7
Greenup	341	5-Sep-13											2.19											
Greenup	341	25-Nov-13	<0.1	297	0.67	40.54		34.87	<0.1	<0.5	2.42	539.08	2.48		11.03	44.7	2.11	0.55	<0.5	0.65			<0.1	5.18
Greenup	341	13-Jan-14	0.18	2060	1.38	59.8		24.4	<1	4.09	5.83	5280	15.2		9.29	211	7.68	4	0.1	<1			<0.1	22.8
Greenup	341	19-Mar-14	<0.1	1210	1.08	46.6		33.1	<1	1.35	3.17	1540	<5		11.3	95.4	4.1	1.44	0.11	<1			<0.1	15.53
Greenup	341	21-May-14	<0.1	1300	1.55	51.4	<1	24.8	<1	2.1	5.24	3060	11.7	1.72	6.28	235	6.03	3.93	0.14	<1			<0.1	51
Greenup	341	9-Jul-14	<0.1	227	1.25	39.8	<1	29.2	<1	1.07	2.19	421	<5	2.94	8.53	43.1	1.96	<1	0.15	<1			<0.1	11.1
Greenup	341	24-Sep-14	<0.1	170	<1	47.8	<1	35.1	<1	<1	1.9	303	<1.5	3.28	12.4	61.7	1.86	<1	0.19	<1			<0.1	10.4
Greenup	341	4-Nov-14	<0.1	219	<1	44.3	<1	33	<1	<1	1.84	468	1.7	2.75	11.7	47.4	1.96	<1	0.12	1.14			<0.1	3.9
Greenup	341	20-Jan-15	<0.1	201	<1	36.4	<1	29.8	<1	<1	1.78	429	1.6	2.92	9.25	36.3	2.33	<1	0.14	<1			<0.1	6.25
Greenup	341	11-Mar-15	<0.1	3360	1.89	68.7	<1	21.3	<1	4.58	7.18	6060	13.1	2.72	7.57	35.4	10.1	6.75	0.12	<1			<0.1	35.3
Greenup	341	20-May-15	<0.1	152	<1	43.6	<1	32.1	<1	<1	1.15	256	<1.5	2.48	11.8	51.9	1.59	<1	0.12	<1			<0.1	4.11
Greenup	341	29-Jul-15	<0.1	241	<1	42.6	<1	27.8	<1	<1	1.84	329	<1.5	2.6	9.67	33.3	1.52	<1	0.12	<1			<0.1	3.32
Greenup	341	2-Sep-15	<0.1	8.92	<1	48.6	<1	34.1	<1	<1	1.56	<50	2.9	3	13.6	8.15	1.14	<1	0.31	<1	245		<0.1	1.23
Greenup	341	4-Nov-15	<0.1	173	<1	46.5	<1	36.7	<1	<1	2.4	311	3.5	3.04	12.1	41.9	2	<1	0.16	<1	239		<0.1	5.16
Greenup	341	21-Jan-16	<0.1	218	<1	34.9	<1	27.6	<1	<1	1.62	475	2.4	2.75	9.19	53.1	1.86	<1	<0.1	<1	158		<0.1	4.77
Greenup	341	22-Mar-16	<0.1	405	<1	35.5	<1	25.6	<1	<1	2.14	799	7.2	1.92	8.54	72.7	2.41	1.27	<0.1	<1	152		<0.1	8.05
Greenup	341	18-May-16	<0.1	240	<1	34.7	<1	25.9	<1	<1	1.6	495	2.3	2.09	8.87	45.5	1.69	<1	<0.1	<1	160		<0.1	8.4
Greenup	341	27-Jul-16	<0.1	174	<1	50.2	<1	29.2	<1	<1	1.56	232	<1.5	2.82	11	23.4	1.28	<1	0.13	<1	233		<0.1	4.47
Greenup	341	12-Sep-16	<0.1	210	1.07	52.8	<1	35.9	<1	1.16	1.75	283	<1.5	2.97	13.8	37.6	1.69	<1	0.18	1.32	258		<0.1	3.03
Greenup	341	2-Nov-16	<0.1	437	1.06	48.3	<1	37.9	<1	1.03	2.67	564	4	5.46	11.6	46.9	2.21	<1	0.16	1.11	226		<0.1	9.36
Mellahl	436.2	5-Jan-12	<0.1	626	1.24	38.49		30.23	<0.1	1.84	3.76	1103.8	3.36		9.73	82.92	3.55	1.1	<0.5	0.72			<0.1	9.25
Mellahl	436.2	7-Mar-12	<0.1	1550	1.29	48.84		24.94	<0.1	2.65	3.67	2670	9.2		8.01	171	4.81	2.91	<0.5	0.55			<0.1	18.09
Mellahl	436.2	17-May-12	<0.1	1085	0.87	45.13		30.58	<0.1	1.92	2.2	1026	2.44		10.07	48	2.73	0.88	<0.5	0.53			<0.1	7.06
Mellahl	436.2	9-Jul-12	<0.1	93.5	1	49.31		33.06	<0.1	0.14	1.89	83.25	<1.5		12.93	18.26	1.74	0.12	<0.5	0.85			<0.1	2.53
Mellahl	436.2	24-Sep-12	<0.1	154.37	1.13	59.15		40.65	<0.1	0.11	2.86	200.62	<1.5		10.97	33.77	2.9	0.25	<0.5	1.27			<0.1	5.85
Mellahl	436.2	8-Nov-12	<0.1	384.94	0.86	44.53		35.05	<0.1	0.61	3.21	731.58	3.56		10.39	62.55	2.94	1.17	<0.5	0.71			<0.1	8.22
Mellahl	436.2	7-Jan-13	<0.1	311	0.64	35.01		26.7	<0.1	0.68	1.56	674.23	<1.5		8.31	28.2	2.2	0.49	<0.5	0.6			<0.1	17.67
Mellahl	436.2	27-Mar-13	<0.1	706	0.88	38.63		28.21	<0.1	1.04	2.2	1198.9	3.04		9.12	70.3	3.04	1.21	<0.5	<0.5			<0.1	8.19
Mellahl	436.2	30-May-13	<0.1	191	1	40.21		27.5	<0.1	<0.5	1.84	313.06	<1.5		10.11	35.4	1.81	0.45	<0.5	1			<0.1	4.83
Mellahl	436.2	25-Jul-13	<0.1	748	1.35	44.91		31.09	<0.1	0.84	2.97	991.29	3.76		8.78	52.8	2.49	1.01	<0.5	0.69			<0.1	5.38
Mellahl	436.2	5-Sep-13	<0.1	413	1.04	49.61		34.11	<0.1	0.67	2.38	620.51	3.09		9.84	51.2	1.92	0.64	<0.5	0.6			<0.1	3.61
Mellahl	436.2	25-Nov-13	<0.1	676	1.31	45.3		39.96	<0.1	0.97	3.75	1136.7	4.21		12.06	79.4	3.6	1.27	<0.5	0.74			<0.1	10.43
Mellahl	436.2	14-Jan-14	<0.1	2590	1.77	57.1		29.2	<1	3.58	5.17	4150	6.9		9.88	219	6.82	3.54	0.12	<1			<0.1	16.1
Mellahl	436.2	19-Mar-14	<0.1	3070	1.49	62.2		38.7	<1	3.31	4.66	3120	7.6		12.1	122	6.88	2.52	0.14	<1			<0.1	17.02
Mellahl	436.2	21-May-14	<0.1	2400	2.18	66.9	<1	31.3	<1	3.34	6.96	4710	6.3	3.32	9.28	391	8.27	6.22	0.16	<1			<0.1	32.3
Mellahl	436.2	9-Jul-14	<0.1	192	1.36	43.2	<1	32.5	<1	<1	2.72	354	<5	3.33	9.4	29.8	2.02	<1	0.18	<1			<0.1	7.72
Mellahl	436.2	24-Sep-14	<0.1	311	1.37	45.9	<1	33.1	<1	<1	2.31	410	1.7	3.32	11.1	45.8	2.1	2.42	0.2	1.33			<0.1	4.26
Mellahl	436.2	4-Nov-14	<0.1	181	<1	47.4	<1	37.7	<1	<1	2.05	322	1.7	3.25	11.9	31.4	1.87	<1	0.16	<1			<0.1	4.1
Mellahl	436.2	20-Jan-15	<0.1	340	<1	37.6	<1	26.4	<1	<1	1.95	781	<1.5	1.99	8.82	90.5	2.62	<1	0.1	<1			<0.1	5.78
Mellahl	436.2	11-Mar-15	<0.1	3560	1.97	73.6	<1	25.2	<1	5.16	8.68	6230	13.2	3.09	8.17	429	10.9	7.27	0.15	<1			<0.1	42
Mellahl	436.2	20-May-15	<0.1	253	<1	44.8	<1	33.7	<1	1.27	1.67	412	<1.5	2.22	12	58.6	2.07	<1	0.18	<1			<0.1	17.4
Mellahl	436.2	29-Jul-15	<0.1	500	<1	43.8	<1	31.4	<1	<1	2.25	529	1.6	2.66	10.3	30.2	1.97	<1	0.14	<1	254		<0.1	7.2
Mellahl	436.2	2-Sep-15	<0.1	174	1.08	51.7	<1	35.9	<1	<1	1.91	197	3.2	3.3	14.2	39.8	1.67	<1	0.19	1.15	297		<0.1	3.11
Mellahl	436.2	4-Nov-15	<0.1	169	<1	53.9	<1	40.3	<1	<1	2.15	287	<1.5	3.08	13.2	33.6	2	<1	0.17	<1	297		<0.1	6.29
Mellahl	436.2	21-Jan-16	<0.1	327	<1	36	<1	30.4	<1	<1	1.71	885	2.5	2.47	9.72	39.8	1.99	<1	0.11	<1	218		<0.1	6.94
Mellahl	436.2	22-Mar-16	<0.1	568	<1	38.1	<1	29	<1	<1	2.52	84	5	2.1	9.08	40.2	2.38	1.21	0.11	<1	199		<0.1	8.61
Mellahl	436.2	18-May-16	<0.1	484	<1	40	<1	29	<1	<1	1.34	905	3.1	2.09	10	67.8	2.34	1.56	0.1	<1	232		<0.1	8.78
Mellahl	436.2	27-Jul-16	<0.1	114	<1	51.7	<1	32.5	<1	<1	1.66	133	<1.5	3.11	12	22.1	1.23	<1	0.19	1.11	261		<0.1	2.68
Mellahl	436.2	12-Sep-16	<0.1	421	1.26	53	<1	32.8	<1	1.44	2.24	591	<1.5	2.87	11.8	69.4	2.16	<1	0.2	1.53	263		<0.1	4.76
Mellahl	436.2	2-Nov-16	<0.1	187	1.5	46.7	<1	32.5	<1	1.12	2.89	286	1.8	3.8	10.75	13.4	5.09	2.19	<0.5	0.59			<0.1	6.15
Markland	531.5	25-Jan-12	<0.1	1961	1.43	46.08		33.98	<0.1	2.79	3.37	2788.7	7.45		10.75	134	5.09	2.19	<0.5					

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016																										
Sample Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Co (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (mg/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)			
Markland	5315	8-Nov-12	<0.1	546.7	1.06	50.81		36.53	<0.1	0.88	3.61	921.82	3.4		11.34	77.39	3.4	1.36	<0.5	0.96			<0.1	8.55		
Markland	5315	10-Jan-13	<0.1	324	0.97	36.43		31.46	<0.1	0.46	1.73	661.36	1.99		9.62	41.2	2.23	0.62	<0.5	0.73			<0.1	5.45		
Markland	5315	26-Mar-13	<0.1	1260	1.49	44.3		31.9	<0.1	2.52	3.08	1886.9	4.28		9.43	84.9	3.81	1.67	<0.5	0.65			<0.1	11.07		
Markland	5315	9-May-13	<0.1	766	0.99	28.86		33.97	<0.1	1.25	2.17	1038.3	1.9		8.06	38.7	2.29	0.85	<0.5	<0.5			<0.1	4.69		
Markland	5315	17-Jul-13	<0.1	930	1.26	44.28		28.35	<0.1	1.29	3.55	1408.6	4.11		7.85	57.8	3.25	1.43	<0.5	0.54			<0.1	10.7		
Markland	5315	11-Sep-13	<0.1	269	1.15	45.23		31.86	<0.1	<0.5	2.2	401.24	<1.5		10.01	64.5	1.81	0.4	<0.5	0.7			<0.1	4.78		
Markland	5315	13-Nov-13	<0.1	329	1.19	48.09		42.09	<0.1	1.22	2.53	468.87	2.26		13.82	31	2.47	0.48	<0.5	1			<0.1	3.88		
Markland	5315	14-Jan-14	<0.1	2220	1.86	52.2		34.6	<1	3.39	4.26	3430	13.6		11.2	196	6.13	3.05	0.13	<1			<0.1	18.71		
Markland	5315	11-Mar-14	<0.1	564	<1	37.8		32	<1	1.4	1.94	1140	<5		10.2	58.8	2.6	<1	<0.1	<1			<0.1	6.23		
Markland	5315	28-May-14	<0.1	326	<1	39.7	<1	31.9	<1	<1	2.37	603	<5	3.89	9.26	44.5	2.1	1.26	0.12	<1			<0.1	9.8		
Markland	5315	8-Jul-14	<0.1	625	1.14	45.1	<1	33.8	<1	1.52	2.82	1030	<5	2.84	9.81	72.7	2.63	<1	0.15	<1			<0.1	5.52		
Markland	5315	10-Sep-14	<0.1	340	1.18	50.4	<1	37.4	<1	<1	2.16	460	<1.5	2.96	12.5	51.2	2.14	<1	0.18	1.29			<0.1	5.1		
Markland	5315	24-Nov-14	<0.1	233	<1	38.6	<1	36.8	<1	<1	1.62	401	2.5	2.73	13.4	24.9	1.73	<1	0.12	1.02			<0.1	21		
Markland	5315	28-Jan-15	<0.1	247	<1	39.4	<1	35	<1	<1	1.76	465	<1.5	2.71	11	37.8	2.12	<1	0.1	<1			<0.1	3.94		
Markland	5315	24-Mar-15	<0.1	1920	1.66	50.9	<1	26.1	<1	3.33	5.36	3400	9.2	3.72	8	249	7.1	3.9	0.15	<1			<0.1	30.3		
Markland	5315	14-May-15	<0.1	142	<1	39.1	<1	31.6	<1	<1	1.23	219	<1.5	2.13	11.2	27.9	1.33	<1	0.1	<1			<0.1	2.43		
Markland	5315	28-Jul-15	<0.1	360	<1	40.2	<1	31.8	<1	<1	2.04	448	1.5	2.74	9.88	22.4	1.86	<1	0.14	<1			<0.1	3.76		
Markland	5315	1-Sep-15	<0.1	216	1.25	51.2	<1	38.8	<1	<1	1.88	266	1.9	3.4	15.4	38.5	1.81	<1	0.21	1.16			<0.1	2.62		
Markland	5315	5-Nov-15	<0.1	186	<1	47.2	<1	38.9	<1	<1	2.07	296	3	3.46	13.4	28.8	1.79	<1	0.18	<1			<0.1	5.01		
Markland	5315	11-Jan-16	<0.1	712	<1	37.7	<1	33.1	<1	2.06	2.69	1110	3.8	2.48	10.1	60	2.83	1.15	0.13	<1			<0.1	8.87		
Markland	5315	8-Mar-16	<0.1	716	<1	38	<1	29.8	<1	2.45	2.54	1410	5.6	1.81	9.17	113	3.36	1.8	<0.1	<1			<0.1	10.6		
Markland	5315	18-May-16	<0.1	453	<1	36.4	<1	29.5	<1	<1	1.9	834	2.4	2.1	9.96	45.4	2.01	<1	<0.1	<1			<0.1	5.02		
Markland	5315	19-Jul-16	<0.1	340	<1	51.5	<1	30.8	<1	1.02	1.97	423	1.5	2.7	10.9	30.9	1.73	<1	0.14	<1			<0.1	3.4		
Markland	5315	20-Sep-16	<0.1	1760	1.56	59.9	<1	39.8	<1	1.88	2.65	1180	<1.5	3.81	13.8	75	2.97	<1	0.22	<1			<0.1	5.85		
Markland	5315	29-Nov-16	<0.1	115	1.46	<10	<1	33.1	<1	1.48	1.82	174	<1.5	3.16	11.2	18.6	1.64	<1	0.16	1.01			<0.1	2.04		
Markland	6068	25-Jan-12	<0.1	2930	1.56	48.13		35.52	<0.1	3.88	4.75	4258.1	9.65		10.58	202	6.81	3.29	<0.5	0.56			<0.1	18.79		
Markland	6068	7-Mar-12	<0.1	5080	1.22	81.63		28.28	0.1	7.02	9.35	8280	26.06		9.36	465	11.97	7.45	<0.5	0.51			<0.1	10.56		
Markland	6068	17-May-12	<0.1	2430	1.24	47.75		34.57	<0.1	3.31	3.54	2277.7	5.1		10.04	85.7	4.07	1.49	<0.5	0.59			<0.1	37.8		
Markland	6068	17-Jul-12	<0.1	88.72	0.83	48.37		33.63	<0.1	0.49	1.99	117.57	<1.5		13.07	22.34	1.72	0.2	<0.5	0.93			<0.1	2.94		
Markland	6068	20-Sep-12	<0.1	174.44	1.15	53.82		38.78	<0.1	0.36	2.38	225.41	<1.5		14.84	28.02	2.25	0.26	<0.5	1.44			<0.1	3.36		
Markland	6068	8-Nov-12	<0.1	782.36	1.14	57.71		38.38	<0.1	1.15	3.84	1258.2	5.3		12.27	128.98	4.56	1.72	<0.5	1.03			<0.1	10.25		
Markland	6068	10-Jan-13	<0.1	392	0.7	31.02		32.86	0.17	0.6	1.94	598.38	2.57		9.34	42.3	2.35	0.74	<0.5	0.97			0.15	5.43		
Markland	6068	26-Mar-13	<0.1	2060	1.61	47.3		32.22	0.11	2.84	4.66	3516.3	7.28		9.38	160	6.36	3.23	<0.5	0.65			<0.1	17.6		
Markland	6068	9-May-13	<0.1	533	0.94	31.31		38.39	<0.1	0.76	2	819.09	2.55		9.7	44.5	2.12	0.82	<0.5	<0.5			<0.1	9.67		
Markland	6068	17-Jul-13	<0.1	832	1.27	44.03		31.81	<0.1	1.43	3.51	1406.6	6.35		8.6	85.8	3.41	1.49	<0.5	0.6			<0.1	11.08		
Markland	6068	11-Sep-13	<0.1	248	1.07	45.48		34.2	<0.1	<0.5	1.88	319.33	2.15		10.98	31	1.6	0.31	<0.5	0.92			<0.1	7.02		
Markland	6068	13-Nov-13	<0.1	298	1.11	46.8		45.6	<0.1	0.71	2.55	403.98	<1.5		14.26	23.4	2.34	0.43	<0.5	0.88			<0.1	3.53		
Markland	6068	14-Jan-14	<0.1	2710	1.45	50.8		41	<1	3.6	4.85	4150	9.8		11.6	193	6.09	3.38	0.11	<1			<0.1	18.9		
Markland	6068	11-Mar-14	<0.1	1210	<1	40.4		34.9	<1	2.83	3.22	2570	8.3		11	127	4.46	2.15	<0.1	<1			<0.1	12.29		
Markland	6068	28-May-14	<0.1	692	<1	42.5	<1	34.5	<1	1.63	2.92	1260	8.3	2.39	9.57	102	2.93	1.58	0.14	<1			<0.1	9.39		
Markland	6068	8-Jul-14	<0.1	208	1.29	43.8	<1	36.1	<1	1.09	2.7	330	<5	2.86	10.3	26.8	1.8	<1	0.16	<1			<0.1	3.46		
Markland	6068	10-Sep-14	<0.1	349	1.11	47.1	<1	36.1	<1	<1	2.23	447	1.7	3.22	11.7	36.7	2	<1	0.19	1.31			<0.1	4.67		
Markland	6068	24-Nov-14	<0.1	277	<1	40	<1	34.3	<1	<1	1.86	314	<1.5	2.85	11.4	23.6	1.92	<1	0.13	<1			<0.1	3.08		
Markland	6068	28-Jan-15	<0.1	290	<1	37.4	<1	35.7	<1	<1	2	529	3	2.7	11	36.5	2.33	<1	0.11	<1			<0.1	6.1		
Markland	6068	24-Mar-15	<0.1	3100	2.04	57.5	<1	29.2	<1	4.92	5.76	4680	11.1	2.81	8.76	335	8.51	4.96	0.17	<1			<0.1	28.8		
Markland	6068	14-May-15	<0.1	183	<1	38.4	<1	32.3	<1	<1	1.65	296	2.3	2.16	10.9	36.4	1.77	<1	0.12	<1			<0.1	11.2		
Markland	6068	28-Jul-15	<0.1	479	<1	36.8	<1	31.3	<1	1	2.14	574	1.9	2.75	9.22	22.9	1.77	<1	0.14	<1			<0.1	3.8		
Markland	6068	1-Sep-15	<0.1	179	1.17	46.3	<1	39	<1	<1	2.06	248	2.2	3.22	14.6	22.2	1.74	<1	0.2	1.02			<0.1	2.43		
Markland	6068	5-Nov-15	<0.1	164	<1	42.4	<1	35.7	<1	<1	2.01	220	3.5	3.31	12.4	23.6	1.67	<1	0.17	<1			<0.1	3.56		
Markland	6068	11-Jan-16	<0.1	710	<1	37.9	<1	33.8	<1	1.41	2.81	1170	6.1	2.56	9.7	79	2.95	1.36	0.11	<1			<0.1	8.81		
Markland	6068	8-Mar-16	<0.1	1150	1	39.7	<1	31.9	<1	2.11	3.33	2170	8.3	1.99	9.53	154	4.2	2.43	0.11	<1			<0.1	14.4		
Markland	6068	18-May-16	<0.1	808	<1	37.5	<1	31.8	<1	1.18	2.4	1470	4.1	2.17	9.6	94.9	2.94	1.44	0.1	<1			<0.1	8.96		
Markland	6068	19-Jul-16	<0.1	362	<1	42.7	<1	28.8	<1	1.75	1.77	398	<1.5	2.43	10.2	18.4	1.6	<1	0.15	<1			<0.1	3.46		
Markland	6068	20-Sep-16	<0.1	1090	1.15	56.8	<1	38.8	<1	1.69	2.24	815	<1.5	3.32	13.4	50.3	2.65	<1	0.23	<1			<0.1	5.51		
Markland	6068	29-Nov-16	<0.1	159	1.62	44.4	<1	37.9	<1	<1	2.33	249	<1.5	3.21	12.4	23.8	2.19	<1	0.18	1.18			<0.1	3.57		
Markland	6068	9-Jan-12	<0.1	846	1.01	37.62		31.84	<0.1	2.21	2.62	1432.7	4.2													

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016																											
SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)				
Carnelton	720.7	29-Jan-13	<0.1	809	0.94	38.15		29.23	0.18	1.4	3.21	1492.7	<1.5		8.44	96.9	4.17	2.09	<0.5	0.79		<0.1	9.94				
Carnelton	720.7	26-Mar-13	<0.1	2340	1.89	48.68		31.91	0.16	2.93	4.42	3709.2	10.13		8.89	162	6.38	3.59	<0.5	0.68		0.15	18.08				
Carnelton	720.7	7-May-13	<0.1	771	0.89	38		37.08	<0.1	1.58	2.24	1093.3	3.32		10.33	57.2	2.58	1.01	<0.5	0.69		<0.1	6.52				
Carnelton	720.7	16-Jul-13	<0.1	1690	1.64	48.92		30.78	<0.1	2.09	5.01	2897.2	7.75		9.16	165	5.52	2.88	<0.5	0.54		<0.1	17.57				
Carnelton	720.7	24-Sep-13	<0.1	173	1.25	42.55		35.02	<0.1	<0.5	2.05	226.96	<1.5		10.74	25.4	1.78	0.28	<0.5	1		<0.1	2.38				
Carnelton	720.7	20-Nov-13	<0.1	1140	1.37	48.78		43.47	<0.1	1.18	3.15	1584.5	4.72		12.99	64	3.41	1.61	<0.5	0.9		<0.1	9.88				
Carnelton	720.7	20-Jan-14	<0.1	2060	1.46	51.3		34.6	<1	3.99	4.43	3270	11		10.7	181	6.8	3.06	0.2	<1		<0.1	18.01				
Carnelton	720.7	18-Mar-14	<0.1	2490	1.41	50.2		35.4	<1	2.84	3.73	2850	8.7		11.7	114	5	2.29	0.12	<1		<0.1	14.87				
Carnelton	720.7	28-May-14	<0.1	1210	1.27	45.5		35	<1	2	3.53	1860	7.2		2.57	9.61	86.7	3.58	1.8	0.15	<1	<0.1	12				
Carnelton	720.7	23-Jul-14	<0.1	206	1.54	45.6		37.4	<1	<1	2.29	317	<1.5		11.3	25.4	1.67	<1	0.18	1.11		<0.1	3.56				
Carnelton	720.7	17-Sep-14	<0.1	272	1.08	45.9		37.7	<1	<1	2.23	393	1.7		3.49	11.6	2.55	2.14	<1	0.19	1.25	<0.1	5.14				
Carnelton	720.7	18-Nov-14	<0.1	211	<1	42.3		38.1	<1	<1	1.77	356	1.5		3.19	13.7	24.5	1.72	<1	0.14	1.06	<0.1	2.7				
Carnelton	720.7	20-Jan-15	<0.1	220	<1	34.8		34.7	<1	1.39	1.56	404	1.9		2.42	10.7	20.9	1.83	<1	0.12	<1	<0.1	3.96				
Carnelton	720.7	25-Mar-15	<0.1	3740	2.34	64.7		28.4	<1	5.94	7.24	5230	19		8.22	314	9.3	5.3	0.16	<1	<1	<0.1	30.1				
Carnelton	720.7	19-May-15	<0.1	139	<1	36.4		32.5	<1	<1	1.88	206	<1.5		2.12	11	24.1	1.26	<1	0.11	<1	<0.1	2.32				
Carnelton	720.7	7-Jul-15	<0.1	2330	1.75	51.2		36	<1	3.54	4.71	3300	10.8		9.98	170	5.55	2.9	0.17	<1	200	<0.1	16.6				
Carnelton	720.7	29-Sep-15	<0.1	262	<1	48.8		40.8	<1	<1	1.87	277	2		3.58	15	20.8	1.92	<1	0.22	1.11	<0.1	3.73				
Carnelton	720.7	12-Nov-15	<0.1	193	<1	41.7		38.4	<1	<1	1.97	287	2		12.5	27.4	1.68	<1	0.17	<1	259	<0.1	3.38				
Carnelton	720.7	5-Jan-16	<0.1	3020	2.16	59		34.5	<1	4.66	6.79	4910	13.8		9.74	357	8.46	5.29	0.14	<1	183	<0.1	31.6				
Carnelton	720.7	22-Mar-16	<0.1	846	<1	40.1		33.9	<1	1.14	2.95	1500	4.7		10.2	93.9	3.37	1.73	0.11	<1	191	<0.1	9.23				
Carnelton	720.7	10-May-16	<0.1	1450	1.22	42.3		28.2	<1	2.2	3.83	2530	9.3		9.25	118	4.44	2.52	0.12	<1	170	<0.1	12.8				
Carnelton	720.7	5-Jul-16	<0.1	813	<1	39.5		28.5	<1	1.4	2.47	904	3.2		9.03	44.1	2.3	<1	0.15	<1	182	<0.1	4.9				
Carnelton	720.7	13-Sep-16	<0.1	389	1.42	49.1		40.7	<1	1.77	1.89	500	<1.5		3.2	12.9	40.3	2.13	<1	0.2	1.34	<0.1	5.71				
Carnelton	720.7	21-Nov-16	<0.1	291	<1	54.3		41.4	<1	<1	2.08	326	<1.5		12.9	23.9	2.22	<1	0.21	1.31	297	<0.1	5.71				
Carnelton	720.7	21-Nov-16	<0.1	184	1.02	56.4		43.2	<1	<1	2.19	198	<1.5		13.6	18.5	2.04	<1	0.21	1.5	287	<0.1	2.15				
Newburgh	776	9-Jan-12	<0.1	1018	1.18	39.44		33.48	<0.1	1.95	7.41	1700.4	5.66		10.81	125	4.15	1.97	<0.5	0.68		<0.1	21.49				
Newburgh	776	14-Mar-12	<0.1	1970	0.3	49.74		32.2	<0.1	3.1	4.37	3360	9.88		9.34	208	5.86	3.4	<0.5	0.78		<0.1	19.9				
Newburgh	776	31-Mar-12	<0.1	410	0.9	41.35		35.59	<0.1	1.18	2.15	404.08	<1.5		11.26	27.2	1.88	0.45	<0.5	0.54		<0.1	4.39				
Newburgh	776	10-Jul-12	<0.1	242	0.81	42.69		35.92	<0.1	0.28	2.17	175.15	<1.5		11.94	140.7	1.45	0.15	<0.5	0.89		<0.1	2.31				
Newburgh	776	12-Sep-12	<0.1	239.93	1.04	51.24		38.32	<0.1	0.22	2.42	329.77	<1.5		13.73	33.8	2.3	0.33	<0.5	0.97		<0.1	4.35				
Newburgh	776	14-Nov-12	<0.1	352.51	1.07	54.15		39.39	<0.1	0.38	2.67	501.13	1.54		12.61	43.58	3.01	0.58	<0.5	1.07		<0.1	4.9				
Newburgh	776	29-Jan-13	<0.1	772	0.95	59.71		30.16	0.31	1.13	3.01	1456.4	3.05		8.85	102	3.51	2.17	<0.5	0.9		0.16	10.35				
Newburgh	776	26-Mar-13	<0.1	3220	2.49	59.71		34.23	0.21	3.96	6.26	5483.7	13.81		9.94	268	9.54	5.18	<0.5	<0.5		<0.1	26.5				
Newburgh	776	7-May-13	<0.1	903	1.16	39.38		33.54	<0.1	1.31	2.8	1546.1	5.79		10.44	93.1	3.31	1.49	<0.5	<0.5		<0.1	8.71				
Newburgh	776	11-Jul-13	<0.1	1950	1.45	48.47		36.47	0.11	2.43	4.69	3404	8.37		8.13	200	5.56	3.55	<0.5	0.56		<0.1	15				
Newburgh	776	24-Sep-13	<0.1	737	1.46	44.6		33.77	<0.1	0.7	2.93	898.82	3.15		10.93	58.8	2.77	0.91	<0.5	1.06		<0.1	6.07				
Newburgh	776	20-Nov-13	<0.1	2400	2.01	60.55		44.65	0.11	3	5.61	3795.7	15.03		14	217	6.64	3.62	<0.5	0.85		<0.1	13.4				
Newburgh	776	20-Jan-14	<0.1	2580	1.62	53		35.3	<1	4.04	4.67	3860	8.8		11.1	192	7.12	3.32	0.18	<1		<0.1	21.2				
Newburgh	776	18-Mar-14	<0.1	2180	1.21	49.5		39.8	<1	2.21	3.39	2380	7.8		12.4	131	4.31	1.87	0.11	<1		<0.1	11.78				
Newburgh	776	28-May-14	<0.1	1340	1.45	42.5		37.7	<1	2.01	4.04	2440	7.9		10.9	175	4.39	2.58	0.14	<1		<0.1	14.8				
Newburgh	776	23-Jul-14	<0.1	159	1.38	40.5		38.6	<1	<1	2.38	245	1.6		11.1	10.9	1.68	<1	0.18	1.08		<0.1	2.13				
Newburgh	776	17-Sep-14	<0.1	225	1.06	47.5		38.9	<1	<1	2.12	325	<1.5		12.9	26.1	1.87	<1	0.19	1.22		<0.1	4.48				
Newburgh	776	18-Nov-14	<0.1	91.5	<1	40.7		38.2	<1	<1	1.59	139	<1.5		11.4	37.7	2.3	<1	0.14	<1		<0.1	5.15				
Newburgh	776	20-Jan-15	<0.1	283	<1	35.4		35.7	<1	6.2	6.98	4120	13		8.26	23.9	10.5	4.9	0.18	<1		<0.1	23.7				
Newburgh	776	25-Mar-15	<0.1	3070	2.34	56.5		35.4	<1	<1	1.45	388	<1.5		12.2	48.8	1.64	<1	0.11	<1		<0.1	3.02				
Newburgh	776	19-May-15	<0.1	243	<1	38.2		35.4	<1	<1	1.45	388	<1.5		12.2	48.8	1.64	<1	0.11	<1		<0.1	3.02				
Newburgh	776	7-Jul-15	<0.1	5040	2.45	69.3		38.3	<1	6.02	7.18	5700	22		4.1	12.2	27.8	9.12	5.06	0.21	<1	211	0.1	28.8			
Newburgh	776	29-Sep-15	<0.1	248	<1	47.6		40.5	<1	<1	1.44	278	1.9		14.4	21.3	1.81	<1	0.22	<1	270	<0.1	4.44				
Newburgh	776	12-Nov-15	<0.1	273	<1	43.4		37.8	<1	<1	2.41	435	2.9		12.9	37.8	2.15	<1	0.18	1.06		<0.1	4.19				
Newburgh	776	5-Jan-16	<0.1	2660	1.95	52.6		33.4	<1	4.23	5.82	4310	19.9		10	296	7.21	4.29	0.16	<1	163	<0.1	21.9				
Newburgh	776	22-Mar-16	<0.1	1550	1.48	49.3		36.6	<1	2.12	4.38	2770	8.3		12.2	185	5.53	3.33	0.12	<1	204	<0.1	16.8				
Newburgh	776	10-May-16	<0.1	2210	1.51	52.2		30	<1	3.41	5.77	4150	18.8		10.2	268	7.52	4.68	0.13	<1	169	<0.1	20.7				
Newburgh	776	5-Jul-16	<0.1	1430	1.4	46.4		33.1	<1	1.82	2.72	1480	3.7		11	63.6	3.05	1.09	0.16	<1	199	<0.1	9.05				
Newburgh	776	13-Sep-16	<0.1	314	1.19	47.2		41.5	<1	1.26	1.76	386	<1.5		13.1	25.3	1.75	<1	0.19	1.17	241	<0.1	15.7				
J.T. Myers	846	9-Jan-12	<0.1	1940	1.58	49.21		33.4	<0.1	3.3	5.11	3324	9.89		9.9	260	6.53	3.52	<0.5	0.55		<0.1	21				
J.T. Myers	846	13-Mar-12	<0.1	2790	1.85	58.5		31.74	0.14	4.26	5.94	4450	13.18		9.25	285	7.64	4.72	<0.5	0.62		<0.1	27.1				
J.T. Myers	846	30-May-12	<0.1	876	0.96	42.94		36.07	<0.1	1.57	2.68	891.05	2.31		10.3	56.2	2.31	0.72	<0.5	0.56		<0.1	5.31				
J.T. Myers	846	10-Jul-12	<0.1	355	0.89	45.2		37.4	<0.1	0.39	1.87	253	<1.5		12.												

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016

SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (mg/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)	
J.T. Myers	846	27-Mar-13	<0.1	2480	1.8	55.21		34.43	<0.1	3.21	5.58	4355.2	15.2		9.95	262	8.01	4.56	<0.5	0.56			<0.1	22
J.T. Myers	846	8-May-13	<0.1	1070	1.28	41.5		33.37	<0.1	1.56	3.28	1932.4	6.85		9.92	129	3.78	1.96	<0.5	0.54			<0.1	12.06
J.T. Myers	846	23-Jul-13	<0.1	689	1.18	42.57		35.29	<0.1	0.67	3.13	1117.6	3.71		9.48	76.3	2.58	1.2	<0.5	0.76			<0.1	6.59
J.T. Myers	846	19-Sep-13	<0.1	205	1.46	41.84		36.54	<0.1	<0.5	2.25	255.24	<1.5		11.65	22.9	1.59	0.3	<0.5	0.87			<0.1	3.65
J.T. Myers	846	20-Nov-13	<0.1	1390	1.57	52.85		43.89	<0.1	1.88	4.51	233.1	11.43		13.56	134	5.39	2.46	<0.5	0.76			<0.1	14.3
J.T. Myers	846	21-Jan-14	<0.1	402	<1	32.8		35.6	<1	<1	1.84	669	<5		9.88	27.8	2.12	<1	<0.1	<1			<0.1	5.75
J.T. Myers	846	19-Mar-14	<0.1	865	<1	35.2		33.9	<1	<1	1.94	927	<5		10.5	36.5	2.41	<1	<0.1	<1			<0.1	5.76
J.T. Myers	846	29-May-14	<0.1	1300	1.44	49.8	<1	36	<1	2.29	4.09	2450	1.1	2.46	9.66	190	4.72	2.83	0.14	<1			<0.1	14.2
J.T. Myers	846	17-Jul-14	<0.1	139	1.04	45.2	<1	37.9	<1	<1	2.09	224	<5	2.74	10.8	27.6	1.43	<1	0.19	<1			<0.1	2.61
J.T. Myers	846	16-Sep-14	<0.1	234	1.01	50.1	<1	41.8	<1	<1	2.12	334	<1.5	3.24	14.3	28.8	1.96	<1	0.21	1.08			<0.1	7.17
J.T. Myers	846	19-Nov-14	<0.1	1700	1.61	58.1	<1	38.6	<1	2.48	4.77	2710	13.3	3.45	13.4	254	5.67	3.3	0.17	<1			<0.1	17.2
J.T. Myers	846	21-Jan-15	<0.1	308	<1	35.2	<1	35.9	<1	1.26	1.78	540	2.1	2.49	10.9	32	2.24	<1	0.13	<1			<0.1	5.51
J.T. Myers	846	26-Mar-15	<0.1	3090	1.59	52.9	<1	28	<1	5.39	4.82	3280	7.7	2.84	7.45	166	6.33	3.64	0.18	<1			<0.1	18.9
J.T. Myers	846	20-May-15	<0.1	517	1.06	38.1	<1	33.9	<1	<1	1.82	750	2.2	2.27	10.8	60.8	2.07	<1	0.11	<1			<0.1	5.39
J.T. Myers	846	7-Jul-15	<0.1	2960	2.28	57.6	<1	35	<1	4.43	5.79	4000	16.9	3.43	9.79	233	6.85	4.05	0.18	<1			<0.1	21.3
J.T. Myers	846	14-Sep-15	<0.1	438	1.18	44.1	<1	40.5	<1	<1	2.1	458	1.8	3.22	12.5	39.7	1.91	<1	0.23	<1			<0.1	3.23
J.T. Myers	846	9-Nov-15	<0.1	207	<1	44.7	<1	40.8	<1	1.33	1.93	286	2.4	3.59	14.3	26.9	1.83	<1	0.17	<1			<0.1	2.49
J.T. Myers	846	6-Jan-16	<0.1	2040	1.38	51.8	<1	31.8	<1	3.16	5.07	3290	14	3.02	8.75	238	6.57	3.68	0.12	<1			<0.1	19.3
J.T. Myers	846	23-Mar-16	<0.1	2080	1.5	49.1	<1	37	<1	3.16	4.43	3460	9.3	2.38	11.6	191	5.74	3.31	0.12	<1			<0.1	16.9
J.T. Myers	846	11-May-16	<0.1	1250	1.18	46.8	<1	29.5	<1	5.21	7.61	5960	31.7	2.44	9.66	371	9.64	6.71	0.14	<1			<0.1	31.5
J.T. Myers	846	5-Jul-16	<0.1	1250	1.18	46.8	<1	35.2	<1	1.48	2.69	1430	4	2.84	11.1	62.5	2.99	1.24	0.16	<1			<0.1	40.6
J.T. Myers	846	14-Sep-16	<0.1	384	1.22	44.6	<1	41.6	<1	1.18	2.09	467	<1.5	3.3	12.4	38	1.98	<1	0.21	1.06			<0.1	4.54
J.T. Myers	846	22-Nov-16	<0.1	365	<1	50.2	<1	44.3	<1	<1	1.82	351	<1.5	3.41	13.1	27.9	1.97	<1	0.19	<1			<0.1	2.93
Smithland	918.5	10-Jan-12	<0.1	1465	1.57	46.18		44.33	<0.1	2.43	3.46	2104.2	5.38		13.45	133	4.65	2.25	<0.5	0.73			<0.1	11.04
Smithland	918.5	13-Mar-12	<0.1	3220	1.9	62.53		37.72	0.14	4.21	5.61	4790	12.59		11.57	268	7.52	4.26	<0.5	0.62			<0.1	23.8
Smithland	918.5	30-May-12	<0.1	388	0.83	40.48		38.4	<0.1	1.13	2.07	365.64	<1.5		12.03	31.6	1.6	0.36	<0.5	0.66			<0.1	2.79
Smithland	918.5	11-Jul-12	<0.1	58.41	1.18	43.47		38.17	<0.1	1.57	1.48	103.92	<1.5		15.5	35.65	1.26	0.14	<0.5	0.67			<0.1	1.04
Smithland	918.5	13-Sep-12	<0.1	157.35	1.24	51.19		40.06	<0.1	0.33	1.9	219.84	<1.5		14.75	58.52	2.31	0.32	<0.5	0.99			<0.1	8.84
Smithland	918.5	15-Nov-12	<0.1	250.02	0.93	60.42		45.48	<0.1	0.25	2.36	382.01	<1.5		15.68	27.88	2.71	0.47	<0.5	0.87			<0.1	3.95
Smithland	918.5	30-Jan-13	<0.1	2400	1.6	53.82		36.11	0.14	3.24	4.45	3374	7.65		10.7	134	5.52	3.56	<0.5	1.13			<0.1	17.87
Smithland	918.5	27-Mar-13	<0.1	2560	1.75	55.5		38.59	0.11	3.63	4.53	3870.8	9.42		11.3	188	5.77	3.82	<0.5	<0.5			0.13	18.09
Smithland	918.5	8-May-13	<0.1	1170	1.63	49.99		42.78	0.11	1.76	3.44	1701.2	7.19		12.84	87.9	3.54	1.52	<0.5	0.6			<0.1	8.23
Smithland	918.5	23-Jul-13	<0.1	1170	1.18	39.05		36.61	<0.1	<0.5	2.14	391.72	<1.5		10.68	26.9	1.62	0.4	<0.5	0.71			<0.1	2.96
Smithland	918.5	19-Sep-13	<0.1	205	1.49	46.02		40.24	<0.1	<0.5	2.22	238.25	<1.5		14.32	30	1.72	0.25	<0.5	0.91			<0.1	2.97
Smithland	918.5	20-Nov-13	<0.1	1280	1.65	47.37		40.03	<0.1	1.54	4.26	1990.9	7.44		12.22	98.3	4.09	1.78	<0.5	0.78			<0.1	12.39
Smithland	918.5	21-Jan-14	<0.1	1620	1.12	50.2		41	<1	2.73	3.77	2750	8.4		12.3	152	4.62	2.54	0.1	<1			<0.1	12.91
Smithland	918.5	19-Mar-14	<0.1	3920	1.65	58.7		41	<1	4.17	4.62	4120	15.2		12.7	142	6.28	3.74	0.13	<1			<0.1	17.7
Smithland	918.5	29-May-14	<0.1	1070	1.29	48.3	<1	40.5	<1	1.6	3.82	1790	9.7	2.75	11.3	118	3.58	1.91	0.14	<1			<0.1	24.5
Smithland	918.5	17-Jul-14	<0.1	142	1.23	47.4	<1	45.7	<1	<1	1.87	203	<5	2.86	14.2	25.8	1.42	<1	0.19	1			<0.1	2
Smithland	918.5	16-Sep-14	<0.1	386	1.17	47.8	<1	41.9	<1	1.01	2.23	521	<1.5	3.43	13.4	41.3	2.11	<1	0.2	1.15			<0.1	3.36
Smithland	918.5	19-Nov-14	<0.1	60.1	<1	40.3	<1	43.8	<1	<1	1.41	80.3	<1.5	3.12	14.7	13.2	1.25	<1	0.15	<1			<0.1	2.55
Smithland	918.5	21-Jan-15	<0.1	254	<1	38.7	<1	44	<1	1.04	1.7	420	1.5	2.85	13.6	28.5	1.86	<1	0.16	<1			<0.1	5.53
Smithland	918.5	26-Mar-15	<0.1	2430	1.4	49.4	<1	30.1	<1	3.23	4.13	2650	6	3.28	8.45	11.6	4.67	2.36	0.14	<1			<0.1	14.9
Smithland	918.5	20-May-15	<0.1	544	1.35	44.6	<1	40.1	<1	1.09	2.16	740	2.5	2.74	13.7	56.2	2.37	<1	0.14	<1			<0.1	5.37
Smithland	918.5	7-Jul-15	<0.1	2990	2.55	62.3	<1	39	<1	4.38	6.07	4010	14.9	4.08	11.2	245	7.19	4.21	0.2	<1			<0.1	20.5
Smithland	918.5	14-Sep-15	<0.1	478	1.27	47.8	<1	42.4	<1	<1	1.78	510	2.2	3.36	15.6	71	1.87	<1	0.21	<1			<0.1	213
Smithland	918.5	9-Nov-15	<0.1	156	<1	47.7	<1	44	<1	<1	1.94	215	1.6	3.87	15.3	24	1.73	<1	0.18	<1			<0.1	1.87
Smithland	918.5	6-Jan-16	<0.1	3590	2.01	54	<1	29.6	<1	4.78	5.57	4440	12	3.89	8.46	174	6.11	4	0.13	<1			<0.1	22
Smithland	918.5	23-Mar-16	<0.1	1880	1.4	50.3	<1	43.5	<1	2.9	4.03	2660	8.8	2.8	13.7	131	4.66	2.52	0.13	<1			<0.1	12.7
Smithland	918.5	11-May-16	<0.1	2820	2.06	56.4	<1	39.1	<1	3.74	4.93	3850	14.1	2.9	12.4	198	5.98	3.4	0.15	<1			<0.1	19.6
Smithland	918.5	6-Jul-16	<0.1	968	1.26	44	<1	36.2	<1	1.24	2.34	961	2.4	3.03	12.1	50.1	2.37	<1	0.16	<1			<0.1	7.61
Smithland	918.5	14-Sep-16	<0.1	366	1.67	43	<1	42.5	<1	1.32	2.03	417	<1.5	3.68	13.6	47.3	1.96	<1	0.19	1.16			<0.1	5.07
Smithland	918.5	22-Nov-16	<0.1	224	1.06	49.3	<1	46.5	<1	<1	1.69	228	<1.5	3.38	16.4	19	1.64	<1	0.2	1.23			<0.1	4.2
L&D 52	938.9	10-Jan-12	<0.1	1708	1.54	47.44		39.97	<0.1	2.55	3.85	2515.3	7.53		11.98	176	5.04	2.26	<0.5	0.64			<0.1	13.96
L&D 52	938.9	13-Mar-12	<0.1	2140	1.67	52.42		34.85	<0.1	3.4	4.28	3390	9.25		10.47	175	5.52	3.14	<0.5	0.77			<0.1	18.28
L&D 52	938.9	30-May-12	<0.1	411	0.89	38.51		35.06	<0.1	1.23	1.87	369.73	<1.5		10.77	36.96	1.53	0.36	<0.5	0.59			<0.1	4.04
L&D 52	938.9	11-Jul-12	<0.1	131.68	1.51	32.99																		

Appendix B - Total Recoverable Metals Results, January 2012 through December 2016

SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (mg/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Sr (ug/L)	Ti (ug/L)	Zn (ug/L)
L&D 52	938.9	21-May-13	<0.1	1220	1.56	49.92		41.72	<0.1	1.95	3.35	1750.9	8.96		12.16	98.6	3.57	1.67	<0.5	0.74		<0.1	9.35
L&D 52	938.9	23-Jul-13	<0.1	1190	1.58	45.19		36.42	<0.1	1.2	3.27	1864.7	5		9.81	156	3.26	1.55	<0.5	0.54		<0.1	12.12
L&D 52	938.9	24-Sep-13	<0.1	574	1.62	48.02		40.75	<0.1	0.64	2.27	597.1	4.05		13.71	51.9	1.99	0.66	<0.5	0.97		<0.1	5.27
L&D 52	938.9	20-Nov-13	<0.1	1900	1.79	54.67		42.01	0.12	2.51	6.5	3083.4	14.56		12.65	177	5.64	2.95	<0.5	0.88		<0.1	16.4
L&D 52	938.9	21-Jan-14	<0.1	4220	2.32	69.4		41.7	<1	5.94	6.59	6000	18		12.5	301	9.09	5.29	0.25	<1		<0.1	36.3
L&D 52	938.9	19-Mar-14	<0.1	4050	1.85	61.6		43.2	<1	4.17	5.02	4270	11.8		13.2	144	6.5	3.22	0.14	<1		<0.1	20.3
L&D 52	938.9	29-May-14	<0.1	1730	1.57	57.1	<1	41.4	<1	2.63	4.56	2940	16	2.89	11.8	203	4.88	3	0.14	<1		<0.1	15.9
L&D 52	938.9	17-Jul-14	<0.1	259	1.29	49.5	<1	46.8	<1	<1	2.02	416	<5	2.87	14.3	36.7	1.66	<1	0.18	<1		<0.1	3.91
L&D 52	938.9	17-Sep-14	<0.1	514	1.62	45.6	<1	38.7	<1	1.16	2.17	597	<1.5	3.25	12	44.1	2.21	<1	0.2	1.03		<0.1	3.86
L&D 52	938.9	19-Nov-14	<0.1	191	<1	40.4	<1	42.5	<1	<1	1.64	290	<1.5	3.1	14.3	25.1	1.6	<1	0.16	1.04		<0.1	2.6
L&D 52	938.9	21-Jan-15	<0.1	720	1	43.1	<1	43.2	<1	1.73	2.51	1140	2.9	2.84	13.4	86.4	2.99	1.2	0.21	<1		<0.1	7.69
L&D 52	938.9	26-Mar-15	<0.1	3320	1.66	57.2	<1	30	<1	3.94	4.94	3750	8.4	3.55	8.33	162	6.46	4.19	0.15	<1		<0.1	26.5
L&D 52	938.9	20-May-15	<0.1	783	1.22	47	<1	40.5	<1	1.62	2.19	1130	3.7	2.78	13.4	95.6	2.38	1.16	0.13	<1		<0.1	5.98
L&D 52	938.9	7-Jul-15	<0.1	1030	1.6	45.2	<1	36.3	<1	1.92	3.34	1330	5.4	3.89	10	86.4	3.38	1.3	0.23	<1	151	<0.1	11.2
L&D 52	938.9	29-Sep-15	<0.1	400	1.75	37.4	<1	30	<1	1.03	1.9	499	2.4	2.61	10.2	57.2	1.89	<1	0.19	<1	138	<0.1	4.5
L&D 52	938.9	9-Nov-15	<0.1	209	1.2	54.2	<1	50.3	<1	1.09	1.88	361	4.7	3.73	17.34	46.83	2	<1	0.18	<1		<0.1	2.97
L&D 52	938.9	5-Jan-16	<0.1	2300	1.47	39.1	<1	29	<1	2.28	3.02	2130	4.8	3.57	8.06	45.5	2.86	2.31	0.18	<1	116	<0.1	29
L&D 52	938.9	23-Mar-16	<0.1	2620	1.77	58.4	<1	42.8	<1	4.19	6.38	4150	16.4	2.74	13.3	257	7.57	4.96	0.14	<1	174	<0.1	24.1
L&D 52	938.9	11-May-16	<0.1	1920	1.77	52	<1	40.1	<1	2.76	4.36	3100	11.3	2.85	12.9	191	5.11	3	0.14	<1	169	<0.1	14.8
L&D 52	938.9	6-Jul-16	<0.1	1830	1.56	50.3	<1	36.9	<1	2.4	3.13	1900	4.1	3.19	12.3	96.2	3.72	1.76	0.17	<1	195	<0.1	9.3
L&D 52	938.9	14-Sep-16	<0.1	287	1.66	39	<1	37.8	<1	1.32	1.55	383	<1.5	2.79	11.7	53	1.39	<1	0.17	<1	151	<0.1	3.16
L&D 52	938.9	22-Nov-16	<0.1	339	1.22	42.6	<1	38.5	<1	1.06	1.59	323	<1.5	2.93	12.4	30.8	1.58	<1	0.19	1.03	214	<0.1	2.71

Appendix B. Dissolved Metals Results, January 2012 through December 2016

Sample/Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Co (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mn (mg/L)	Nm (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Ti (ug/L)	Zn (ug/L)
New Cumberland	54.4	9-Jan-12	<0.1	16.43	0.48	33.04		25.5	<0.1	0.89	1.35	<50	<1.5		7.08	89.98	3.93	0.12	<0.5	0.51	<0.1	3.38
New Cumberland	54.4	8-Mar-12	<0.1	18.18	0.18	29.81		21.05	<0.1	0.5	0.98	<50	<1.5		5.69	63.2	2.16	<0.1	<0.5	<0.5	<0.1	2.04
New Cumberland	54.4	15-May-12	<0.1	14.59	0.41	35.16		21.94	<0.1	2.99	<50	<50	<1.5		5.96	24.73	2.08	<0.1	<0.5	<0.5	<0.1	1.76
New Cumberland	54.4	23-Jul-12	<0.1	11.92	0.79	51.11		37.45	<0.1	0.37	<0.1	<50	<1.5		11.14	3.34	2.07	<0.1	<0.5	1.05	<0.1	2.59
New Cumberland	54.4	19-Sep-12	<0.1	9.45	0.9	46.27		34.87	<0.1	0.5	2.08	<50	<1.5		9.7	11.28	2.21	<0.1	<0.5	1.23	<0.1	2.18
New Cumberland	54.4	20-Nov-12	<0.1	17.47	0.36	33.29		23.15	<0.1	0.18	2.12	<50	<1.5		5.92	66.26	2.58	<0.1	<0.5	<0.5	<0.1	2.95
New Cumberland	54.4	9-Jan-13	<0.1	16.73	0.36	35.88		29.21	<0.1	0.2	1.85	<50	<1.5		7.66	94	3.27	0.14	<0.5	<0.5	<0.1	<1
New Cumberland	54.4	20-Mar-13	<0.1	19.38	0.25	31.64		24.84	<0.1	0.18	1.06	<50	<1.5		6.7	75.7	3.15	<0.1	<0.5	<0.5	<0.1	3.28
New Cumberland	54.4	14-May-13	<0.1	19.61	0.45	39.95		31.17	<0.1	<0.5	2.54	<50	<1.5		9.02	13.56	2.13	<0.1	<0.5	0.55	<0.1	2.14
New Cumberland	54.4	15-Jul-13	<0.1	16.24	0.63	36.29		27.24	<0.1	<0.5	2.68	<50	<1.5		6.9	4.08	1.66	<0.1	<0.5	<0.5	<0.1	1.27
New Cumberland	54.4	11-Sep-13	<0.1	14.23	0.64	40.22		26.06	<0.1	<0.5	4.49	<50	<1.5		6.81	23	1.73	<0.1	<0.5	0.63	<0.1	2.18
New Cumberland	54.4	14-Nov-13	<0.1	9.08	0.69	36.09		26.48	<0.1	<0.5	3.3	<50	<1.5		6.54	18.51	1.59	<0.1	<0.5	<0.5	<0.1	2.33
New Cumberland	54.4	13-Jan-14	<0.1	13.34	<1	32.5		26.2	<1	<1	1.66	<50	<5		6.62	88.4	2.65	<1	<0.1	<1	<0.1	3.32
New Cumberland	54.4	31-Mar-14	<0.1	19.81	<1	32.9		26.3	<1	<1	1.28	<50	<5		7.58	109	3.01	<1	<0.1	<1	<0.1	<1
New Cumberland	54.4	14-May-14	<0.1	18.9	<1	30.2		25.7	<1	<1	1.65	<50	<5	1.66	6.91	27	1.38	<1	<0.1	<1	<0.1	1.77
New Cumberland	54.4	29-Jul-14	<0.1	18.9	<1	43.4		30.3	<1	<1	2.94	<50	<1.5	2.27	7.79	9.52	1.39	<1	0.11	<1	<0.1	<1
New Cumberland	54.4	23-Sep-14	<0.1	13.6	<1	43.8		32	<1	<1	3.27	<50	<1.5	2.54	8.74	52.6	1.44	<1	0.13	<1	<0.1	2.3
New Cumberland	54.4	19-Nov-14	<0.1	12.6	<1	37.1		27.3	<1	<1	2.19	<50	<1.5	2.16	7.07	43.4	1.47	<1	<0.1	<1	<0.1	1.7
New Cumberland	54.4	13-Jan-15	<0.1	11.5	<1	31.8		24.6	<1	1.26	2.02	<50	<1.5	2	6.36	68.2	2.26	<1	<0.1	<1	<0.1	2.49
New Cumberland	54.4	24-Mar-15	<0.1	15	<1	33.2		20.9	<1	<1	<1	<50	<1.5	1.77	5.68	69.8	2.46	<1	<0.1	<1	<0.1	1.75
New Cumberland	54.4	12-May-15	<0.1	26.4	<1	38.8		28.6	<1	<1	2.65	<50	<1.5	1.84	8.14	18.8	2.1	<1	<0.1	<1	<0.1	3.18
New Cumberland	54.4	28-Jul-15	<0.1	21.7	<1	39.4		26.3	<1	<1	3.28	<50	<1.5	2.09	6.96	5.2	1.34	<1	<0.1	<1	<0.1	4.91
New Cumberland	54.4	1-Sep-15	<0.1	12.4	<1	48.2		38	<1	<1	4.11	<50	<1.5	2.67	10.6	2.94	1.33	<1	0.16	<1	<0.1	1.85
New Cumberland	54.4	17-Nov-15	<0.1	11.1	<1	36		26	<1	<1	2.68	<50	<1.5	2.24	7.2	35	1.55	<1	<0.1	<1	<0.1	2.12
New Cumberland	54.4	26-Jan-16	<0.1	15.6	<1	33.7		29.9	<1	<1	1.55	<50	<1.5	1.91	8.56	95.5	2.5	<1	<0.1	<1	<0.1	2.97
New Cumberland	54.4	22-Mar-16	<0.1	16.4	<1	26.5		22	<1	<1	1.12	<50	<1.5	1.59	6.2	56.5	1.78	<1	<0.1	<1	<0.1	1.43
New Cumberland	54.4	10-May-16	<0.1	19	<1	30.6		22.8	<1	<1	1.54	<50	<1.5	1.56	6.19	27.4	1.51	<1	<0.1	<1	<0.1	1.99
New Cumberland	54.4	6-Jul-16	<0.1	20.1	<1	43.6		32.5	<1	<1	3.3	<50	<1.5	2.26	9.06	53.7	1.45	<1	0.11	<1	<0.1	3.06
New Cumberland	54.4	7-Sep-16	<0.1	9.97	<1	38.4		29.3	<1	<1	4.28	<50	<1.5	2.48	8.7	<1	1.35	<1	0.16	1.22	<0.1	2.63
New Cumberland	54.4	21-Nov-16	<0.1	11.1	<1	30.3		23.8	<1	<1	2.2	54.9	<1.5	1.96	6.44	41.2	1.36	<1	<0.1	<1	<0.1	1.9
Pike Island	84.2	9-Jan-12	<0.1	17.01	0.27	28.86		22.6	<0.1	0.58	1.01	<50	<1.5		6.07	66.19	3.11	<0.1	<0.5	<0.5	<0.1	3.64
Pike Island	84.2	8-Mar-12	<0.1	18.78	0.22	29.73		21.12	<0.1	0.51	1	<50	<1.5		5.43	57.8	2.18	<0.1	<0.5	<0.5	<0.1	2.18
Pike Island	84.2	15-May-12	<0.1	12.94	0.29	35.01		22.31	<0.1	<0.1	1.58	<50	<1.5		6.03	17.14	1.78	<0.1	<0.5	<0.5	<0.1	<1
Pike Island	84.2	23-Jul-12	<0.1	14.26	1.02	47.5		36.91	<0.1	0.35	2.69	<50	<1.5		10.92	5.78	2.3	<0.1	<0.5	1.21	<0.1	2.2
Pike Island	84.2	19-Sep-12	<0.1	9.91	1.05	45.15		35.85	<0.1	0.18	2.24	<50	<1.5		10.56	2.99	2.26	<0.1	<0.5	1.21	<0.1	1.56
Pike Island	84.2	20-Nov-12	<0.1	14.7	0.36	33.24		24.63	<0.1	0.33	1.38	<50	<1.5		6.35	54.52	2.39	<0.1	<0.5	0.52	<0.1	1.62
Pike Island	84.2	9-Jan-13	<0.1	17.69	0.38	36.43		30.08	<0.1	0.15	1.23	<50	<1.5		7.8	82.3	2.95	<0.1	<0.5	<0.5	<0.1	2.89
Pike Island	84.2	20-Mar-13	<0.1	16.6	0.26	32.55		23.49	<0.1	0.14	<0.1	<50	<1.5		6.16	84.9	3.25	<0.1	<0.5	<0.5	<0.1	<1
Pike Island	84.2	14-May-13	<0.1	19.69	0.42	42.87		35.88	<0.1	<0.5	<0.1	<50	<1.5		10.3	7.54	2.01	<0.1	<0.5	0.55	<0.1	1.78
Pike Island	84.2	15-Jul-13	<0.1	15.61	0.72	36.44		27.93	<0.1	<0.5	2.17	<50	<1.5		6.86	7.51	1.76	<0.1	<0.5	0.55	<0.1	<1
Pike Island	84.2	11-Sep-13	<0.1	14.07	0.69	37.7		24.41	<0.1	<0.5	2.22	<50	<1.5		6.58	41.8	1.56	<0.1	<0.5	0.58	<0.1	1.22
Pike Island	84.2	14-Nov-13	<0.1	10.29	0.65	37.94		31.79	<0.1	<0.5	1.55	<50	<1.93		7.94	18.22	1.73	0.11	<0.5	0.57	<0.1	1.78
Pike Island	84.2	13-Jan-14	<0.1	11.19	<1	33.3		28.5	<1	<1	<1	<50	<5		6.96	81	2.62	<1	<0.1	<1	<0.1	2.48
Pike Island	84.2	31-Mar-14	<0.1	19.53	<1	33.3		25.8	<1	<1	1.04	<50	<5		6.84	102	2.72	<1	<0.1	<1	<0.1	<1
Pike Island	84.2	14-May-14	<0.1	19.5	<1	36.1		29.9	<1	<1	<1	<50	<5	1.86	7.76	34	1.59	<1	<0.1	<1	<0.1	<1
Pike Island	84.2	29-Jul-14	<0.1	16	<1	42.8		32.1	<1	<1	1.77	<50	<1.5	2.38	8.47	16.2	1.43	<1	0.12	<1	<0.1	1.22
Pike Island	84.2	23-Sep-14	<0.1	14.4	<1	45.3		36.4	<1	<1	2.16	<50	<1.5	2.6	10.8	19.4	1.43	<1	0.15	<1	<0.1	1.72
Pike Island	84.2	19-Nov-14	<0.1	12	<1	34.3		27	<1	<1	1.21	<50	<1.5	2.16	7.14	38.7	1.19	<1	<0.1	<1	<0.1	1.66
Pike Island	84.2	13-Jan-15	<0.1	15.8	<1	33.5		25.3	<1	1.25	1.26	<50	<1.5	1.88	6.44	64.5	2.32	<1	<0.1	<1	<0.1	2.48
Pike Island	84.2	24-Mar-15	<0.1	15.5	<1	31.2		20.2	<1	<1	<1	<50	<1.5	1.65	5.3	62.4	2.52	<1	<0.1	<1	<0.1	2.16
Pike Island	84.2	12-May-15	<0.1	26.4	<1	38.9		29.7	<1	<1	1.2	<50	<1.5	1.77	8.43	25.8	2.01	<1	0.1	<1	<0.1	1.71
Pike Island	84.2	28-Jul-15	<0.1	23.4	<1	38.4		28.1	<1	<1	1.79	<50	<1.5	2.04	7.84	1.57	1.26	<1	0.1	<1	<0.1	3.84
Pike Island	84.2	1-Sep-15	<0.1	11.8	<1	51.4		42.3	<1	<1	2.33	<50	<1.5	2.78	12.7	<1	1.28	<1	0.18	1.13	<0.1	1.23
Pike Island	84.2	17-Nov-15	<0.1	10.5	<1	35.7		26.2	<1	<1	1.43	<50	<1.5	1.87	7.87	24.1	1.37	<1	<0.1	<1	<0.1	1.08
Pike Island	84.2	26-Jan-16	<0.1	14.1	<1	34.5		29.4	<1	<1	1.08	<50	<1.5	1.89	7.9	64.3	2.13	<1	<0.1	<1	<0.1	4.77
Pike Island	84.2	22-Mar-16	<0.1	25.2	<1	34.3		29.7	<1	<1	1.08	<50	<1.5	1.89	7.9	64.3	2.13	<1	<0.1	<1	<0.1	5.56
Pike Island	84.2	10-May-16	<0.1	17.2	<1	27.9		21	<1	<1	<1	<50	<1.5	1.41	5.49	15.1	1.21	<1	<0.1	<1	<0.1	1.47
Pike Island	84.2	6-Jul-16	<0.1	18	<1	46.9		37	<1	<1	2.01	<50	<1.5	2.18	10.8	44.3	1.22	<1	0.12	<1	<0.1	1.64
Pike Island	84.2	7-Sep-16	<0.1	11	1.06	39		31.5	<1	<1	2.17	<50	<1.5	2.51	9.4	<1	1.23	<1	0.18	1.22	<0.1	1.09
Pike Island	84.2	21-Nov-16	<0.																			

Appendix B. Dissolved Metals Results, January 2012 through December 2016																									
Sample Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	TI (ug/L)	Zn (ug/L)			
Hannibal	126.4	10-Jan-12	<0.1	17.57	0.34	28.12		23.27	0.11	0.37	0.88	<50	<1.5		6.4	56.77	3.09	0.16	<0.5	<0.5	<0.1	2.38			
Hannibal	126.4	12-Mar-12	<0.1	18.3	0.3	30.45		26.52	<0.1	0.24	1.04	<50	<1.5		6.86	49.7	2.09	<0.1	<0.5	<0.5	<0.1	1.6			
Hannibal	126.4	16-May-12	<0.1	13.55	0.4	34.72		23.79	<0.1	0.13	1.31	<50	<1.5		6.54	23.6	1.78	<0.1	<0.5	<0.5	<0.1	1			
Hannibal	126.4	24-Jul-12	<0.1	15.27	0.77	49.46		38.9	<0.1	0.15	2.32	<50	<1.5		11.64	9.92	2.1	<0.1	<0.5	1.16	<0.1	2.02			
Hannibal	126.4	27-Sep-12	<0.1	10.07	0.97	46.16		37.25	<0.1	0.23	2.48	<50	<1.5		10.66	32.91	2.94	<0.1	<0.5	1.18	<0.1	1.93			
Hannibal	126.4	19-Nov-12	<0.1	14.21	0.51	35.34		26.05	<0.1	0.22	1.22	<50	<1.5		6.89	40.19	2.38	<0.1	<0.5	0.59	<0.1	1.03			
Hannibal	126.4	14-Jan-13	<0.1	15.28	0.44	38.03		34.2	<0.1	0.34	1.24	<50	<1.5		9.01	64.8	3	<0.1	<0.5	0.54	<0.1	3.33			
Hannibal	126.4	19-Mar-13	<0.1	21.8	0.35	35.77		28.43	<0.1	0.21	1.02	<50	<1.5		7.57	78.2	3.1	<0.1	<0.5	<0.5	<0.1	2.12			
Hannibal	126.4	21-May-13	<0.1	16.74	0.4	37.93		29.84	<0.1	<0.5	1.22	<50	<1.5		8.96	26.7	1.94	<0.1	<0.5	0.56	<0.1	<1			
Hannibal	126.4	18-Jul-13	<0.1	13.86	0.69	37.61		29.31	<0.1	<0.5	2.06	<50	<1.5		7.06	7.93	1.63	<0.1	<0.5	0.55	<0.1	<1			
Hannibal	126.4	5-Sep-13	<0.1	13.25	0.51	39.4		26.12	<0.1	<0.5	1.79	<50	<1.5		6.93	29.4	1.54	<0.1	<0.5	0.57	<0.1	2.07			
Hannibal	126.4	11-Nov-13	<0.1	9.58	0.69	39.07		34.46	<0.1	<0.5	1.66	<50	<1.5		8.66	17.3	1.72	<0.1	<0.5	0.78	<0.1	1.9			
Hannibal	126.4	20-Jan-14	<0.1	15.06	<1	32.8		24.2	<1	<1	<1	<50	<5		6.39	56.7	2.55	<1	<0.1	<1	<0.1	2.27			
Hannibal	126.4	10-Mar-14	<0.1	16.96	<1	35.3		29.6	<1	<1	1.31	<50	<5		8.3	102	3.3	<1	<0.1	<1	<0.1	<1			
Hannibal	126.4	19-May-14	<0.1	15.7	<1	32.4		24.5	<1	<1	1.2	<50	<5	1.65	5.87	5.78	1.31	<1	<0.1	<1	<0.1	<1			
Hannibal	126.4	21-Jul-14	<0.1	16.8	<1	41.7		30.1	<1	<1	1.56	<50	<5	2.17	8.29	25.1	1.37	<1	0.13	<1	<0.1	1.01			
Hannibal	126.4	24-Sep-14	<0.1	14.8	<1	39.6		31.3	<1	<1	1.83	<50	<1.5	2.24	9.12	4	1.35	<1	0.16	<1	<0.1	2.98			
Hannibal	126.4	19-Nov-14	<0.1	11.2	<1	34.5		27.3	<1	<1	1.27	<50	<1.5	2.22	7.24	30.2	1.32	<1	<0.1	<1	<0.1	1.74			
Hannibal	126.4	13-Jan-15	<0.1	15.5	<1	32.8		25	<1	1.49	1.16	<50	<1.5	1.85	6.37	54	2.14	<1	<0.1	<1	<0.1	2.07			
Hannibal	126.4	24-Mar-15	<0.1	16.5	<1	31.8		21.3	<1	<1	<1	<50	6.2	1.7	5.69	53.1	2.4	<1	<0.1	<1	<0.1	1.29			
Hannibal	126.4	12-May-15	<0.1	11.1	<1	38.6		31	<1	<1	1.46	235	<1.5	1.76	8.78	63.7	2.61	<1	<0.1	<1	<0.1	5.1			
Hannibal	126.4	28-Jul-15	<0.1	23	<1	37.5		27.8	<1	<1	1.59	<50	<1.5	2.11	7.49	3.17	1.27	<1	0.1	<1	<0.1	1.05			
Hannibal	126.4	1-Sep-15	<0.1	20.3	<1	49.8		41.4	<1	1.07	2.17	<50	<1.5	2.78	11.9	2.04	1.43	<1	0.18	<1	<0.1	<1			
Hannibal	126.4	17-Nov-15	<0.1	10.7	<1	35.5		27.6	<1	<1	1.55	<50	<1.5	2.4	7.4	25.5	1.45	<1	0.1	<1	<0.1	1.64			
Hannibal	126.4	26-Jan-16	<0.1	14.8	<1	31.6		26.6	<1	<1	<1	<50	<1.5	1.68	7.25	82.2	2.13	<1	<0.1	<1	<0.1	4.89			
Hannibal	126.4	12-Mar-16	<0.1	23.9	<1	35		31.7	<1	<1	1.18	<50	<1.5	1.76	8.57	51.6	1.99	<1	<0.1	<1	<0.1	5.37			
Hannibal	126.4	10-May-16	<0.1	17.8	<1	33.2		26.1	<1	<1	1.07	<50	<1.5	1.64	7.3	17.7	1.5	<1	<0.1	<1	<0.1	2.18			
Hannibal	126.4	6-Jul-16	<0.1	17.8	<1	44		34	<1	<1	1.7	<50	<1.5	2.28	9.89	21.4	1.31	<1	0.16	<1	<0.1	1.8			
Hannibal	126.4	7-Sep-16	<0.1	9.83	<1	39.6		30.7	<1	<1	1.59	<50	<1.5	2.21	9.8	4.48	1.08	<1	0.17	1.09	<0.1	3.49			
Hannibal	126.4	21-Nov-16	<0.1	9.62	<1	34.3	<1	28	<1	1.21	1.82	<50	<1.5	2.33	7.6	35.8	1.64	<1	0.12	<1	<0.1	2.82			
Willow Island	161.8	10-Jan-12	<0.1	18.51	0.37	31.49		25.9	<0.1	0.81	1.26	<50	<1.5		7.14	50.19	2.77	0.12	<0.5	<0.5	<0.1	1.72			
Willow Island	161.8	12-Mar-12	<0.1	18.72	0.14	30.18		24.12	<0.1	<0.1	0.96	<50	<1.5		6.34	45.6	1.9	<0.1	<0.5	<0.5	<0.1	<1			
Willow Island	161.8	16-May-12	<0.1	10.82	0.4	33.27		23.8	<0.1	0.47	1.31	<50	<1.5		6.26	13.71	1.35	<0.1	<0.5	<0.5	<0.1	<1			
Willow Island	161.8	24-Jul-12	<0.1	<1	0.67	49.83		37.65	<0.1	<0.1	1.98	<50	<1.5		11.76	7.49	1.92	<0.1	<0.5	0.91	<0.1	1.2			
Willow Island	161.8	27-Sep-12	<0.1	6.83	0.87	47.06		35.64	<0.1	0.17	2.28	<50	<1.5		10.45	6.44	2.95	<0.1	<0.5	1.27	<0.1	1.87			
Willow Island	161.8	19-Nov-12	<0.1	16.38	0.47	33.23		24.79	<0.1	0.27	1.81	<50	<1.5		6.3	27.6	2.23	<0.1	<0.5	0.51	<0.1	1.97			
Willow Island	161.8	14-Jan-13	<0.1	12.59	0.32	30.57		26.42	<0.1	0.35	1.1	<50	<1.5		7.05	56.3	2.31	<0.1	<0.5	<0.5	<0.1	2.37			
Willow Island	161.8	19-Mar-13	<0.1	21.2	0.29	36.73		29.25	<0.1	<0.1	1.02	<50	<1.5		7.94	64.2	3.01	<0.1	<0.5	<0.5	<0.1	1.57			
Willow Island	161.8	21-May-13	<0.1	14.94	0.53	40.96		32.58	<0.1	<0.5	1.36	<50	<1.5		9.37	2.57	1.92	<0.1	<0.5	0.61	<0.1	1.57			
Willow Island	161.8	18-Jul-13	<0.1	12.79	0.67	37.96		30.66	<0.1	0.72	2.22	<50	<1.5		7.16	2.6	1.54	<0.1	<0.5	0.74	<0.1	<1			
Willow Island	161.8	5-Sep-13	<0.1	12.31	0.65	44.31		29.35	<0.1	<0.5	1.7	<50	<1.5		8	28.5	1.27	<0.1	<0.5	0.59	<0.1	1.19			
Willow Island	161.8	11-Nov-13	<0.1	9.93	0.7	40.65		35.65	<0.1	<0.5	1.82	<50	<1.5		9.01	22.4	2.3	0.12	<0.5	0.69	<0.1	1.69			
Willow Island	161.8	20-Jan-14	<0.1	11.7	<1	30.7		23.4	<1	<1	<1	<50	<5		5.97	50.9	2.44	<1	<0.1	<1	<0.1	6.06			
Willow Island	161.8	10-Mar-14	<0.1	16	<1	34.1		28.3	<1	<1	1.26	<50	<5		7.65	95.7	2.76	<1	<0.1	<1	<0.1	<1			
Willow Island	161.8	19-May-14	<0.1	7.9	<1	38.6	<1	27	<1	<1	1.36	<50	<5	1.77	6.74	16.7	1.7	<1	0.1	<1	<0.1	1.7			
Willow Island	161.8	21-Jul-14	<0.1	12.2	<1	41.9		29.2	<1	<1	1.6	<50	<5	2.09	7.78	7.86	1.25	<1	0.12	<1	<0.1	1.21			
Willow Island	161.8	24-Sep-14	<0.1	10.4	<1	42.2	<1	33.4	<1	<1	1.79	<50	<1.5	2.52	9.33	15.8	1.46	<1	0.17	<1	<0.1	3.56			
Willow Island	161.8	20-Nov-14	<0.1	9.63	<1	37.3	<1	29.8	<1	<1	1.39	<50	<1.5	2.5	7.82	33.3	1.42	<1	<0.1	<1	<0.1	1.09			
Willow Island	161.8	14-Jan-15	<0.1	11.1	<1	32.2	<1	24.1	<1	<1	1.03	<50	<1.5	1.71	6.26	41.4	1.77	<1	<0.1	<1	<0.1	2.02			
Willow Island	161.8	24-Mar-15	<0.1	13.9	<1	29		19	<1	<1	<1	<50	<1.5	1.58	5.09	41.4	1.74	<1	<0.1	<1	<0.1	2.37			
Willow Island	161.8	13-May-15	<0.1	26.9	<1	36.8		31.9	<1	<1	<1	<50	<1.5	1.79	9.14	12.1	1.57	<1	<0.1	<1	<0.1	4.29			
Willow Island	161.8	29-Jul-15	<0.1	16.3	<1	33.9		24.8	<1	<1	1.42	<50	<1.5	1.89	6.75	<1	<1	<1	<0.1	<1	<0.1	<1			
Willow Island	161.8	2-Sep-15	<0.1	12.6	<1	38		28.1	<1	<1	1.58	<50	<1.5	2.14	8.53	13.2	1.03	<1	0.13	<1	<0.1	3.02			
Willow Island	161.8	18-Nov-15	<0.1	8.19	<1	28.2	<1	22	<1	<1	1.26	<50	<1.5	1.98	5.75	19.6	1.09	<1	<0.1	<1	<0.1	1.19			
Willow Island	161.8	22-Jan-16	<0.1	17.7	<1	34.7		29.7	<1	<1	1.18	<50	<1.5	1.84	7.93	71.8	2.21	<1	<0.1	<1	<0.1	5.3			
Willow Island	161.8	22-Mar-16	<0.1	21.6	<1	33.2	<1	30.4	<1	<1	1.19	<50	<1.5	1.8	8.24	39.6	1.8	<1	<0.1	<1	<0.1	1.83			
Willow Island	161.8	10-May-16	<0.1	13.4	<1	33	<1	26.6	<1	<1	1.14	<50	<1.5	1.63	7.48	19.8	1.18	<1	<0.1	<1	<0.1	1.16			
Willow Island	161.8	6-Jul-16	<0.1	11.8	<1	42.9	<1																		

Appendix B. Dissolved Metals Results, January 2012 through December 2016

Sample/Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Cg (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Ti (ug/L)	Zn (ug/L)
Belleville	203.9	24-Jan-12	<0.1	18.67	0.32	31.87		31.17	<0.1	1.29	<0.1	<50	<1.5		8.74	37.33	3.14	0.11	<0.5	0.56	<0.1	1.27
Belleville	203.9	14-Mar-12	<0.1	15.02	0.22	31.51		30.67	<0.1	0.63	1.04	<50	<1.5		8.64	26	1.54	<0.1	<0.5	<0.5	<0.1	<1
Belleville	203.9	21-May-12	<0.1	11.65	0.49	36.6		27.8	<0.1	0.24	1.26	<50	<1.5		7.93	36.7	1.41	<0.1	<0.5	<0.5	<0.1	1.73
Belleville	203.9	18-Jul-12	<0.1	5.52	0.69	41.03		31.64	<0.1	<0.1	1.3	<50	<1.5		10.5	8.53	1.33	<0.1	<0.5	0.62	<0.1	1.75
Belleville	203.9	17-Sep-12	<0.1	4.4	0.72	48.43		35.51	<0.1	0.65	1.74	<50	<1.5		12.22	1.43	2.53	<0.1	<0.5	0.91	<0.1	1.37
Belleville	203.9	13-Nov-12	<0.1	8.7	0.58	33.56		28.29	<0.1	0.4	1.48	<50	<1.5		7.54	8.66	1.93	<0.1	<0.5	<0.5	<0.1	1.14
Belleville	203.9	17-Jan-13	<0.1	12.56	0.39	33.93		31.04	<0.1	0.16	1	<50	<1.5		8.28	16.96	2.63	<0.1	<0.5	<0.5	<0.1	2.13
Belleville	203.9	27-Mar-13	<0.1	14.44	0.35	32.36		28.02	<0.1	0.22	1	<50	<1.5		7.82	40.3	2.11	<0.1	<0.5	<0.5	<0.1	1.48
Belleville	203.9	16-Mar-13	<0.1	12.86	0.47	34.34		29.92	<0.1	<0.5	1.11	<50	<1.5		8.68	12.73	1.17	<0.1	<0.5	<0.5	<0.1	2.23
Belleville	203.9	24-Jul-13	<0.1	9.36	1.06	39.98		36.18	<0.1	<0.5	1.87	<50	<1.5		9.35	6.33	1.61	<0.1	<0.5	0.59	<0.1	<1
Belleville	203.9	9-Sep-13	<0.1	8.61	0.83	48.49		34.63	<0.1	0.54	1.58	<50	<1.5		10.2	73.8	1.44	<0.1	<0.5	0.6	<0.1	1.03
Belleville	203.9	18-Nov-13	<0.1	7.59	0.87	38.85		37.09	<0.1	<0.5	1.69	<50	<1.5		10.11	22.7	1.6	0.11	<0.5	0.73	<0.1	2.71
Belleville	203.9	20-Mar-14	<0.1	13.61	<1	32.9		30.2	<1	<1	<1	<50	<5		8.46	47.3	2.16	<1	<0.1	<1	<0.1	3.99
Belleville	203.9	27-May-14	<0.1	11.6	<1	33.8	<1	27.9	<1	<1	1.09	<50	<5	1.82	7.8	19.2	1.43	<1	<0.1	<1	<0.1	2.48
Belleville	203.9	16-Jul-14	<0.1	11	<1	40.3	<1	28.7	<1	<1	1.4	<50	<5	2.27	7.68	5.9	1.14	<1	0.12	<1	<0.1	<1
Belleville	203.9	24-Sep-14	<0.1	9.14	<1	42.3	<1	36.8	<1	<1	1.63	<50	<1.5	2.69	11.3	52.7	1.6	<1	0.16	<1	<0.1	3.21
Belleville	203.9	20-Nov-14	<0.1	7.98	<1	37.3	<1	33.8	<1	<1	1.45	<50	<1.5	2.53	9.4	26.6	1.48	<1	0.11	<1	<0.1	1.6
Belleville	203.9	14-Jan-15	<0.1	10.5	<1	33	<1	28.9	<1	1.4	1.27	<50	<1.5	2.23	7.82	39.4	1.72	<1	<0.1	<1	<0.1	1.37
Belleville	203.9	25-Mar-15	<0.1	13.9	<1	29.9	<1	26	<1	<1	1.09	<50	<1.5	2.07	7.58	29.6	1.84	<1	<0.1	<1	<0.1	1.24
Belleville	203.9	13-May-15	<0.1	22.4	<1	38.5	<1	34.6	<1	1.04	1.07	<50	<1.5	1.98	10.6	3.99	1.54	<1	0.1	<1	<0.1	2.72
Belleville	203.9	29-Jul-15	<0.1	14.5	<1	40	<1	34	<1	<1	1.56	<50	<1.5	2.63	9.99	2.19	1.22	<1	0.12	<1	<0.1	1.26
Belleville	203.9	2-Sep-15	<0.1	8.21	<1	49.9	<1	37.1	<1	<1	1.48	<50	<1.5	2.77	12.5	10.2	1.34	<1	0.14	<1	<0.1	3.63
Belleville	203.9	18-Nov-15	<0.1	7.66	<1	36.2	<1	30.7	<1	<1	1.57	<50	<1.5	2.64	8.76	17.6	1.41	<1	<0.1	<1	<0.1	<1
Belleville	203.9	27-Jan-16	<0.1	12.8	<1	35.4	<1	34	<1	<1	1.16	<50	<1.5	2.09	9.76	63.9	2.01	<1	<0.1	<1	<0.1	4.37
Belleville	203.9	23-Mar-16	<0.1	13	<1	31	<1	33.2	<1	<1	1.18	<50	<1.5	1.99	9.22	16.8	1.48	<1	<0.1	<1	<0.1	1.23
Belleville	203.9	11-May-16	<0.1	13.4	<1	35.3	<1	32.5	<1	1.1	1.21	<50	<1.5	1.88	9.32	21.6	1.35	<1	<0.1	<1	<0.1	1.58
Belleville	203.9	7-Jul-16	<0.1	8.65	<1	43.9	<1	34.7	<1	2.55	1.78	<50	<1.5	2.6	10.2	54.9	1.16	<1	0.22	<1	<0.1	2.39
Belleville	203.9	8-Sep-16	<0.1	8.86	1.02	46.9	<1	35.8	<1	1.17	1.68	<50	<1.5	2.68	11.4	93.9	1.59	<1	0.2	<1	<0.1	3.22
Belleville	203.9	22-Nov-16	<0.1	6.7	<1	29.7	<1	26.5	<1	<1	1.79	<50	<1.5	2.26	7.83	15.5	1.6	<1	0.11	<1	<0.1	2.44
R.C. Byrd	279.2	24-Jan-12	<0.1	9.53	0.28	23.94		16.29	0.12	0.85	0.83	<50	<1.5		5.59	66.68	1.55	0.16	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	14-Mar-12	<0.1	13.07	0.23	31.15		23.06	<0.1	0.71	<0.1	<50	<1.5		7.1	66.2	1.2	<0.1	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	21-May-12	<0.1	9.24	0.37	34.95		21.82	<0.1	<0.1	0.89	<50	<1.5		6.6	115	0.93	<0.1	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	18-Jul-12	<0.1	11.04	0.79	51.95		32.08	<0.1	<0.1	1.74	<50	<1.5		12.51	53.7	1.31	<0.1	<0.5	0.62	<0.1	<1
R.C. Byrd	279.2	17-Sep-12	<0.1	8.4	0.83	49.71		33.75	<0.1	<0.1	2.03	<50	<1.5		12.49	11.89	2.66	<0.1	<0.5	0.92	<0.1	1.31
R.C. Byrd	279.2	13-Nov-12	<0.1	7.09	0.47	34.88		26.62	<0.1	0.35	1.35	<50	<1.5		8.01	14.08	1.88	<0.1	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	17-Jan-13	<0.1	7.13	0.3	32.74		16.85	<0.1	0.14	0.62	<50	<1.5		5.97	78.3	1.32	<0.1	<0.5	<0.5	<0.1	1.08
R.C. Byrd	279.2	27-Mar-13	<0.1	8.96	0.22	30.27		21	<0.1	0.5	0.65	<50	<1.5		6.46	90.5	1.38	<0.1	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	16-May-13	<0.1	10.36	0.42	37.03		25.45	<0.1	<0.5	1	<50	<1.5		7.89	83.4	1.09	<0.1	<0.5	<0.5	<0.1	1.36
R.C. Byrd	279.2	24-Jul-13	<0.1	9.7	0.74	36.67		26.67	<0.1	<0.5	1.65	<50	<1.5		7.63	19.59	1.17	<0.1	<0.5	<0.5	<0.1	<1
R.C. Byrd	279.2	9-Sep-13	<0.1	10.97	0.76	44.49		27.46	<0.1	0.72	1.32	<50	1.72		8.36	54.7	1.23	<0.1	<0.5	0.66	<0.1	<1
R.C. Byrd	279.2	18-Nov-13	<0.1	6.26	0.83	41.77		36.49	<0.1	<0.5	1.66	<50	<1.5		10.7	32.2	1.79	<0.1	<0.5	0.63	<0.1	2.27
R.C. Byrd	279.2	4-Feb-14	<0.1	10.26	<1	33.9		27.2	<1	<1	<1	<50	<5		9.35	66.4	1.82	<1	<0.1	<1	<0.1	1.63
R.C. Byrd	279.2	20-Mar-14	<0.1	12.15	<1	31.3		25.8	<1	<1	1.01	<50	<5		7.75	48.6	1.85	<1	<0.1	<1	<0.1	1.41
R.C. Byrd	279.2	27-May-14	<0.1	13	<1	32.4	<1	24.5	<1	<1	1.13	<50	<5	1.78	6.82	26.9	1.15	<1	<0.1	<1	<0.1	<1
R.C. Byrd	279.2	16-Jul-14	<0.1	14.2	1	45.2	<1	29.9	<1	<1	1.28	<50	<5	2.54	8.51	167	1.45	<1	0.19	<1	<0.1	<1
R.C. Byrd	279.2	24-Sep-14	<0.1	10.3	<1	42.5	<1	33.2	<1	<1	1.56	<50	<1.5	2.65	10.8	18.1	1.3	<1	0.21	<1	<0.1	2.34
R.C. Byrd	279.2	20-Nov-14	<0.1	7.85	<1	34.9	<1	25.5	<1	<1	1.18	<50	<1.5	2.49	8.22	22.9	1.26	<1	0.1	<1	<0.1	1.84
R.C. Byrd	279.2	14-Jan-15	<0.1	7.84	<1	29.1	<1	23.6	<1	1.29	1.12	<50	<1.5	2	6.58	23.1	1.45	<1	<0.1	<1	<0.1	1.44
R.C. Byrd	279.2	25-Mar-15	<0.1	14	<1	29.4	<1	21.1	<1	<1	<1	<50	<1.5	1.87	9.5	21.8	1.12	<1	<0.1	<1	<0.1	1.24
R.C. Byrd	279.2	13-May-15	<0.1	23.6	<1	37.3	<1	30	<1	<1	<1	<50	<1.5	1.82	9.5	25.4	1.53	<1	<0.1	<1	<0.1	1.25
R.C. Byrd	279.2	29-Jul-15	<0.1	9.24	<1	39.8	<1	28	<1	<1	1.78	<50	<1.5	2.33	8.76	9.39	<1	<1	0.12	<1	<0.1	1.41
R.C. Byrd	279.2	2-Sep-15	<0.1	5.35	<1	42.6	<1	28.2	<1	<1	1.32	<50	<1.5	2.27	10.3	5	<1	<1	0.11	<1	<0.1	<1
R.C. Byrd	279.2	18-Nov-15	<0.1	5.65	<1	34	<1	25.6	<1	<1	1.26	<50	<1.5	2.54	7.94	13.8	1.31	<1	<0.1	<1	<0.1	2.9
R.C. Byrd	279.2	27-Jan-16	<0.1	7.8	<1	28	<1	23.9	<1	<1	<1	<50	<1.5	1.65	7.43	39	1.29	<1	<0.1	<1	<0.1	4.49
R.C. Byrd	279.2	23-Mar-16	<0.1	11.9	<1	29.6	<1	27	<1	<1	1.04	<50	<1.5	1.91	7.68	19.7	1.18	<1	<0.1	<1	<0.1	<1
R.C. Byrd	279.2	11-May-16	<0.1	8.97	<1	30.7	<1	20.5	<1	<1	<1	<50	<1.5	1.53	6.7	20.7	<1	<1	0.11	<1	<0.1	1.57
R.C. Byrd	279.2	7-Jul-16	<0.1	8.7	<1	36.5	<1	22.5	<1	<1	1.27	<50	<1.5	2.03	6.88	15.8	1.1	<1	<0.1	<1	<0.1	<1
R.C. Byrd	279.2	8-Sep-16	<0.1	9.57	1	40.3	<1	28.2	<1	1.04	1.45	<50	<1.5	2.21	10.2	2.75	1.19	<1	0.18			

Appendix B. Dissolved Metals Results, January 2012 through December 2016																									
SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sr (ug/L)	Se (ug/L)	Ti (ug/L)	Zn (ug/L)			
Greenup	341	17-May-12	<0.1	11.08	0.42	35.73		25.18	<0.1	0.86	1.13	<50	<1.5		8.97	7.45	1.23	<0.1	<0.5	<0.5	<0.1	1.31			
Greenup	341	9-Jul-12	<0.1	6.89	0.77	48.27		33.32	<0.1	0.17	1.48	<50	<1.5		12.82	1.44	1.53	<0.1	<0.5	0.81	<0.1	<1			
Greenup	341	24-Sep-12	<0.1	7.5	0.78	48.33		32.17	<0.1	0.27	1.73	<50	<1.5		13.32	4.93	2.27	<0.1	<0.5	1.02	<0.1	2.78			
Greenup	341	8-Nov-12	<0.1	8.16	0.44	37.12		31.06	<0.1	0.25	1.51	<50	<1.5		10.02	1.74	1.49	<0.1	<0.5	0.55	<0.1	1.11			
Greenup	341	7-Jan-13	<0.1	12.51	0.34	31.92		24.53	<0.1	0.13	0.93	<50	<1.5		8.65	25.82	1.55	<0.1	<0.5	0.53	<0.1	3.22			
Greenup	341	27-Mar-13	<0.1	13.44	0.28	27.51		20.81	<0.1	0.1	1	<50	<1.5		7.84	21.6	1.73	<0.1	<0.5	0.6	<0.1	<1			
Greenup	341	30-May-13	<0.1	9.11	0.46	37.96		29.36	<0.1	<0.5	1.17	<50	<1.5		10.49	23.7	1.31	<0.1	<0.5	0.55	<0.1	2.28			
Greenup	341	25-Jul-13	<0.1	10.25	0.82	35.62		27.64	<0.1	<0.5	1.44	<50	<1.5		8.26	1.87	1.16	<0.1	<0.5	<0.5	<0.1	2.17			
Greenup	341	5-Sep-13	<0.1	8.79	0.71	45.7		31.08	<0.1	<0.5	1.78	<50	<1.5		9.75	10.21	1.34	<0.1	<0.5	0.7	<0.1	<1			
Greenup	341	25-Nov-13	<0.1	5.71	0.64	37.64		34.82	<0.1	<0.5	1.93	<50	<1.5		10.9	8.17	1.57	<0.1	<0.5	0.66	<0.1	1.61			
Greenup	341	13-Jan-14	<0.1	11.07	<1	28		23	<1	<1	1.45	<50	<5		7.99	16.47	1.47	<1	<0.1	<1	<0.1	1.76			
Greenup	341	19-Mar-14	<0.1	13.51	<1	32.8		28.8	<1	<1	1.24	<50	<5		9.48	21.1	1.85	<1	<0.1	<1	<0.1	2.07			
Greenup	341	21-May-14	<0.1	10.6	<1	34.8	<1	27.2	<1	<1	1.51	<50	<5	2.34	7.59	2.92	1.11	<1	0.1	<1	<0.1	14.8			
Greenup	341	9-Jul-14	<0.1	12.8	<1	38.6	<1	29.8	<1	<1	1.76	<50	<5	3.03	8.73	8.83	1.33	<1	0.13	<1	<0.1	3.06			
Greenup	341	24-Sep-14	<0.1	7.78	<1	40.1	<1	30.4	<1	<1	1.35	<50	<1.5	2.76	11.2	19.4	1.4	<1	0.17	<1	<0.1	<1			
Greenup	341	4-Nov-14	<0.1	6.38	<1	41.3	<1	33.1	<1	<1	1.26	<50	<1.5	2.7	11.4	16.4	1.19	<1	0.12	<1	<0.1	<1			
Greenup	341	20-Jan-15	<0.1	8.12	<1	32.1	<1	28.7	<1	<1	1.33	<50	<1.5	2.69	8.75	13.3	1.56	<1	<0.1	<1	<0.1	2.25			
Greenup	341	11-Mar-15	<0.1	10	<1	29.1	<1	19.9	<1	<1	<1	<50	<1.5	2.18	6.73	23.9	<1	<1	<0.1	<1	<0.1	1.48			
Greenup	341	20-May-15	<0.1	15.8	<1	40.8	<1	32	<1	<1	<1	<50	<1.5	2.48	11.5	14.1	1.12	<1	<0.1	<1	<0.1	<1			
Greenup	341	29-Jul-15	<0.1	10.8	<1	39.9	<1	27.2	<1	<1	1.24	<50	<1.5	2.47	9.45	1.69	1.03	<1	0.1	<1	<0.1	<1			
Greenup	341	2-Sep-15	<0.1	7.79	<1	47.9	<1	32	<1	<1	1.24	<50	<1.5	2.83	12.9	6.71	<1	<1	0.27	<1	<0.1	<1			
Greenup	341	4-Nov-15	<0.1	6.06	<1	43.3	<1	39	<1	<1	1.93	<50	<1.5	3.07	12.6	8.56	1.42	<1	0.14	1.14	<0.1	2.38			
Greenup	341	21-Jan-16	<0.1	8.51	<1	30.9	<1	28.6	<1	<1	<1	<50	<1.5	2.7	9.23	23.4	1.27	<1	<0.1	<1	<0.1	1.88			
Greenup	341	22-Mar-16	<0.1	9.41	<1	30.6	<1	26.3	<1	<1	1.2	<50	<1.5	2.09	8.69	8.47	1.23	<1	<0.1	<1	<0.1	<1			
Greenup	341	18-May-16	<0.1	10.3	<1	31.7	<1	24.9	<1	<1	1.09	<50	<1.5	1.9	8.49	12.4	<1	<1	<0.1	<1	<0.1	2.84			
Greenup	341	27-Jul-16	<0.1	9.33	<1	43.1	<1	27.2	<1	<1	1.29	<50	<1.5	2.71	10.3	5.13	1.04	<1	0.13	<1	<0.1	2.12			
Greenup	341	12-Sep-16	<0.1	15.6	<1	43	<1	31.8	<1	<1	1.29	<50	<1.5	2.47	12.2	2.52	1.15	<1	0.16	<1	<0.1	<1			
Greenup	341	2-Nov-16	<0.1	5.34	<1	39	<1	33.6	<1	1	1.6	<50	<1.5	4.76	10.6	3.54	1.52	<1	0.15	<1	<0.1	1.82			
Meldahl	436.2	5-Jan-12	<0.1	11.32	0.66	29.26		27	0.2	1.85	1.36	<50	<1.5		8.49	3.9	2.43	0.19	<0.5	0.73	<0.1	1.4			
Meldahl	436.2	7-Mar-12	<0.1	11.07	0.24	28.33		22.03	<0.1	0.69	0.93	<50	<1.73		6.88	4.37	1.2	<0.1	<0.5	<0.5	<0.1	1.53			
Meldahl	436.2	17-May-12	<0.1	8.21	0.42	37.04		29.5	<0.1	0.24	1.28	<50	<1.5		9.32	5.61	1.1	<0.1	<0.5	<0.5	<0.1	1.67			
Meldahl	436.2	9-Jul-12	<0.1	5.66	0.79	46.41		32.15	<0.1	0.19	1.47	<50	<1.5		12.53	0.58	1.5	<0.1	<0.5	0.69	<0.1	1.28			
Meldahl	436.2	24-Sep-12	<0.1	5.66	1	55.35		39.15	<0.1	0.19	2.26	<50	<1.5		15.07	2.65	3.67	<0.1	<0.5	0.89	<0.1	2.39			
Meldahl	436.2	8-Nov-12	<0.1	7.39	0.63	40.99		35.88	<0.1	<0.1	2.34	<50	<1.5		10.58	2.17	1.7	<0.1	<0.5	0.68	<0.1	3.11			
Meldahl	436.2	7-Jan-13	<0.1	11.26	0.34	31.35		25.53	<0.1	0.46	1.16	<50	<1.5		8.08	7.99	1.5	<0.1	<0.5	<0.5	<0.1	<1			
Meldahl	436.2	27-Mar-13	<0.1	8.8	0.35	26.35		22.84	<0.1	<0.1	0.87	<50	<1.5		7.5	4.19	1.37	<0.1	<0.5	<0.5	<0.1	<1			
Meldahl	436.2	30-May-13	<0.1	7.18	0.44	36.41		29.25	<0.1	<0.5	1.25	<50	<1.5		10.78	5.68	1.24	<0.1	<0.5	0.58	<0.1	1.34			
Meldahl	436.2	25-Jul-13	<0.1	9.11	0.95	37.92		30.68	<0.1	<0.5	2.01	<50	<1.96		8.71	0.73	1.36	<0.1	<0.5	0.58	<0.1	<1			
Meldahl	436.2	5-Sep-13	<0.1	7.79	0.83	46.59		32.08	<0.1	0.85	2.39	<50	<1.5		9.49	12.65	1.37	0.11	<0.5	0.58	<0.1	1.2			
Meldahl	436.2	25-Nov-13	<0.1	5.67	0.84	38.16		39.09	<0.1	<0.5	2.37	<50	<1.5		11.85	3.21	1.84	0.12	<0.5	0.69	<0.1	2.23			
Meldahl	436.2	14-Jan-14	<0.1	11.3	<1	29.8		27.4	<1	<1	1.17	<50	<5		8.49	4.49	1.47	<1	<0.1	<1	<0.1	1.12			
Meldahl	436.2	19-Mar-14	<0.1	11.24	<1	34.5		32	<1	<1	1.24	<50	<5		10	3.28	1.6	<1	<0.1	<1	<0.1	1.78			
Meldahl	436.2	21-May-14	<0.1	9.32	<1	35	<1	30.1	<1	<1	1.61	<50	<5	3.21	8.38	1.41	1.28	<1	0.11	<1	<0.1	1.48			
Meldahl	436.2	9-Jul-14	<0.1	10	1	38.1	<1	31.4	<1	<1	2.14	<50	<5	3.2	8.81	6.2	1.4	<1	0.16	<1	<0.1	1.65			
Meldahl	436.2	24-Sep-14	<0.1	8.63	<1	42	<1	32	<1	<1	1.68	<50	<1.5	3.12	11.2	12.7	1.42	<1	0.18	<1	<0.1	<1			
Meldahl	436.2	4-Nov-14	<0.1	6.43	<1	45.9	<1	38.5	<1	<1	1.71	<50	<1.5	3.27	12.3	4.2	1.45	<1	0.15	1.15	<0.1	1.8			
Meldahl	436.2	20-Jan-15	<0.1	7.82	<1	32.9	<1	26.8	<1	<1	1	<50	<1.5	2.19	8.7	33.3	1.5	<1	<0.1	<1	<0.1	4.11			
Meldahl	436.2	11-Mar-15	<0.1	11	<1	30.4	<1	22.5	<1	<1	1	<50	<1.5	2.44	7.1	9.55	1.23	<1	<0.1	<1	<0.1	1.86			
Meldahl	436.2	20-May-15	<0.1	13.6	<1	40.8	<1	35.2	<1	<1	1.17	<50	<1.5	2.25	12	1.47	1.12	<1	0.16	<1	<0.1	1.06			
Meldahl	436.2	29-Jul-15	<0.1	9.32	<1	40.9	<1	31.4	<1	<1	1.52	<50	<1.5	2.55	10.3	1.78	1.14	<1	0.1	<1	<0.1	2.43			
Meldahl	436.2	2-Sep-15	<0.1	8.57	1.05	51.9	<1	35.8	<1	<1	1.36	<50	<1.5	3.4	14.2	15.9	1.32	<1	0.18	1.17	<0.1	1.94			
Meldahl	436.2	4-Nov-15	<0.1	3.29	<1	44.1	<1	37.1	<1	<1	1.51	<50	<1.5	2.88	12.3	6.43	1.58	<1	0.14	<1	<0.1	1.91			
Meldahl	436.2	21-Jan-16	<0.1	7.32	<1	31.5	<1	32.4	<1	<1	1.03	<50	<1.5	2.38	9.95	6.4	1.17	<1	0.1	<1	<0.1	1.27			
Meldahl	436.2	22-Mar-16	<0.1	9.32	<1	31.2	<1	29.8	<1	<1	1.41	<50	<1.7	2.14	9.09	5.59	1.25	<1	<0.1	<1	<0.1	<1			
Meldahl	436.2	18-May-16	<0.1	10.9	<1	34.2	<1	29.1	<1	<1	1.13	<50	<1.5	2.04	10.1	13	1.1	<1	<0.1	<1	<0.1	2.12			
Meldahl	436.2	17-Jul-16	<0.1	7.41	<1	41.9	<1	28.3	<1	<1	1.38	<50	<1.5	2.78	10.6	<1	<1	<1	0.17	<1	<0.1	1.15			
Meldahl	436.2	12-Sep-16	<0.1	10.6	1.02	44.3	<1	29	<1	<1	1.52	<50	<1.5	2.39	10.7	19.5	1.35	<1	0.2	1.36	<0.1	1.02			
Meldahl	436.2	2-Nov-16	<0.1	4.03	<1	41.4	<1	31.8	<1	<1	1.8														

Appendix B. Dissolved Metals Results, January 2012 through December 2016

SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
Markland	531.5	17-Jul-12	<0.1	4.05	1.13	49.16		35.72	<0.1	<0.1	1.42	<50	<1.5		14.01	0.57	1.39	<0.1	<0.5	0.79	<0.1	1.24
Markland	531.5	20-Sep-12	<0.1	7.7	0.97	53.7		39.43	<0.1	0.92	4.98	<50	<1.5		15.33	3.26	2.53	0.17	<0.5	1.15	<0.1	3.28
Markland	531.5	8-Nov-12	<0.1	5.56	0.66	45.25		37.27	<0.1	0.2	2.67	<50	<1.5		11.72	1.4	1.76	<0.1	<0.5	0.71	<0.1	1.81
Markland	531.5	10-Jan-13	<0.1	10.09	0.46	32.41		30.73	<0.1	0.33	<0.1	<50	<1.5		9.16	8.63	1.38	<0.1	<0.5	0.53	<0.1	<1
Markland	531.5	26-Mar-13	<0.1	10.5	0.39	31.59		31.38	<0.1	0.15	1.22	<50	<1.5		9.36	2.2	1.31	<0.1	<0.5	<0.5	<0.1	<1
Markland	531.5	9-May-13	<0.1	13.78	0.65	25.25		37.05	<0.1	0.68	1.44	<50	<1.5		8.58	4.17	1.16	<0.1	<0.5	<0.5	<0.1	2.22
Markland	531.5	17-Jul-13	<0.1	9.15	0.73	34.51		28.81	<0.1	<0.5	2	<50	<1.5		8.06	1.43	1.18	<0.1	<0.5	<0.5	<0.1	5.58
Markland	531.5	11-Sep-13	<0.1	6.11	0.82	44.86		31.04	<0.1	<0.5	1.51	<50	<1.5		9.6	21.9	1.29	<0.1	<0.5	0.63	<0.1	1.33
Markland	531.5	13-Nov-13	<0.1	5.09	0.94	48.3		42.63	<0.1	<0.5	1.85	<50	<1.5		13.53	9.1	1.87	0.12	<0.5	0.96	<0.1	1.33
Markland	531.5	14-Jan-14	<0.1	8.9	<1	29.6		32.4	<1	<1	1.36	<50	<5		9.64	2.99	1.3	<1	<0.1	<1	<0.1	1.54
Markland	531.5	11-Mar-14	<0.1	10.79	<1	30.6		31	<1	<1	1.15	<50	<5		9.72	7.49	1.37	<1	<0.1	<1	<0.1	1.23
Markland	531.5	28-May-14	<0.1	14.2	<1	34.9	<1	31.2	<1	<1	1.66	<50	<5	3.88	9.04	4.57	1.36	<1	0.11	<1	<0.1	<1
Markland	531.5	8-Jul-14	<0.1	10	<1	40.1	<1	33.9	<1	<1	1.81	<50	<5	2.87	10	6.01	1.17	<1	0.15	<1	<0.1	<1
Markland	531.5	10-Sep-14	<0.1	8.78	1.02	46.6	<1	37.9	<1	<1	1.49	<50	<1.5	2.98	12.4	12.5	1.25	<1	0.17	<1	<0.1	4.37
Markland	531.5	24-Nov-14	<0.1	5.16	<1	36.4	<1	36.1	<1	<1	1.22	<50	<1.5	2.8	12.6	4.7	1.18	<1	0.11	<1	<0.1	17.7
Markland	531.5	28-Jan-15	<0.1	8.53	<1	35.6	<1	34.9	<1	1.07	1.16	<50	<1.5	2.52	10.9	14.9	1.55	<1	<0.1	<1	<0.1	1.82
Markland	531.5	24-Mar-15	<0.1	50.5	<1	30.9	<1	25.1	<1	<1	1.3	86	<1.5	3.51	7.78	13.3	1.42	<1	<0.1	<1	<0.1	1.88
Markland	531.5	14-May-15	<0.1	8.07	<1	36.7	<1	32.2	<1	<1	<1	<50	<1.5	2.1	11.3	<1	<1	<1	<0.1	<1	<0.1	<1
Markland	531.5	28-Jul-15	<0.1	9.01	<1	37	<1	32.7	<1	<1	1.62	<50	<1.5	2.69	9.79	3.41	1.29	<1	0.12	<1	<0.1	1.68
Markland	531.5	1-Sep-15	<0.1	5.12	1.22	49.2	<1	39	<1	<1	1.37	<50	<1.5	3.23	15.4	17.7	1.41	<1	0.18	<1	<0.1	1.43
Markland	531.5	5-Nov-15	<0.1	9.66	1.04	44.2	<1	40.8	<1	<1	1.97	<50	<1.5	3.55	14	2.22	1.65	<1	0.19	1.08	<0.1	1.83
Markland	531.5	11-Jan-16	<0.1	7.42	<1	31.2	<1	36.2	<1	<1	1.23	<50	<1.5	2.56	10.8	5.27	1.01	<1	<0.1	<1	<0.1	<1
Markland	531.5	8-Mar-16	<0.1	14.4	<1	28	<1	29.1	<1	<1	1.24	<50	<1.5	1.89	8.85	3.98	1.13	<1	<0.1	<1	<0.1	2.39
Markland	531.5	18-May-16	<0.1	8.18	<1	32.9	<1	29.6	<1	<1	1.09	<50	<1.5	2	9.64	3.28	<1	<1	<0.1	<1	<0.1	<1
Markland	531.5	19-Jul-16	<0.1	8.42	<1	43.7	<1	29	<1	<1	1.46	<50	<1.5	2.6	10.3	7.73	1.14	<1	0.13	<1	<0.1	1.26
Markland	531.5	20-Sep-16	<0.1	7.21	1.23	49.6	<1	40.2	<1	<1	1.71	<50	<1.5	3.27	13.5	15.6	1.45	<1	0.21	<1	<0.1	<1
Markland	531.5	29-Nov-16	<0.1	4.52	<1	36.8	<1	31.4	<1	<1	1.66	<50	<1.5	2.63	10.9	3.01	1.46	<1	0.13	<1	<0.1	1.05
McAlpine	606.8	25-Jan-12	<0.1	9.39	0.43	22.7		32.64	<0.1	1.33	2.47	<50	<1.5		9.2	1.21	1.84	<0.1	<0.5	<0.5	<0.1	<1
McAlpine	606.8	7-Mar-12	<0.1	9.99	0.33	26.42		26.13	<0.1	1.09	0.98	<50	<1.5		7.83	2.46	0.97	<0.1	<0.5	<0.5	<0.1	1.2
McAlpine	606.8	17-May-12	<0.1	6.71	0.54	32.22		35.1	<0.1	0.44	1.71	<50	<1.5		9.71	1.32	1.2	<0.1	<0.5	<0.5	<0.1	<1
McAlpine	606.8	17-Jul-12	<0.1	4.72	1.07	47		35.89	<0.1	0.45	2.16	<50	<1.5		14.02	0.98	1.66	<0.1	<0.5	1.08	<0.1	4.19
McAlpine	606.8	20-Sep-12	<0.1	3.87	1.15	51.03		38.03	<0.1	0.18	2.05	<50	<1.5		12.36	2.27	2.81	<0.1	<0.5	1.38	<0.1	2.02
McAlpine	606.8	8-Nov-12	<0.1	4.14	0.66	49.92		39.1	<0.1	0.12	2.1	<50	<1.5		10.43	0.92	2.3	<0.1	<0.5	0.87	<0.1	4.76
McAlpine	606.8	10-Jan-13	<0.1	9.44	0.36	28.89		32	<0.1	0.15	2.46	<50	<1.5		9.34	8.11	1.24	<0.1	<0.5	0.6	<0.1	2.28
McAlpine	606.8	26-Mar-13	<0.1	9.6	0.45	27.72		30.83	<0.1	0.29	1.15	<50	<1.5		8.93	2.33	1.25	<0.1	<0.5	0.56	<0.1	1.24
McAlpine	606.8	9-May-13	<0.1	8.14	0.56	28.62		41.71	<0.1	0.56	1.33	<50	<1.5		10.43	1.31	0.96	<0.1	<0.5	<0.5	<0.1	1.17
McAlpine	606.8	17-Jul-13	<0.1	8.23	0.77	36.76		33.63	<0.1	<0.5	2.05	<50	<1.5		8.94	0.92	1.21	<0.1	<0.5	0.63	<0.1	<1
McAlpine	606.8	11-Sep-13	<0.1	5.68	0.84	45.13		33.28	<0.1	<0.5	1.69	<50	<1.5		10.96	2.24	1.38	<0.1	<0.5	1.02	<0.1	3.83
McAlpine	606.8	13-Nov-13	<0.1	5	1.05	47.51		46.4	<0.1	<0.5	1.84	<50	<1.5		13.8	2.05	1.87	<0.1	<0.5	0.93	<0.1	1.99
McAlpine	606.8	14-Jan-14	<0.1	8.68	<1	26		36.5	<1	<1	1.58	<50	<5		9.51	1.94	1.18	<1	<0.1	<1	<0.1	3.33
McAlpine	606.8	11-Mar-14	<0.1	9.42	<1	26.6		33.7	<1	<1	1.1	<50	<5		10.1	4.49	1.17	<1	<0.1	<1	<0.1	<1
McAlpine	606.8	28-May-14	<0.1	11.3	<1	34	<1	33.4	<1	<1	1.59	<50	<5	2.49	9	34.2	1.16	<1	0.12	<1	<0.1	<1
McAlpine	606.8	8-Jul-14	<0.1	9.29	<1	42.1	<1	36.4	<1	<1	1.88	<50	<5	2.86	10.6	2.38	1.16	<1	0.15	<1	<0.1	1.52
McAlpine	606.8	10-Sep-14	<0.1	7.09	1	43.7	<1	37	<1	<1	1.83	<50	<1.5	3.03	11.6	9.8	1.27	<1	0.19	<1	<0.1	1.36
McAlpine	606.8	24-Nov-14	<0.1	6.1	<1	40.2	<1	35.4	<1	<1	1.36	<50	<1.5	2.76	11.8	9.24	1.45	<1	0.12	1.01	<0.1	1.06
McAlpine	606.8	28-Jan-15	<0.1	8.67	<1	34	<1	35.7	<1	<1	1.11	<50	<1.5	2.5	11	10.6	1.35	<1	<0.1	<1	<0.1	2.2
McAlpine	606.8	24-Mar-15	<0.1	9.76	<1	32.1	<1	30	<1	1.05	1.14	<50	<1.5	2.45	8.92	44.2	1.37	<1	<0.1	<1	<0.1	1.97
McAlpine	606.8	14-May-15	<0.1	5.58	<1	35.2	<1	33.2	<1	<1	1.16	<50	<1.5	2.08	11.1	<1	<1	<1	<0.1	<1	<0.1	2.73
McAlpine	606.8	28-Jul-15	<0.1	8.33	<1	34.4	<1	31.8	<1	<1	1.73	<50	<1.5	2.67	9.23	1.53	1.24	<1	0.12	<1	<0.1	<1
McAlpine	606.8	1-Sep-15	<0.1	4.1	<1	45.5	<1	38.8	<1	<1	1.51	<50	<1.5	3.1	14.5	<1	1.24	<1	0.18	<1	<0.1	<1
McAlpine	606.8	5-Nov-15	<0.1	7.74	<1	40.3	<1	38.1	<1	<1	1.65	<50	<1.5	3.36	13.3	1.29	1.31	<1	0.17	<1	<0.1	1.14
McAlpine	606.8	11-Jan-16	<0.1	6.9	<1	29.7	<1	35.7	<1	<1	1.36	<50	<1.5	2.49	10.2	2.37	1.1	<1	<0.1	<1	<0.1	<1
McAlpine	606.8	8-Mar-16	<0.1	9.44	<1	26.5	<1	32	<1	<1	1.15	<50	<1.5	2	9.39	3.89	1	<1	<0.1	<1	<0.1	1.01
McAlpine	606.8	18-May-16	<0.1	7.02	<1	30	<1	31.1	<1	<1	1.34	<50	<1.5	2.02	9.25	<1	1.04	<1	<0.1	<1	<0.1	<1
McAlpine	606.8	19-Jul-16	<0.1	7.36	<1	37.9	<1	28.2	<1	<1	1.35	<50	<1.5	2.49	10	3.21	1.11	<1	0.12	<1	<0.1	<1
McAlpine	606.8	20-Sep-16	<0.1	11.8	1.07	49.6	<1	39.5	<1	<1	1.62	<50	<1.5	3.17	13.6	<1	1.38	<1	0.22	<1	<0.1	3.43
McAlpine	606.8	29-Nov-16	<0.1	3.1	<1	38.5	<1	35	<1	<1	1.97	<50	<1.5	2.75	11.6	2.38	1.7	<1	0.17	<1	<0.1	<1
Cannelton	720.7	9-Jan-12	<0.1	9.68	0.46	28.51		30.25	<0.1	1.12	1.29	<50	<1.5		9.12	2.52	2.09	0.11	<0.5	0.56	<0.1	1.43
Cannelton	720.7	14-Mar-12	<0.1	13.63	0.38	28.63		31														

Appendix B. Dissolved Metals Results, January 2012 through December 2016																									
SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Ce (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sr (ug/L)	Se (ug/L)	Ti (ug/L)	Zn (ug/L)			
Canneton	720.7	12-Sep-12	<0.1	4.63	1.13	46.17		36.95	<0.1	0.27	1.96	<50	<1.5		13.08	1	2.15	<0.1	<0.5	1.22	<0.1	<1			
Canneton	720.7	14-Nov-12	<0.1	3.84	0.71	47.69		38.86	<0.1	0.68	2.31	<50	<1.5		11.93	1	2.06	<0.1	<0.5	0.95	<0.1	8.08			
Canneton	720.7	29-Jan-13	<0.1	9.02	0.49	29.98		28.67	<0.1	0.33	1.12	<50	<1.5		7.99	1.88	1.22	<0.1	<0.5	<0.5	<0.1	1.17			
Canneton	720.7	26-Mar-13	<0.1	9.98	0.45	27.39		30.96	<0.1	0.4	1.17	<50	<1.5		8.69	1.66	1.36	<0.1	<0.5	0.52	<0.1	1.06			
Canneton	720.7	7-May-13	<0.1	8.37	0.56	33.11		37.34	<0.1	<0.5	1.31	<50	<1.5		9.93	6.47	1.08	<0.1	<0.5	<0.5	<0.1	1.09			
Canneton	720.7	16-Jul-13	<0.1	7.58	0.76	32.06		30.06	<0.1	0.59	1.84	<50	<1.5		8.72	0.93	1	<0.1	<0.5	<0.5	<0.1	<1			
Canneton	720.7	24-Sep-13	<0.1	4.88	0.89	44.32		37.02	<0.1	<0.5	1.64	<50	<1.5		11.19	8.53	1.36	<0.1	<0.5	0.98	<0.1	8.24			
Canneton	720.7	20-Nov-13	<0.1	5.02	1	41.01		42.75	<0.1	<0.5	1.67	<50	<1.5		12.37	1.7	1.76	<0.1	<0.5	0.81	<0.1	2.62			
Canneton	720.7	20-Jan-14	<0.1	11.69	<1	26.7		30.3	<1	<1	1.03	<50	<5		8.7	2.5	1.23	<1	<0.1	<1	<0.1	<1			
Canneton	720.7	18-Mar-14	<0.1	7.51	<1	30		32.1	<1	<1	<1	<50	<5		10.3	1.08	<1	<1	<0.1	<1	<0.1	<1			
Canneton	720.7	28-May-14	<0.1	7.73	<1	34.1	<1	34.5	<1	<1	1.69	<50	<5	2.45	9.14	1.38	1.13	<1	0.12	<1	<0.1	<1			
Canneton	720.7	23-Jul-14	<0.1	6.08	<1	40.5	<1	34.7	<1	<1	1.7	<50	<5	2.91	10.7	6.44	1.2	<1	0.17	<1	<0.1	1.55			
Canneton	720.7	17-Sep-14	<0.1	6.72	<1	43	<1	38.6	<1	<1	1.7	<50	<1.5	3.27	11.5	14.3	1.44	<1	0.17	<1	<0.1	2.33			
Canneton	720.7	18-Nov-14	<0.1	4.52	<1	40.5	<1	38.7	<1	<1	1.4	<50	<1.5	3.17	13.3	5.01	1.14	<1	0.13	<1	<0.1	1.18			
Canneton	720.7	20-Jan-15	<0.1	6.43	<1	32.4	<1	35.1	<1	<1	1.15	<50	<1.5	2.33	10.5	4.09	1.27	<1	<0.1	<1	<0.1	1.1			
Canneton	720.7	25-Mar-15	<0.1	9.47	<1	33.7	<1	29.2	<1	<1	1.23	<50	<1.5	2.34	8.23	2.41	1.38	<1	<0.1	<1	<0.1	2.73			
Canneton	720.7	19-May-15	<0.1	6.22	<1	34.2	<1	33.1	<1	<1	1.06	<50	<1.5	2.12	11	1.98	<1	<1	<0.1	<1	<0.1	1.53			
Canneton	720.7	7-Jul-15	<0.1	6.6	<1	33.9	<1	35.9	<1	<1	1.94	<50	<1.5	3.03	9.64	<1	1.22	<1	0.12	<1	<0.1	3.06			
Canneton	720.7	29-Sep-15	<0.1	9.47	1	47.5	<1	41.4	<1	<1	1.53	<50	1.7	3.49	15.3	5.46	1.54	<1	0.19	1.09	<0.1	1.01			
Canneton	720.7	12-Nov-15	<0.1	7.07	<1	36.6	<1	36.5	<1	<1	1.62	<50	<1.5	3.37	11.9	2.21	1.38	<1	0.16	<1	<0.1	1.35			
Canneton	720.7	5-Jan-16	<0.1	5.47	<1	25.7	<1	26.9	<1	<1	1.41	<50	<1.5	2.05	7.41	<1	1.11	<1	<0.1	<1	<0.1	<1			
Canneton	720.7	22-Mar-16	<0.1	7.66	<1	30.4	<1	34.2	<1	<1	1.22	<50	<1.5	2.18	9.96	1.44	1.1	<1	<0.1	<1	<0.1	<1			
Canneton	720.7	10-May-16	<0.1	7.11	<1	27.8	<1	27.6	<1	<1	1.3	<50	<1.5	2.1	8.98	1.47	<1	<1	<0.1	<1	<0.1	<1			
Canneton	720.7	5-Jul-16	<0.1	6.26	<1	35	<1	28.6	<1	<1	1.54	<50	3.5	2.44	8.86	1.51	1.1	<1	0.14	<1	<0.1	1.19			
Canneton	720.7	13-Sep-16	<0.1	11.7	1.23	39	<1	34.4	<1	<1	1.3	<50	<1.5	2.69	10.7	11.3	1.41	<1	0.19	<1	<0.1	<1			
Canneton	720.7	21-Nov-16	<0.1	3.68	<1	47.7	<1	39.9	<1	1.22	1.84	<50	<1.5	3.28	13.1	8.26	1.65	<1	0.19	1.05	<0.1	1.02			
Canneton	720.7	21-Nov-16	<0.1	2.49	<1	49	<1	40.2	<1	1.07	1.69	<50	<1.5	3.22	13.3	2.1	1.74	<1	0.19	1.08	<0.1	1.18			
Newburgh	776	9-Jan-12	<0.1	9.12	0.6	28.22		31.79	<0.1	0.38	1.59	<50	<1.5		9.99	17.68	2.3	<0.1	<0.5	0.53	<0.1	<1			
Newburgh	776	14-Mar-12	<0.1	9.98	0.26	29.2		32.27	<0.1	0.9	1.09	<50	<1.5		8.96	2.29	0.9	<0.1	<0.5	<0.5	<0.1	<1			
Newburgh	776	31-May-12	<0.1	5.38	0.8	38.96		36.64	0.13	0.22	1.86	<50	<1.5		11.2	0.56	1.39	0.14	<0.5	0.71	<0.1	1.66			
Newburgh	776	10-Jul-12	<0.1	6.69	0.73	40.73		36.59	<0.1	0.24	1.53	<50	<1.5		11.83	0.19	1.03	<0.1	<0.5	0.59	<0.1	<1			
Newburgh	776	12-Sep-12	<0.1	7.78	0.96	44.65		35.46	<0.1	0.58	<0.1	<50	<1.5		11.92	0.42	1.84	<0.1	<0.5	1.09	<0.1	2.07			
Newburgh	776	14-Nov-12	<0.1	3.53	0.65	52.33		41.03	<0.1	0.39	<0.1	<50	<1.5		12.92	3.59	2.12	<0.1	<0.5	0.95	<0.1	<1			
Newburgh	776	29-Jan-13	<0.1	8.75	0.44	29.92		29.19	<0.1	0.39	1.11	<50	<1.5		8.35	8.55	1.22	<0.1	<0.5	0.51	<0.1	<1			
Newburgh	776	26-Mar-13	<0.1	8.23	0.44	27.33		32.21	<0.1	0.22	2.41	<50	<1.5		9.33	7.53	1.43	<0.1	<0.5	0.68	<0.1	3.18			
Newburgh	776	7-May-13	<0.1	8.63	0.61	32.14		32.87	<0.1	<0.5	1.41	<50	<1.5		9.9	13.94	1.36	<0.1	<0.5	<0.5	<0.1	2.39			
Newburgh	776	11-Jul-13	<0.1	8.4	0.81	28.98		36.13	<0.1	<0.5	1.91	<50	<1.5		7.59	1.1	1.15	<0.1	<0.5	<0.5	<0.1	<1			
Newburgh	776	24-Sep-13	<0.1	6.66	0.84	42.22		35.56	<0.1	<0.5	1.57	<50	<1.5		11.09	6.97	1.2	<0.1	<0.5	0.88	<0.1	1.27			
Newburgh	776	20-Nov-13	<0.1	5.85	1.08	39.68		42.26	<0.1	<0.5	1.98	<50	<1.5		12.82	5.01	1.8	0.1	<0.5	0.9	<0.1	7.81			
Newburgh	776	20-Jan-14	<0.1	8.5	<1	28.9		33.3	<1	<1	1.53	<50	<5		9.94	6.33	1.48	<1	<0.1	<1	<0.1	2.78			
Newburgh	776	18-Mar-14	<0.1	7.4	<1	31.3		35.3	<1	<1	<1	<50	<5		11.1	45.2	1.08	<1	<0.1	<1	<0.1	1.84			
Newburgh	776	28-May-14	<0.1	7.99	<1	36.1	<1	37.3	<1	<1	1.74	<50	<5	2.34	10.4	6.53	1.06	<1	0.12	<1	<0.1	<1			
Newburgh	776	23-Jul-14	<0.1	5.17	<1	40.2	<1	38.3	<1	<1	1.92	<50	<5	3.06	10.8	1.13	1.26	<1	0.18	<1	<0.1	<1			
Newburgh	776	17-Sep-14	<0.1	7.68	<1	44.7	<1	39.9	<1	<1	1.57	<50	<1.5	3.2	12.6	4.79	1.42	<1	0.2	1.07	<0.1	1.5			
Newburgh	776	18-Nov-14	<0.1	5.22	<1	40	<1	38.3	<1	<1	1.47	<50	<1.5	2.99	13.1	11.6	1.46	<1	0.15	1.03	<0.1	1.06			
Newburgh	776	20-Jan-15	<0.1	5.52	<1	32	<1	36	<1	<1	1.21	<50	<1.5	2.43	11.2	12.5	1.29	<1	<0.1	<1	<0.1	8.82			
Newburgh	776	25-Mar-15	<0.1	10	<1	33.4	<1	29.6	<1	<1	1.47	<50	<1.5	2.53	8.42	15.1	1.51	<1	<0.1	<1	<0.1	10			
Newburgh	776	19-May-15	<0.1	8.4	<1	35.9	<1	36.7	<1	<1	1.25	<50	<1.5	2.25	12.4	17	1.09	<1	0.1	<1	<0.1	4.32			
Newburgh	776	7-Jul-15	<0.1	7.14	1	33.3	<1	36.9	<1	<1	1.81	<50	<1.5	3.02	11.1	5.86	1.27	<1	0.14	<1	<0.1	1.52			
Newburgh	776	29-Sep-15	<0.1	10.9	<1	45.8	<1	41.1	<1	<1	1.46	<50	1.5	3.32	14.1	<1	1.43	<1	0.23	<1	<0.1	2.41			
Newburgh	776	12-Nov-15	<0.1	4.71	<1	37.7	<1	36.4	<1	<1	1.88	<50	<1.5	3.56	12.5	6.64	1.55	<1	0.16	<1	<0.1	8.59			
Newburgh	776	5-Jan-16	<0.1	5.99	<1	25.5	<1	27.3	<1	<1	1.56	<50	<1.5	2.35	8.02	3.84	1.28	<1	<0.1	<1	<0.1	2.74			
Newburgh	776	22-Mar-16	<0.1	7.26	<1	30.4	<1	36.2	<1	<1	1.41	<50	<1.5	2.21	11	16.6	1.18	<1	<0.1	<1	<0.1	1.35			
Newburgh	776	10-May-16	<0.1	6.34	<1	27.3	<1	29.3	<1	<1	1.41	<50	<1.5	2.16	9.7	2.86	1.06	<1	<0.1	<1	<0.1	<1			
Newburgh	776	5-Jul-16	<0.1	6.98	<1	36.2	<1	31.9	<1	<1	1.28	<50	<1.5	2.71	10.4	16.8	1.08	<1	0.14	<1	<0.1	1.93			
Newburgh	776	13-Sep-16	<0.1	13.2	1.23	40.9	<1	37.8	<1	<1	1.59	<50	<1.5	2.73	12	5.35	1.58	<1	0.21	<1	<0.1	11.3			
J.T. Myers	846	9-Jan-12	<0.1	8.26	0.5	26.94		30.52	<0.1	0.27	<0.1	<50	<1.5		8.79	24.82	1.98	<0.1	<0.5	0.52	<0.1	<1			
J.T. Myers	846	14-Mar-12	<0.1	9.43	0.44	27.96		30.41	<0.1	0.43	<0.1	<50	<1.5												

Appendix B. Dissolved Metals Results, January 2012 through December 2016																						
Sample/Site	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Tl (ug/L)	Zn (ug/L)
J.T. Myers	846	15-Nov-12	<0.1	5.73	0.7	53.07		40.58	<0.1	0.36	1.95	<50	<1.5		13.17	3.1	2.28	<0.1	<0.5	0.93	<0.1	1.95
J.T. Myers	846	30-Jan-13	<0.1	8.96	0.65	29.4		29.64	<0.1	0.21	1.24	<50	<1.5		7.99	6.52	1.31	<0.1	<0.5	<0.5	<0.1	<1
J.T. Myers	846	27-Mar-13	<0.1	7.14	0.46	26.3		30.38	<0.1	0.22	1.24	<50	<1.5		8.53	2.17	1.31	<0.1	<0.5	<0.5	<0.1	1.87
J.T. Myers	846	8-May-13	<0.1	6.81	0.51	31.14		33.19	<0.1	<0.5	1.36	<50	<1.5		9.34	2.37	1.12	<0.1	<0.5	<0.5	<0.1	1.4
J.T. Myers	846	23-Jul-13	<0.1	7.52	0.75	35.46		34.72	<0.1	<0.5	2.07	<50	<1.5		8.83	0.89	1.19	<0.1	<0.5	<0.5	<0.1	1.5
J.T. Myers	846	19-Sep-13	<0.1	5.37	0.87	<10		37.51	<0.1	0.56	1.67	<50	<1.5		11.72	1.03	1.14	<0.1	<0.5	0.9	<0.1	3.29
J.T. Myers	846	20-Nov-13	<0.1	4.26	0.87	33.39		36.26	<0.1	<0.5	1.69	<50	<1.5		10.93	1.86	1.53	<0.1	<0.5	0.63	<0.1	5.05
J.T. Myers	846	21-Jan-14	<0.1	6.89	<1	27		34.2	<1	<1	1.3	<50	<5		8.97	4.3	1.2	<1	<0.1	<1	<0.1	1.2
J.T. Myers	846	19-Mar-14	<0.1	7.83	<1	29.6		35.1	<1	<1	1.13	<50	<5		10.1	12.74	1.14	<1	<0.1	<1	<0.1	1.6
J.T. Myers	846	29-May-14	<0.1	7.65	<1	34.4	<1	35.3	<1	<1	1.73	<50	<5	2.37	9.32	1.34	1.13	<1	0.12	<1	<0.1	<1
J.T. Myers	846	17-Jul-14	<0.1	6.23	1.02	44.3	<1	38.5	<1	<1	1.73	<50	<5	2.8	11.4	1.61	1.12	<1	0.18	<1	<0.1	1.12
J.T. Myers	846	16-Sep-14	<0.1	8.94	1.06	47	<1	42.5	<1	<1	1.68	<50	<1.5	3.21	14.2	3.14	1.31	<1	0.2	<1	<0.1	<1
J.T. Myers	846	19-Nov-14	<0.1	9.66	<1	39.3	<1	37.7	<1	<1	1.41	<50	<1.5	3.26	12.6	1.1	1.23	<1	0.15	<1	<0.1	1.23
J.T. Myers	846	21-Jan-15	<0.1	15.7	<1	31.8	<1	36.1	<1	<1	1.23	<50	<1.5	2.42	10.7	8.38	1.2	<1	<0.1	<1	<0.1	2.93
J.T. Myers	846	26-Mar-15	<0.1	6.2	<1	29	<1	26.9	<1	<1	1.38	<50	<1.5	2.28	7.32	6.12	1.36	<1	<0.1	<1	<0.1	1.37
J.T. Myers	846	20-May-15	<0.1	6.81	<1	32.5	<1	33	<1	<1	<1	<50	<1.5	2.18	10.5	6.62	<1	<1	0.1	<1	<0.1	<1
J.T. Myers	846	7-Jul-15	<0.1	6.34	<1	36.2	<1	35.5	<1	<1	2.14	<50	<1.5	3.1	9.68	<1	1.34	<1	0.1	<1	<0.1	<1
J.T. Myers	846	14-Sep-15	<0.1	12.7	1.04	42.6	<1	41.6	<1	<1	1.5	<50	<1.5	3.19	13	2.15	1.21	<1	0.2	<1	<0.1	<1
J.T. Myers	846	9-Nov-15	<0.1	4.39	<1	43.4	<1	44.1	<1	<1	1.62	<50	<1.5	3.61	15.7	1.04	1.42	<1	0.16	<1	<0.1	1.94
J.T. Myers	846	6-Jan-16	<0.1	5.37	<1	24.8	<1	26.2	<1	<1	1.58	<50	<1.5	2.24	7.1	1.84	1.51	<1	<0.1	<1	<0.1	<1
J.T. Myers	846	23-Mar-16	<0.1	6.63	<1	29.4	<1	35.3	<1	<1	1.36	<50	<1.5	2.07	10.5	4.5	1.17	<1	<0.1	<1	<0.1	<1
J.T. Myers	846	11-May-16	<0.1	6.18	<1	26.4	<1	28.4	<1	<1	1.34	<50	<1.5	2.12	8.79	2.53	<1	<1	0.1	<1	<0.1	<1
J.T. Myers	846	5-Jul-16	<0.1	6.3	<1	35.3	<1	32.3	<1	<1	1.24	<50	<1.5	2.29	10.1	2.14	<1	<1	0.13	<1	<0.1	22.3
J.T. Myers	846	14-Sep-16	<0.1	13	1.16	36.6	<1	36.5	<1	<1	1.78	<50	<1.5	2.93	10.8	4.1	1.36	<1	0.19	<1	<0.1	1.46
J.T. Myers	846	22-Nov-16	<0.1	4.84	1	39.6	<1	34	<1	1.04	1.71	<50	<1.5	2.76	11.7	3.56	1.57	<1	0.19	1.05	<0.1	<1
Smithland	918.5	10-Jan-12	<0.1	5.11	0.7	33.12		43.3	<0.1	2	1.49	<50	<1.5		12.7	13.88	2.38	<0.1	<0.5	0.68	<0.1	2.19
Smithland	918.5	13-Mar-12	<0.1	8.14	0.35	31.55		35.71	<0.1	1.62	<0.1	<50	<1.5		10.47	1.96	0.97	<0.1	<0.5	<0.5	<0.1	<1
Smithland	918.5	30-May-12	<0.1	3.96	0.74	38.02		39.6	<0.1	0.57	1.58	<50	<1.5		12.32	6.81	1.09	<0.1	<0.5	<0.5	<0.1	2.39
Smithland	918.5	11-Jul-12	<0.1	8.42	1.02	42.91		39.93	<0.1	<0.1	1.24	<50	<5		16.29	0.68	1.02	<0.1	<0.5	0.56	<0.1	3.96
Smithland	918.5	13-Sep-12	<0.1	4.26	1.12	46.3		37.38	<0.1	0.21	1.57	<50	<1.5		13.32	0.46	1.74	<0.1	<0.5	0.9	<0.1	1.34
Smithland	918.5	15-Nov-12	<0.1	2.21	0.71	57.66		45.06	<0.1	0.39	1.79	<50	<1.5		15.53	1.5	2.25	<0.1	<0.5	0.93	<0.1	1.34
Smithland	918.5	30-Jan-13	<0.1	5.95	0.65	34.46		35.71	<0.1	1.01	1.73	<50	<1.5		9.83	14.64	1.53	0.1	<0.5	0.69	<0.1	<1
Smithland	918.5	27-Mar-13	<0.1	5.38	0.58	30.6		35.84	<0.1	0.42	1.28	<50	<1.5		10.14	2.96	1.36	<0.1	<0.5	0.54	<0.1	<1
Smithland	918.5	8-May-13	<0.1	3.99	0.96	38.86		42.2	<0.1	<0.5	1.82	<50	<1.5		11.9	2.3	1.42	<0.1	<0.5	<0.5	<0.1	1.32
Smithland	918.5	23-Jul-13	<0.1	6.28	1	35.64		38.95	<0.1	0.67	1.95	<50	<1.5		10.83	1.04	1.03	<0.1	<0.5	<0.5	<0.1	1.21
Smithland	918.5	19-Sep-13	<0.1	2.36	1.12	44.72		39.7	<0.1	<0.5	1.53	<50	<1.5		14.74	0.83	1.33	<0.1	<0.5	0.83	<0.1	<1
Smithland	918.5	20-Nov-13	<0.1	4.11	1.17	36.71		38.86	<0.1	<0.5	1.63	<50	<1.5		11.83	2.19	1.64	<0.1	<0.5	0.71	<0.1	4.36
Smithland	918.5	21-Jan-14	<0.1	5.26	<1	30.8		38	<1	<1	1.41	<50	<5		10.7	3.63	1.23	<1	<0.1	<1	<0.1	1.63
Smithland	918.5	19-Mar-14	<0.1	4.22	<1	30.6		37.9	<1	<1	1.28	<50	<5		11.2	2.65	1.05	<1	<0.1	<1	<0.1	<1
Smithland	918.5	29-May-14	<0.1	5.11	<1	36.3	<1	39.8	<1	<1	1.72	<50	<5	2.73	10.8	2.56	1.16	<1	0.13	<1	<0.1	1.15
Smithland	918.5	17-Jul-14	<0.1	3.08	1.09	47.4	<1	47	<1	<1	1.46	<50	<5	2.79	14.9	<1	1	<1	0.18	<1	<0.1	<1
Smithland	918.5	16-Sep-14	<0.1	4.23	1.3	43.6	<1	43.1	<1	<1	1.75	<50	<1.5	3.43	13.1	2.45	1.35	<1	0.2	<1	<0.1	2.95
Smithland	918.5	19-Nov-14	<0.1	2.92	<1	40.4	<1	44	<1	<1	1.3	<50	<1.5	3.82	14.4	8.9	1.11	<1	0.14	<1	<0.1	<1
Smithland	918.5	21-Jan-15	<0.1	4.07	<1	35.4	<1	44	<1	<1	1.22	<50	<1.5	2.82	13.3	12.1	1.38	<1	0.1	<1	<0.1	1.7
Smithland	918.5	26-Mar-15	<0.1	5.21	<1	28.4	<1	26.2	<1	<1	1.37	<50	<1.5	2.63	7.48	9.01	1.21	<1	<0.1	<1	<0.1	1
Smithland	918.5	20-May-15	<0.1	5.48	<1	39.4	<1	40.5	<1	<1	1.4	<50	<1.5	2.62	13.6	9.03	1.15	<1	0.11	<1	<0.1	1.52
Smithland	918.5	7-Jul-15	<0.1	1.20	1.22	40.9	<1	38.5	<1	<1	2.4	232	1.8	3.59	11.2	20.1	1.78	<1	0.14	<1	<0.1	1.83
Smithland	918.5	14-Sep-15	<0.1	4.15	1.25	41.4	<1	42	<1	<1	1.37	<50	<1.5	3.1	15.2	1.17	1.24	<1	0.18	<1	<0.1	<1
Smithland	918.5	9-Nov-15	<0.1	2.47	1	45.4	<1	46.8	<1	<1	1.62	<50	<1.5	3.92	16.1	1.16	1.6	<1	0.17	<1	<0.1	1.33
Smithland	918.5	6-Jan-16	<0.1	4.52	<1	24.1	<1	24.5	<1	<1	1.45	<50	<1.6	2.9	6.88	3.31	1.28	<1	<0.1	<1	<0.1	<1
Smithland	918.5	23-Mar-16	<0.1	4.88	<1	33	<1	41.3	<1	<1	1.56	<50	<1.5	2.47	12.7	2.95	1.25	<1	0.11	<1	<0.1	<1
Smithland	918.5	11-May-16	<0.1	5.58	<1	33.3	<1	38.3	<1	<1	1.43	<50	<1.5	2.42	11.9	3.36	1.34	<1	0.12	<1	<0.1	<1
Smithland	918.5	6-Jul-16	<0.1	5.88	<1	39	<1	36.6	<1	<1	1.37	<50	<1.5	2.94	12.3	12	1.08	<1	0.14	<1	<0.1	1.9
Smithland	918.5	14-Sep-16	<0.1	3.86	1.39	37.8	<1	40.9	<1	<1	1.8	<50	<1.5	3.6	12.8	<1	1.51	<1	0.18	<1	<0.1	4.21
Smithland	918.5	22-Nov-16	<0.1	1.95	1.14	43.5	<1	42.8	<1	1.14	1.71	<50	<1.5	3.08	15.2	4.25	1.56	<1	0.18	1.03	<0.1	2.16
L&D 52	938.9	10-Jan-12	<0.1	5.71	0.73	32.15		38.67	<0.1	1.12	1.6	<50	<1.5		11.38	34.81	2.42	<0.1	<0.5	0.61	<0.1	9.17
L&D 52	938.9	13-Mar-12	<0.1	7.04	0.39	30.83		34.87	<0.1	<0.1	1.52	<50	<1.5		10.21	2.66	0.97	<0.1	<0.5	<0.5	<0.1	1.41
L&D 52	938.9	30-May-12	<0.1	2.96	0.69	34.65		36.17	<0.1	0.54	1.52	<										

Appendix B. Dissolved Metals Results, January 2012 through December 2016																							
SampleSite	Mile Point	Date	Ag (ug/L)	Al (ug/L)	As (ug/L)	Ba (ug/L)	Be (ug/L)	Ca (mg/L)	Cd (ug/L)	Cr (ug/L)	Cu (ug/L)	Fe (ug/L)	Hg (ng/L)	K (mg/L)	Mg (mg/L)	Mn (ug/L)	Ni (ug/L)	Pb (ug/L)	Sb (ug/L)	Se (ug/L)	Ti (ug/L)	Zn (ug/L)	
L&D 52	938.9	30-Jan-13	<0.1	6.99	0.73	32.66		32.18	<0.1	0.2	1.72	<50	1.61		8.8	26.6	146	<0.1	<0.5	<0.5	<0.1	<0.1	5.06
L&D 52	938.9	27-Mar-13	<0.1	5.01	0.53	27		29.77	<0.1	0.36	1.31	<50			8.32	7.02	124	<0.1	<0.5	0.5	<0.1	<1	
L&D 52	938.9	8-May-13	<0.1	3.41	0.93	38.01		40.92	<0.1	0.61	1.82	<50	<1.5		11.66	3.53	141	<0.1	<0.5	0.54	<0.1	1.21	
L&D 52	938.9	23-Jul-13	<0.1	6.83	1.18	34.58		35.65	<0.1	0.57	1.73	<50	<1.5		9.81	57.3	114	<0.1	<0.5	<0.5	<0.1	2.77	
L&D 52	938.9	24-Sep-13	<0.1	3.95	1.03	44.07		39.5	<0.1	<0.5	1.38	<50	<1.5		13.52	3.18	124	0.12	<0.5	0.88	<0.1	<1	
L&D 52	938.9	20-Nov-13	<0.1	4.09	1.01	36.94		40.01	<0.1	<0.5	1.5	<50	<1.5		11.82	3.4	163	0.1	<0.5	0.66	<0.1	1.38	
L&D 52	938.9	21-Jan-14	<0.1	9.44	<1	32.2		38.9	<1	<1	1.35	<50	<5		11.2	4.46	131	<1	<0.1	<1	<0.1	5.09	
L&D 52	938.9	19-Mar-14	<0.1	4.52	<1	31.6		39.2	<1	<1	1.29	<50	<5		11.5	3.73	111	<1	<0.1	<1	<0.1	1.58	
L&D 52	938.9	29-May-14	<0.1	4.26	<1	36.9	<1	40.5	<1	<1	1.68	<50	<5	2.76	11.2	9.21	126	<1	0.13	<1	<0.1	<1	
L&D 52	938.9	17-Jul-14	<0.1	6.8	1.18	47.5	<1	47.2	<1	<1	1.56	<50	<5	2.82	14.6	<1	108	<1	0.18	<1	<0.1	1.1	
L&D 52	938.9	17-Sep-14	<0.1	4.04	1.29	40.6	<1	39.8	<1	<1	1.59	<50	<1.5	3.19	12.1	4.18	125	<1	0.18	<1	<0.1	<1	
L&D 52	938.9	19-Nov-14	<0.1	21.3	<1	39.2	<1	42.7	<1	<1	1.38	<50	<1.5	3.2	14.1	11.5	1.3	<1	0.15	<1	<0.1	1.17	
L&D 52	938.9	21-Jan-15	<0.1	3.34	<1	35.6	<1	43.1	<1	<1	1.23	<50	<1.5	2.71	13.4	10.4	121	<1	0.1	<1	<0.1	6	
L&D 52	938.9	26-Mar-15	<0.1	5.54	<1	31.4	<1	29.4	<1	<1	1.42	<50	<1.5	2.96	8.18	10.9	145	<1	<0.1	<1	<0.1	4.3	
L&D 52	938.9	20-May-15	<0.1	5.38	<1	39	<1	40.5	<1	<1	1.41	<50	<1.5	2.68	13.1	10	119	<1	0.12	<1	<0.1	1.14	
L&D 52	938.9	7-Jul-15	<0.1	4.92	1.29	38.4	<1	37.1	<1	<1	1.94	<50	<1.5	3.65	10.5	14.6	135	<1	0.15	<1	<0.1	1.34	
L&D 52	938.9	29-Sep-15	<0.1	2.91	1.15	32.5	<1	30.5	<1	<1	1.01	<50	1.5	2.51	9.8	1.17	<1	<1	0.15	<1	<0.1	6.15	
L&D 52	938.9	9-Nov-15	<0.1	2.51	<1	42.2	<1	40.6	<1	<1	1.4	<50	1.8	3.36	14.2	5.18	<1	<1	0.16	<1	<0.1	<1	
L&D 52	938.9	5-Jan-16	<0.1	5.1	<1	25.6	<1	26.1	<1	<1	1.58	<50	3	3.01	7.04	12.7	114	<1	0.1	<1	<0.1	16.4	
L&D 52	938.9	23-Mar-16	<0.1	4.72	<1	31.7	<1	39.8	<1	<1	1.52	<50	<1.5	2.43	11.8	19.7	1.2	<1	0.12	<1	<0.1	1.89	
L&D 52	938.9	11-May-16	<0.1	5.08	<1	33	<1	38.9	<1	<1	1.65	<50	<1.5	2.52	12.2	7.65	132	<1	0.11	<1	<0.1	1.11	
L&D 52	938.9	6-Jul-16	<0.1	5.83	1.02	38.4	<1	36.6	<1	<1	1.4	<50	<1.5	2.8	11.9	3.46	112	<1	0.15	<1	<0.1	<1	
L&D 52	938.9	14-Sep-16	<0.1	3.18	1.34	31.1	<1	32.9	<1	<1	1.14	<50	<1.5	2.39	10.2	<1	<1	<1	0.15	<1	<0.1	<1	
L&D 52	938.9	22-Nov-16	<0.1	2.4	<1	35	<1	34.2	<1	<1	1.22	<50	<1.5	2.53	11.4	1.37	1.1	<1	0.18	<1	<0.1	<1	

APPENDIX C

Nutrients Monitoring Program Data

Appendix C. Nutrients Monitoring Program Data.

Location	Mile Point	Date	Total Kjeldahl Nitrogen, mg/L	Ammonia-Nitrogen, mg/L	Nitrate/Nitrite-Nitrogen, mg/L	Total Phosphorus, mg/L
WEST VIEW	5.0	3/3/2010	0.29	0.09	0.947	0.029
WEST VIEW	5.0	3/17/2010	0.566	0.04	0.688	0.086
WEST VIEW	5.0	4/5/2010	0.577	0.04	0.659	0.053
WEST VIEW	5.0	4/27/2010	0.514	0.05	0.618	0.054
WEST VIEW	5.0	5/10/2010	0.498		0.651	0.079
WEST VIEW	5.0	5/24/2010	0.456		0.52	
WEST VIEW	5.0	6/7/2010	0.504		0.779	0.028
WEST VIEW	5.0	6/15/2010	0.6		0.737	0.042
WEST VIEW	5.0	7/7/2010	0.43		0.841	0.035
WEST VIEW	5.0	7/26/2010	0.613		0.72	0.033
WEST VIEW	5.0	8/4/2010	0.523		0.608	0.024
WEST VIEW	5.0	8/19/2010	0.347		0.812	
WEST VIEW	5.0	9/14/2010	1.21		0.857	0.016
WEST VIEW	5.0	9/27/2010	0.282		1.05	0.06
WEST VIEW	5.0	11/29/2010	0.713		0.662	0.038
WEST VIEW	5.0	12/13/2010	0.292	0.03	0.486	0.026
WEST VIEW	5.0	12/28/2010	0.488	0.09	0.763	0.011
WEST VIEW	5.0	1/10/2011	0.514	0.1	0.667	0.042
WEST VIEW	5.0	1/24/2011	0.583	0.16	0.96	0.131
WEST VIEW	5.0	2/8/2011	0.408	0.1	0.997	0.04
WEST VIEW	5.0	2/23/2011	0.479	0.06	0.874	0.05
WEST VIEW	5.0	3/15/2011	0.891	0.04	0.671	0.06
WEST VIEW	5.0	3/21/2011	0.364		0.547	0.037
WEST VIEW	5.0	4/11/2011	0.394		0.513	0.032
WEST VIEW	5.0	4/20/2011	0.603	0.04	0.437	0.062
WEST VIEW	5.0	5/9/2011	0.322		0.459	0.051
WEST VIEW	5.0	5/26/2011	0.151		0.448	0.026
WEST VIEW	5.0	6/14/2011	0.488		0.573	0.033
WEST VIEW	5.0	6/29/2011	0.384	0.05	0.452	0.054
WEST VIEW	5.0	7/12/2011	0.21	0.02	1.3	0.053
WEST VIEW	5.0	01/09/2012	0.18	0.09	0.59	0.026
WEST VIEW	5.0	02/08/2012			0.64	0.019
WEST VIEW	5.0	03/27/2012	0.15		0.53	0.022
WEST VIEW	5.0	04/04/2012	0.49		0.88	0.02
WEST VIEW	5.0	04/16/2012	0.24		0.7	0.011
WEST VIEW	5.0	05/08/2012		0.42	0.41	0.049
WEST VIEW	5.0	05/23/2012	0.17		0.56	0.17
WEST VIEW	5.0	06/07/2012	0.32		0.8	0.25
WEST VIEW	5.0	06/18/2012	0.26		0.97	
WEST VIEW	5.0	08/06/2012	0.2		0.87	
WEST VIEW	5.0	08/22/2012	0.25		0.92	0.043
WEST VIEW	5.0	09/06/2012			1	0.02
WEST VIEW	5.0	10/23/2012			0.73	0.051
WEST VIEW	5.0	11/19/2012			0.62	0.059
WEST VIEW	5.0	12/05/2012			0.76	0.02
WEST VIEW	5.0	05/29/2013	0.23		0.67	0.047
WEST VIEW	5.0	06/12/2013	0.55		0.76	
WEST VIEW	5.0	09/16/2013	0.24	0.059	0.89	0.027
WHEELING	86.8	1/11/2010	0.583	0.08	0.948	0.05
WHEELING	86.8	1/25/2010	1.68	0.09	0.932	0.343
WHEELING	86.8	2/18/2010	0.469	0.14	0.798	0.034
WHEELING	86.8	3/8/2010	0.367	0.13	0.956	0.033
WHEELING	86.8	3/23/2010	1.62	0.04	0.754	0.314
WHEELING	86.8	4/5/2010	0.634	0.05	0.676	0.031
WHEELING	86.8	4/20/2010	0.595		0.687	0.054
WHEELING	86.8	5/3/2010	0.301		0.584	0.046
WHEELING	86.8	6/7/2010	1.13	0.07	0.975	0.104
WHEELING	86.8	6/23/2010	0.853		0.812	0.054
WHEELING	86.8	7/6/2010	0.486		0.803	0.045
WHEELING	86.8	7/19/2010	0.625		0.811	0.113
WHEELING	86.8	8/17/2010	0.514		0.683	0.044
WHEELING	86.8	9/21/2010	0.461	0.04	1.02	0.043
WHEELING	86.8	10/19/2010	0.407	0.04	0.937	0.095
WHEELING	86.8	11/1/2010	0.444	0.05	1.05	0.12
WHEELING	86.8	11/16/2010	0.364	0.04	0.806	0.038
WHEELING	86.8	12/8/2010	0.782	0.05	0.648	0.115
WHEELING	86.8	12/20/2010	0.706	0.06	0.625	0.036
WHEELING	86.8	1/5/2011	0.794	0.16	0.866	0.053
WHEELING	86.8	1/19/2011	0.659	0.14	0.741	0.058
WHEELING	86.8	2/8/2011	0.607	0.15	1.07	0.066
WHEELING	86.8	2/24/2011	0.893	0.09	0.931	0.079
WHEELING	86.8	3/9/2011	0.859	0.06	0.733	0.117
WHEELING	86.8	3/23/2011	0.547	0.04	0.644	0.055
WHEELING	86.8	4/5/2011	0.817	0.06	0.657	0.061
WHEELING	86.8	4/18/2011	0.619	0.03	0.566	0.094
WHEELING	86.8	5/4/2011	0.376	0.04	0.548	0.041
WHEELING	86.8	5/31/2011	0.732		0.421	0.175
WHEELING	86.8	6/7/2011	0.564		0.373	0.027
WHEELING	86.8	6/22/2011	0.471	0.06	0.627	0.042
WHEELING	86.8	7/6/2011	0.22	0.05	1	0.16
WHEELING	86.8	12/16/2011	0.17	0.084	0.76	0.1
WHEELING	86.8	01/03/2012	0.2	0.084	0.72	0.028
WHEELING	86.8	02/06/2012		36	0.77	0.031
WHEELING	86.8	04/02/2012	0.56		0.65	0.018
WHEELING	86.8	04/16/2012	0.31		0.74	0.011
WHEELING	86.8	05/07/2012	0.3			0.027

Appendix C. Nutrients Monitoring Program Data.						
Location	Mile Point	Date	Total Kjeldahl Nitrogen, mg/L	Ammonia-Nitrogen, mg/L	Nitrate/Nitrite-Nitrogen, mg/L	Total Phosphorus, mg/L
WHEELING	86.8	05/21/2012	0.31		0.63	0.19
WHEELING	86.8	06/04/2012	0.22		0.85	
WHEELING	86.8	06/18/2012	0.31		0.82	
WHEELING	86.8	07/09/2012			1	0.027
WHEELING	86.8	07/23/2012	0.32		0.89	0.02
WHEELING	86.8	08/06/2012	0.29		0.93	0.061
WHEELING	86.8	08/20/2012	0.31		0.98	0.038
WHEELING	86.8	09/04/2012			1	
WHEELING	86.8	09/17/2012			1.1	0.018
WHEELING	86.8	10/01/2012		0.055	1.2	0.034
WHEELING	86.8	10/15/2012			1	0.032
WHEELING	86.8	11/05/2012		0.12	0.84	0.04
WHEELING	86.8	11/19/2012	0.21	0.031	0.77	
WHEELING	86.8	12/03/2012			0.93	0.022
WHEELING	86.8	12/17/2012			0.72	0.032
WHEELING	86.8	01/07/2013		0.031	0.75	0.022
WHEELING	86.8	01/28/2013			0.8	0.036
WHEELING	86.8	02/06/2013	0.23		0.74	0.098
WHEELING	86.8	02/19/2013	0.31		0.76	
WHEELING	86.8	03/07/2013	0.27	0.047	0.84	0.01
WHEELING	86.8	03/18/2013	0.42		0.68	
WHEELING	86.8	04/08/2013		0.045	0.67	
WHEELING	86.8	04/22/2013	0.14	0.11	0.6	0.032
WHEELING	86.8	05/06/2013	0.33		0.63	0.024
WHEELING	86.8	05/28/2013	0.13		0.67	
WHEELING	86.8	06/04/2013	0.4		0.75	0.014
WHEELING	86.8	06/17/2013	0.37		0.75	
WHEELING	86.8	07/08/2013	0.34		0.77	0.024
WHEELING	86.8	08/19/2013	0.29		0.75	0.028
WHEELING	86.8	09/10/2013	0.29		0.79	0.04
WHEELING	86.8	09/23/2013	0.46	0.031	1.1	0.042
WHEELING	86.8	10/08/2013	0.39		0.83	0.027
WHEELING	86.8	10/22/2013	0.37		0.86	0.036
WHEELING	86.8	11/05/2013	0.36		0.75	0.36
WHEELING	86.8	12/04/2013	0.23		0.67	0.035
WHEELING	86.8	12/17/2013			0.65	0.018
HUNTINGTON	306	1/6/2010	0.485	0.06	0.864	0.065
HUNTINGTON	306	1/19/2010	0.766	0.07	0.752	0.109
HUNTINGTON	306	2/8/2010	1.13	0.06	0.591	0.209
HUNTINGTON	306	2/22/2010	0.399	0.07	0.718	0.04
HUNTINGTON	306	3/8/2010	0.319	0.08	0.951	0.067
HUNTINGTON	306	3/17/2010	0.824	0.05	0.786	0.26
HUNTINGTON	306	4/7/2010	0.543	0.04	0.705	0.058
HUNTINGTON	306	4/20/2010	0.688	0.03	0.524	0.048
HUNTINGTON	306	5/5/2010	2.02		0.454	0.426
HUNTINGTON	306	5/18/2010	0.889		0.625	0.1
HUNTINGTON	306	6/8/2010	1.96	0.04	0.649	0.189
HUNTINGTON	306	6/14/2010	2.65		0.738	0.684
HUNTINGTON	306	7/20/2010	0.625		0.779	0.18
HUNTINGTON	306	8/10/2010	0.693		0.574	0.048
HUNTINGTON	306	8/24/2010	0.484		0.656	0.067
HUNTINGTON	306	9/13/2010	0.991		0.454	0.06
HUNTINGTON	306	9/27/2010	0.512		0.579	0.019
HUNTINGTON	306	10/18/2010	0.684		0.805	0.092
HUNTINGTON	306	10/26/2010	0.469		0.935	0.09
HUNTINGTON	306	11/8/2010	0.568		0.871	0.026
HUNTINGTON	306	11/22/2010	0.433		0.88	0.027
HUNTINGTON	306	11/26/2010	0.469		0.935	0.09
HUNTINGTON	306	12/6/2010	1.43	0.05	0.819	0.368
HUNTINGTON	306	12/27/2010	0.597	0.06	0.844	0.025
HUNTINGTON	306	1/10/2011	0.748	0.14	0.952	0.067
HUNTINGTON	306	1/24/2011	0.502	0.1	0.914	0.136
HUNTINGTON	306	2/9/2011	0.643	0.13	0.942	0.087
HUNTINGTON	306	2/23/2011	0.788	0.1	1.32	0.284
HUNTINGTON	306	3/10/2011	1.11	0.06	0.772	0.209
HUNTINGTON	306	3/28/2011	0.471	0.03	0.659	0.086
HUNTINGTON	306	4/12/2011	0.752	0.03	0.575	0.142
HUNTINGTON	306	4/27/2011	0.784		0.486	0.085
HUNTINGTON	306	5/9/2011	0.494		0.592	0.146
HUNTINGTON	306	5/26/2011	0.55		0.568	0.233
HUNTINGTON	306	6/13/2011	0.637		0.67	0.055
HUNTINGTON	306	6/28/2011	0.412	0.05	0.47	0.049
N. KENTUCKY	462.9	1/6/2010	0.578	0.05	0.888	0.076
N. KENTUCKY	462.9	1/20/2010	0.541	0.06	0.85	0.108
N. KENTUCKY	462.9	2/3/2010	0.654	0.06	0.983	0.207
N. KENTUCKY	462.9	2/23/2010	0.505	0.05	0.802	0.098
N. KENTUCKY	462.9	3/2/2010	0.371	0.07	0.886	0.119
N. KENTUCKY	462.9	3/16/2010	0.828	0.04	0.931	0.216
N. KENTUCKY	462.9	4/6/2010	0.528	0.05	0.857	0.05
N. KENTUCKY	462.9	5/18/2010	0.733		0.789	0.039
N. KENTUCKY	462.9	6/8/2010	0.893		1.2	0.086
N. KENTUCKY	462.9	6/30/2010	1.15		0.954	0.08
N. KENTUCKY	462.9	7/15/2010	0.582		0.956	0.152

Appendix C. Nutrients Monitoring Program Data.						
Location	Mile Point	Date	Total Kjeldahl Nitrogen, mg/L	Ammonia-Nitrogen, mg/L	Nitrate/Nitrite-Nitrogen, mg/L	Total Phosphorus, mg/L
N. KENTUCKY	462.9	7/29/2010	0.636		0.738	0.06
N. KENTUCKY	462.9	8/2/2010	0.541		0.513	0.039
N. KENTUCKY	462.9	8/16/2010	0.52		0.628	0.037
N. KENTUCKY	462.9	9/20/2010	0.709		0.665	0.029
N. KENTUCKY	462.9	10/4/2010	1.68	0.03	0.468	0.038
N. KENTUCKY	462.9	10/18/2010	1.06		0.645	0.024
N. KENTUCKY	462.9	11/1/2010	0.198		0.832	0.021
N. KENTUCKY	462.9	11/15/2010	0.328		0.902	0.018
N. KENTUCKY	462.9	12/6/2010	1.12	0.05	0.67	0.323
N. KENTUCKY	462.9	12/20/2010	0.781	0.04	0.822	0.043
N. KENTUCKY	462.9	1/3/2011	0.528	0.07	0.975	0.046
N. KENTUCKY	462.9	1/17/2011	0.522	0.11	0.879	0.062
N. KENTUCKY	462.9	2/9/2011	0.678	0.08	0.993	0.094
N. KENTUCKY	462.9	2/21/2011	0.472	0.1	1.24	0.073
N. KENTUCKY	462.9	3/7/2011	0.927	0.06	1.13	0.218
N. KENTUCKY	462.9	3/21/2011	0.8	0.03	1.03	0.113
N. KENTUCKY	462.9	4/4/2011	0.519	0.03	0.798	0.047
N. KENTUCKY	462.9	4/18/2011	0.478		0.601	0.055
N. KENTUCKY	462.9	5/2/2011	0.405	0.05	0.709	0.052
N. KENTUCKY	462.9	5/17/2011	0.699		0.699	0.075
N. KENTUCKY	462.9	6/6/2011	0.504	0.03	0.75	0.071
N. KENTUCKY	462.9	6/16/2011	0.493	0.07	0.684	0.029
N. KENTUCKY	462.9	6/20/2011	0.374	0.05	0.744	0.073
N. KENTUCKY	462.9	7/5/2011	0.25	0.06	1.2	0.034
N. KENTUCKY	462.9	12/19/2011	0.14	0.036	0.95	0.058
N. KENTUCKY	462.9	01/09/2012	0.16	0.087	0.92	0.033
N. KENTUCKY	462.9	01/23/2012	0.23	1	0.71	0.12
N. KENTUCKY	462.9	02/06/2012	0.1		0.95	0.063
N. KENTUCKY	462.9	04/03/2012	3.5		0.72	0.056
N. KENTUCKY	462.9	04/16/2012	0.13		0.52	
N. KENTUCKY	462.9	05/07/2012			0.71	0.045
N. KENTUCKY	462.9	05/21/2012			0.76	0.027
N. KENTUCKY	462.9	06/04/2012	0.24		0.63	
N. KENTUCKY	462.9	06/18/2012	0.33		0.58	
N. KENTUCKY	462.9	07/02/2012	0.29		0.44	0.011
N. KENTUCKY	462.9	07/16/2012	0.37		0.45	0.033
N. KENTUCKY	462.9	08/06/2012	0.14		0.59	
N. KENTUCKY	462.9	08/20/2012			0.58	0.024
N. KENTUCKY	462.9	09/05/2012			0.66	
N. KENTUCKY	462.9	09/17/2012			0.58	
N. KENTUCKY	462.9	10/01/2012			0.68	0.016
N. KENTUCKY	462.9	10/15/2012			0.77	0.045
N. KENTUCKY	462.9	11/05/2012			1.1	0.59
N. KENTUCKY	462.9	11/19/2012				0.028
N. KENTUCKY	462.9	12/03/2012			1	0.04
N. KENTUCKY	462.9	12/17/2012	0.22		0.81	0.03
N. KENTUCKY	462.9	01/07/2013			0.81	0.016
N. KENTUCKY	462.9	01/21/2013	0.29		0.86	0.059
N. KENTUCKY	462.9	02/04/2013	0.14		0.74	0.092
N. KENTUCKY	462.9	11/18/2013	0.22		0.59	0.014
LOUISVILLE	600	4/19/2010	0.377		1.07	0.05
LOUISVILLE	600	5/3/2010	0.883		0.682	0.288
LOUISVILLE	600	5/17/2010	0.568		0.958	0.061
LOUISVILLE	600	6/16/2010	0.638		1.45	0.126
LOUISVILLE	600	7/8/2010	0.659	0.03	1.03	0.108
LOUISVILLE	600	7/19/2010	0.442		1.18	0.161
LOUISVILLE	600	8/1/2010	0.701		0.909	0.061
LOUISVILLE	600	8/16/2010	0.487		0.778	0.075
LOUISVILLE	600	9/7/2010	0.401		0.744	
LOUISVILLE	600	9/21/2010	0.479		0.877	0.046
LOUISVILLE	600	10/4/2010	0.275		0.993	0.05
LOUISVILLE	600	10/19/2010	0.362		0.928	0.045
LOUISVILLE	600	11/19/2010	0.362		0.928	0.045
LOUISVILLE	600	3/21/2011	0.576		1.15	0.078
LOUISVILLE	600	4/4/2011	0.37		0.957	0.044
LOUISVILLE	600	6/7/2011	0.788		0.843	0.079
LOUISVILLE	600	6/22/2011	0.516	0.04	1.01	0.092
LOUISVILLE	600	07/16/2012	0.26		0.71	0.029
EVANSVILLE	791.5	1/4/2010	1.03	0.05	0.942	0.176
EVANSVILLE	791.5	1/19/2010	0.475	0.07	1.17	0.077
EVANSVILLE	791.5	2/2/2010	0.758	0.06	1.01	0.311
EVANSVILLE	791.5	2/16/2010	0.945	0.06	0.832	0.254
EVANSVILLE	791.5	3/2/2010	0.617	0.07	0.978	0.32
EVANSVILLE	791.5	3/16/2010	1.13	0.07	1.6	0.309
EVANSVILLE	791.5	4/12/2010	0.667	0.06	0.94	0.083
EVANSVILLE	791.5	4/21/2010	0.621	0.03	1.07	0.07
EVANSVILLE	791.5	5/4/2010	1.08	0.04	0.819	0.359
EVANSVILLE	791.5	5/18/2010	1.16		0.824	0.239
EVANSVILLE	791.5	6/7/2010	0.641		1.54	0.149
EVANSVILLE	791.5	6/15/2010	0.793		1.21	0.219
EVANSVILLE	791.5	7/7/2010	0.618		1.24	0.062
EVANSVILLE	791.5	7/20/2010	0.536		1.27	0.102
EVANSVILLE	791.5	8/3/2010	0.664		0.74	0.066

Appendix C. Nutrients Monitoring Program Data.						
Location	Mile Point	Date	Total Kjeldahl Nitrogen, mg/L	Ammonia-Nitrogen, mg/L	Nitrate/Nitrite-Nitrogen, mg/L	Total Phosphorus, mg/L
EVANSVILLE	791.5	8/17/2010	0.79		0.781	0.09
EVANSVILLE	791.5	9/13/2010	0.979		0.88	0.089
EVANSVILLE	791.5	9/21/2010	0.497		0.742	0.078
EVANSVILLE	791.5	10/6/2010	0.47		0.828	0.085
EVANSVILLE	791.5	10/19/2010	0.453		1.02	0.041
EVANSVILLE	791.5	11/2/2010	0.371	0.03	1.14	0.084
EVANSVILLE	791.5	11/16/2010	0.344		0.905	0.07
EVANSVILLE	791.5	12/13/2010	0.969	0.06	0.887	0.214
EVANSVILLE	791.5	12/22/2010	1	0.08	1.02	0.21
EVANSVILLE	791.5	1/5/2011	1.08	0.27	1.06	0.138
EVANSVILLE	791.5	1/18/2011	0.711	0.14	1.11	0.07
EVANSVILLE	791.5	2/1/2011	0.666	0.18	1.42	0.099
EVANSVILLE	791.5	2/22/2011	0.707	0.11	1.38	0.123
EVANSVILLE	791.5	3/8/2011	1.12	0.05	1.37	0.181
EVANSVILLE	791.5	3/22/2011	0.82	0.03	1.08	0.105
EVANSVILLE	791.5	4/5/2011	1.05	0.05	0.862	0.196
EVANSVILLE	791.5	4/19/2011	0.59	0.03	0.859	0.129
EVANSVILLE	791.5	5/3/2011	1.08	0.04	0.815	0.124
EVANSVILLE	791.5	5/23/2011	0.601		0.846	0.16
EVANSVILLE	791.5	6/6/2011	0.785	0.05	0.995	0.123
EVANSVILLE	791.5	6/21/2011	0.595	0.07	1.26	0.128
EVANSVILLE	791.5	7/12/2011	0.35	0.03	1.7	0.084
EVANSVILLE	791.5	7/26/2011	0.19	0.04	1.2	0.062
EVANSVILLE	791.5	12/20/2011	0.14	0.045	0.94	0.11
EVANSVILLE	791.5	01/04/2012	0.23	0.12	1	0.088
EVANSVILLE	791.5	01/18/2012	0.14	0.048	1.1	0.1
EVANSVILLE	791.5	02/01/2012	0.36	0.15	1	0.12
EVANSVILLE	791.5	02/13/2012	0.48	0.17	1.1	0.092
EVANSVILLE	791.5	04/17/2012	0.51		0.82	0.049
EVANSVILLE	791.5	04/23/2012	0.29	0.064	0.67	0.068
EVANSVILLE	791.5	05/01/2012	0.23			0.099
EVANSVILLE	791.5	05/14/2012			0.98	0.12
EVANSVILLE	791.5	06/06/2012	0.23		1	0.031
EVANSVILLE	791.5	06/19/2012	0.35		0.88	0.034
EVANSVILLE	791.5	07/17/2012	0.28			
EVANSVILLE	791.5	07/23/2012	0.55		1.1	0.038
EVANSVILLE	791.5	08/01/2012	0.35		0.78	0.063
EVANSVILLE	791.5	08/21/2012	0.26		0.62	0.045
EVANSVILLE	791.5	09/12/2012			0.82	0.022
EVANSVILLE	791.5	09/18/2012	0.14		0.83	0.057
EVANSVILLE	791.5	10/10/2012			1.1	0.063
EVANSVILLE	791.5	10/23/2012		0.04	1	0.047
EVANSVILLE	791.5	11/06/2012			1.2	0.059
EVANSVILLE	791.5	11/20/2012			1.2	0.02
EVANSVILLE	791.5	12/04/2012			1.2	0.059
EVANSVILLE	791.5	12/18/2012	0.12		1	0.14
EVANSVILLE	791.5	01/07/2013		0.059	0.95	0.069
EVANSVILLE	791.5	01/23/2013			1.1	0.19
EVANSVILLE	791.5	02/05/2013	0.14		1	0.21
EVANSVILLE	791.5	02/20/2013	0.49		1	0.04
EVANSVILLE	791.5	03/11/2013	0.52		1.2	0.063
EVANSVILLE	791.5	05/29/2013	0.44		1	0.061
EVANSVILLE	791.5	06/18/2013	0.42		0.8	0.057
EVANSVILLE	791.5	08/20/2013	0.3		0.9	0.061
EVANSVILLE	791.5	08/27/2013	0.36		0.85	0.057
EVANSVILLE	791.5	09/23/2013	0.37		0.86	0.067
EVANSVILLE	791.5	10/01/2013	0.53		0.96	0.053
EVANSVILLE	791.5	10/22/2013	0.43		0.98	0.11
EVANSVILLE	791.5	10/28/2013	0.33		1	0.087
EVANSVILLE	791.5	11/19/2013	0.68		1.1	0.15
PADUCAH	935.5	1/4/2010	0.66	0.04	0.459	0.12
PADUCAH	935.5	1/19/2010	0.343	0.03	0.369	0.068
PADUCAH	935.5	2/2/2010	0.502		0.553	0.096
PADUCAH	935.5	2/15/2010	0.772		0.465	0.231
PADUCAH	935.5	3/2/2010	0.513		0.503	0.158
PADUCAH	935.5	3/16/2010	0.61		0.362	0.137
PADUCAH	935.5	4/6/2010	0.861		0.324	0.082
PADUCAH	935.5	4/20/2010	0.655	0.08	0.468	0.092
PADUCAH	935.5	5/5/2010	0.498	0.04	0.258	0.169
PADUCAH	935.5	5/19/2010	1.37		0.335	0.601
PADUCAH	935.5	6/8/2010	0.649	0.06	0.293	0.102
PADUCAH	935.5	6/28/2010	1.09		0.216	0.083
PADUCAH	935.5	7/8/2010	0.603	0.05		0.069
PADUCAH	935.5	7/20/2010	0.508	0.07		0.08
PADUCAH	935.5	8/5/2010	0.685			0.04
PADUCAH	935.5	9/7/2010	0.792	0.03		0.026
PADUCAH	935.5	9/20/2010	0.431	0.04	0.303	0.05
PADUCAH	935.5	10/5/2010	0.253	0.03	0.144	0.029
PADUCAH	935.5	10/19/2010	0.405	0.03	0.135	0.088
PADUCAH	935.5	11/1/2010	0.392	0.04	0.204	0.115
PADUCAH	935.5	11/15/2010	0.386		0.241	0.104
PADUCAH	935.5	12/6/2010	0.401	0.05	0.239	0.094
PADUCAH	935.5	12/13/2010	0.538	0.04	0.303	0.074

Appendix C. Nutrients Monitoring Program Data.						
Location	Mile Point	Date	Total Kjeldahl Nitrogen, mg/L	Ammonia-Nitrogen, mg/L	Nitrate/Nitrite-Nitrogen, mg/L	Total Phosphorus, mg/L
PADUCAH	935.5	1/4/2011	1.05	0.06	0.407	0.121
PADUCAH	935.5	1/18/2011	0.666	0.06	0.417	0.128
PADUCAH	935.5	2/21/2011	0.964		0.333	0.06
PADUCAH	935.5	3/7/2011	0.625	0.06	0.414	0.058
PADUCAH	935.5	3/21/2011	0.784		0.459	0.111
PADUCAH	935.5	4/4/2011	0.494		0.351	0.092
PADUCAH	935.5	4/18/2011	0.343		0.341	0.064
PADUCAH	935.5	5/23/2011	0.646		0.337	0.264
PADUCAH	935.5	6/6/2011	0.736	0.06	0.346	0.158
PADUCAH	935.5	6/22/2011	0.641	0.03	0.254	0.116
PADUCAH	935.5	7/5/2011	0.23	0.09	0.2	0.071
PADUCAH	935.5	01/04/2012		0.097		
PADUCAH	935.5	01/17/2012	0.16		0.57	0.086
PADUCAH	935.5	02/07/2012			0.56	0.054
PADUCAH	935.5	04/09/2012	0.55	0.97	0.24	0.072
PADUCAH	935.5	04/25/2012	0.23		0.17	0.042
PADUCAH	935.5	05/07/2012	0.19		0.46	0.077
PADUCAH	935.5	05/21/2012			0.22	0.038
PADUCAH	935.5	06/05/2012	0.43		0.07	0.042
PADUCAH	935.5	06/20/2012	0.29			0.015
PADUCAH	935.5	07/02/2012	0.57			0.043
PADUCAH	935.5	07/18/2012	0.37			0.049
PADUCAH	935.5	08/13/2012	0.43	0.053	0.06	0.045
PADUCAH	935.5	09/05/2012			0.12	0.053
PADUCAH	935.5	10/02/2012			0.19	0.073
PADUCAH	935.5	10/23/2012		0.097	0.21	0.096
PADUCAH	935.5	11/06/2012			0.36	0.063
PADUCAH	935.5	11/19/2012			0.31	
PADUCAH	935.5	12/04/2012			0.23	0.065
PADUCAH	935.5	12/18/2012	0.33		0.24	0.067
PADUCAH	935.5	01/07/2013		0.07	0.48	0.045
PADUCAH	935.5	01/22/2013	0.23		0.56	0.1
PADUCAH	935.5	02/05/2013	0.14		0.53	0.075
PADUCAH	935.5	02/18/2013	0.47		0.44	
PADUCAH	935.5	03/04/2013	0.25		0.46	0.032
PADUCAH	935.5	03/26/2013	1.1		0.47	0.036
PADUCAH	935.5	04/02/2013	0.24		0.51	
PADUCAH	935.5	04/22/2013	0.24		0.34	0.02
PADUCAH	935.5	05/09/2013	0.25	0.055	0.3	0.034
PADUCAH	935.5	05/23/2013	0.36		0.29	0.092
PADUCAH	935.5	06/05/2013	0.61		0.3	0.094
PADUCAH	935.5	07/08/2013	0.42		0.068	0.026
PADUCAH	935.5	07/16/2013	0.38		0.14	0.065
PADUCAH	935.5	08/22/2013	0.47		0.14	0.016
PADUCAH	935.5	09/04/2013	0.41		0.077	0.059
PADUCAH	935.5	09/17/2013	0.45	0.075	0.11	0.065
PADUCAH	935.5	10/09/2013	0.57		0.26	0.042
PADUCAH	935.5	10/23/2013	0.29		0.25	0.074
PADUCAH	935.5	11/05/2013	0.1		0.27	0.62
PADUCAH	935.5	11/20/2013	0.38		0.29	0.074
PADUCAH	935.5	12/05/2013	0.2		0.29	0.023

APPENDIX D

Dissolved Oxygen Data

Daily Dissolved Oxygen, mg/L May 2012																						
CALENDAR DAY	2-May	3-May	4-May	5-May	6-May	9-May	10-May	12-May	13-May	16-May	17-May	18-May	19-May	20-May	23-May	24-May	25-May	26-May	27-May	31-May	Monthly	
JULIAN DAY	122	123	124	125	126	129	130	132	133	136	137	138	139	140	143	144	145	146	147	151	% Exceedance	
MONTGOMERY MP 31.7	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	
HANNIBAL*** MP 126.4 UPSTREAM	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	
RACINE*** MP 237.5	MAX MIN AVG	No Data Available	No Data Available	8.88 7.59 8.33	8.95 8.87 8.92	9.11 8.91 9.04	9.13 8.95 9.05	9.11 4.81 7.74	9.03 8.90 8.97	9.00 8.85 8.90	65.10 64.37 64.68	8.05 7.52 7.74	7.56 7.17 7.39	7.26 7.01 7.16	7.83 7.00 7.50	7.85 7.63 7.75	7.88 7.76 7.83	7.84 7.68 7.78	7.82 7.63 7.76	7.74 7.65 7.69	7.66 7.45 7.54	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX MIN AVG	8.23 8.02 8.15	8.26 8.09 8.23	8.35 8.09 8.26	8.59 8.35 8.53	8.59 8.38 8.52	8.59 8.09 8.39	8.11 7.94 8.04	7.66 7.42 7.46	7.39 6.74 7.04	7.39 6.58 6.95	6.58 6.00 6.35	6.58 5.62 6.13	5.64 5.30 5.47	5.30 4.92 5.09	5.30 4.78 5.02	5.16 4.87 5.04	5.35 5.11 5.24	5.54 5.04 5.36	5.76 5.52 5.58	7.42 7.15 7.30	0.00%
DOWNSTREAM	MAX MIN AVG	12.05 8.26 10.87	9.17 6.84 8.25	9.70 6.24 8.12	14.38 9.14 13.00	13.03 12.29 12.60	13.03 10.75 12.45	12.72 12.10 12.33	11.40 11.04 11.25	11.40 9.10 10.49	11.40 7.63 9.62	7.85 7.42 7.63	7.85 7.42 7.63	7.82 7.32 7.63	7.68 7.51 7.61	7.68 7.34 7.58	7.66 7.49 7.55	7.49 7.32 7.41	7.34 7.06 7.20	7.18 7.06 7.11	7.54 6.46 6.85	0.00%
MARKLAND*** MP 531.5	US-Lock DS-Lock US-Hydro DS-Hydro	7.84 8.02 7.49 8.20	7.09 7.37 6.35 7.32	7.76 8.03 7.32 8.07	7.95 * 7.65 8.42	7.53 * 6.85 7.84	6.56 6.88 5.31 6.60	6.80 7.27 5.51 6.86	6.82 6.83 5.92 6.94	6.85 6.76 6.24 7.05	6.62 7.65 6.42 7.09	6.77 7.85 6.77 7.24	6.66 7.98 6.90 7.45	5.83 8.02 7.34 7.68	* 8.14 7.93 7.78	5.82 7.85 7.52 7.74	6.46 8.02 7.66 8.00	7.00 8.07 7.70 8.29	7.00 7.90 8.13 8.56	7.24 7.85 8.39 8.93	6.60 6.72 7.04 7.78	0.00% 0.00% 0.00% 0.00%
McALPINE*** MP 606.8	MAX MIN AVG	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L June 2012

CALENDAR DAY	1-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun	Monthly % Exceedance
JULIAN DAY	153	156	157	158	159	160	163	164	165	166	167	170	171	172	173	174	177	178	179	180	181	
MONTGOMERY MP 31.7	MAX 9.60 MIN 8.40 AVG 8.80	8.80 8.20 8.60	9.20 8.70 8.90	9.20 8.80 8.90	9.60 8.90 9.20	9.80 8.90 9.30	10.20 8.80 9.40	10.70 8.70 9.50	9.70 8.30 9.10	9.80 8.50 9.00	9.70 7.80 8.70	10.20 8.70 9.30	9.90 8.70 9.10	9.20 7.90 8.50	9.70 8.40 8.40	9.60 8.00 8.80	10.10 7.40 8.60	11.60 7.20 9.70	11.00 7.20 8.80	8.60 7.10 7.80	8.30	0.00%
HANNIBAL*** MP 126.6	MAX 8.24 MIN 7.32 AVG 7.68	8.52 7.88 8.17	8.72 8.01 8.35	8.90 8.55 8.74	8.88 8.21 8.68	8.82 8.21 8.35	9.14 8.27 8.58	8.87 7.94 8.39	8.70 8.03 8.40	9.30 8.36 8.90	9.12 7.67 8.57	8.99 8.86 8.68	8.87 8.54	8.39 7.55	7.91 7.08 7.49	8.43 7.95 8.18	8.56 7.61 7.98	8.10 7.70 7.91	8.15 7.44 7.73	8.60 7.74 8.10	8.87 7.76 8.23	0.00%
RAKINE*** MP 231.5	MAX 7.33 MIN 7.02 AVG 7.21	6.65 6.40 6.53	6.98 6.51 6.74	6.85 6.45 6.60	6.66 6.46 6.55	6.61 6.42 6.50	6.84 6.24 6.46	6.84 6.21 6.52	6.96 6.17 6.52	7.01 6.52 6.78	6.89 6.38 6.60	6.00 4.97 5.61	*	*	6.44 6.13	6.51 6.03 6.30	6.81 5.98 6.21	6.61 5.54 6.09	7.87 6.46 7.29	7.71 6.92 7.27	8.42 6.85 7.52	0.00%
GREENUP*** MP 341.0	MAX 8.18 MIN 5.90 AVG 6.30	6.86 5.20 5.97	5.76 5.26 5.46	5.71 5.33 5.48	7.63 5.26 5.58	6.46 5.06 5.29	7.27 4.75 5.26	10.06 5.14 6.00	8.16 5.50 5.99	8.47 5.38 6.29	9.43 5.76 6.38	9.43 5.52 6.22	6.62 5.64 5.90	6.46 5.23 5.57	6.98 5.30 6.11	6.89 6.00 6.34	6.91 5.06 5.67	5.81 5.18 5.51	6.74 5.54 5.88	6.94 5.47 6.21	5.98 5.26 5.61	0.00%
DOWNSTREAM	MAX * MIN * AVG *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	8.59 7.73 6.58	7.73 6.79 7.18	8.33 7.25 7.57	8.90 7.25 7.71	7.68 7.20 7.41	0.00%
MARKLAND*** MP 531.3	US-Lock 6.94 DS-Lock 6.82 US-Hydro 7.22 DS-Hydro 8.08	5.88 6.07 6.54 7.19	5.43 5.57 6.17 6.67	5.96 5.61 6.54 7.10	5.81 5.69 6.17 7.19	5.83 5.28 6.13 7.11	6.43 5.74 6.93 7.38	6.09 5.87 6.69 7.12	7.26 6.27 6.64 7.16	7.16 6.27 6.98 6.83	6.54 5.52 6.07 6.53	6.13 4.06 5.96 6.48	6.34 5.96 6.09	5.93 6.25 5.46 6.09	6.17 6.09 5.82 5.98	6.78 6.16 5.18 6.34	6.80 6.69 * 6.71	5.78 5.90 * 6.43	5.38 * * 6.05	6.39 * * 5.78	6.15 * * 5.81	0.00% 0.00% 12.50% 0.00%
McALPINE*** MP 606.8	MAX 6.49 MIN 6.25 AVG 6.37	6.12 5.74 6.00	6.38 6.03 6.21	6.48 6.31 6.38	6.31 6.02 6.20	6.95 5.82 6.30	6.64 5.75 6.30	7.38 6.30 6.78	8.50 6.39 7.43	8.26 5.62 7.20	8.64 6.89 7.51	7.44 6.02 6.62	6.43 6.02 6.25	9.43 5.52 6.93	10.04 5.72 7.04	8.06 7.05 7.58	6.57 5.55 6.15	5.95 4.65 5.32	6.77 4.06 5.35	* * *	6.81 6.08	0.00%
JOHN T. WATERS** MP 846.0	MAX MIN AVG	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	No Data Available Available	10.02 7.17 8.27	9.15 6.83 7.95	9.51 6.71 7.74	0.00%
SMITHLAND** MP 919.0	MAX MIN AVG	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	6.52 5.53 6.02	9.63 5.93 7.55	0.00%

* Indicates problem with instrument
 ** Indicates ORSANCO data
 *** Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L July 2012

CALENDAR DAY	3-Jul	5-Jul	6-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	16-Jul	17-Jul	19-Jul	20-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	30-Jul	31-Jul	Monthly
JULIAN DAY	185	187	188	191	192	193	194	195	198	199	201	202	205	206	207	208	209	212	213	% Exceedance
MONTGOMERY MP 31.7	MAX 12.20 MIN 7.70 AVG 8.90	8.90 9.20 5.80 7.60	9.20 12.60 5.90 7.30	10.40 9.30 5.20 8.00	9.30 8.30 5.30 6.80	8.30 5.10 6.40 6.30	7.30 8.40 5.50 6.50	8.20 7.50 5.70 6.70	8.00 8.40 6.00 7.50	8.40 9.30 7.00 8.00	9.30 7.40 8.30 8.20	9.10 7.80 7.00 7.50	8.10 7.80 7.50 7.50	8.10 7.80 7.00 7.50	8.10 7.80 7.00 7.50	8.10 7.80 7.00 7.50	8.10 7.80 7.00 7.50	8.10 7.80 7.00 7.50	8.10 7.80 7.00 7.50	0.00%
HANNIBAL*** MP 126.4 UPSTREAM	MAX 7.89 MIN 7.10 AVG 7.44	8.37 7.46 7.91	11.87 5.45 7.78	8.13 7.50 7.86	7.83 7.01 7.33	7.64 7.22 7.51	7.73 7.40 7.56	7.68 6.87 7.39	8.28 7.22 7.95	8.88 6.92 7.94	7.61 7.17 7.44	7.64 6.93 7.38	7.62 7.25 7.40	8.07 7.50 7.84	8.30 7.50 7.98	8.60 8.01 8.33	9.47 7.43 7.86	8.55 7.55 8.14	10.80 8.27 9.11	0.00%
RACINE*** MP 237.5	MAX No MIN Data AVG Available	6.35 5.90 6.14	6.35 5.52 5.95	5.12 ~~3.92~~ ~~4.44~~	6.40 ~~3.84~~ 5.26	6.40 5.99 6.19	6.44 5.94 6.27	6.44 5.74 6.10	5.88 5.29 5.38	5.62 5.20 5.38	5.75 5.04 5.43	6.43 5.59 5.96	5.42 5.08 5.21	8.07 5.18 5.70	6.05 5.69 5.88	6.05 5.37 5.71	6.44 5.39 5.81	5.48 4.84 5.21	6.76 4.78 6.10	5.50%
GREENUP*** MP 341.0 UPSTREAM	MAX 4.92 MIN 5.14 AVG 5.14	5.11 4.34 ~~4.27~~	No Data Available	6.34 4.68 5.10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	33.00%
DOWNSTREAM	MAX 7.18 MIN 6.22 AVG 6.62	6.77 5.45 6.20	No Data Available	7.46 5.57 6.46	7.03 6.02 6.58	6.17 5.40 5.72	6.05 5.50 5.72	6.22 5.80 5.84	5.69 5.09 5.38	6.53 5.14 6.09	7.99 6.38 6.74	7.22 6.65 6.88	6.19 4.56 5.33	5.86 4.94 5.31	5.86 4.97 5.42	6.22 5.11 5.65	6.31 5.42 5.92	6.48 5.40 6.12	6.29 5.76 5.97	0.00%
MARKLAND*** MP 531.5 D.O. #1	US-Lock DS-Lock US-Hydro DS-Hydro	6.96 * 6.95 6.07	7.97 * 7.01 6.29	8.22 * 7.01 6.33	6.87 * ~~4.88~~ *	6.10 * 6.70 *	6.37 * 7.63 6.59	6.03 6.49 7.04 6.47	5.75 5.36 5.46 5.94	5.60 5.13 5.00 5.25	5.41 ~~4.99~~ 5.00 ~~4.86~~	5.73 6.03 6.14 5.57	5.11 5.17 5.10 ~~4.44~~	6.10 5.73 5.78 5.41	5.79 5.66 5.65 5.40	5.08 5.32 5.27 5.35	5.66 5.85 5.98 6.09	6.08 6.39 6.02 6.43	5.82 6.17 5.98 6.18	5.20%
METALPINE*** MP 606.8	MAX 6.24 MIN ~~4.52~~ AVG 5.29	6.67 5.22 5.05	5.95 4.50 5.54	5.43 4.50 ~~4.80~~	6.35 4.39 ~~4.02~~	7.31 4.20 5.57	6.56 5.31 5.87	6.95 4.93 5.62	5.92 4.24 ~~4.02~~	6.95 4.93 5.76	6.82 5.77 6.16	6.35 5.38 5.76	7.24 5.42 6.17	7.95 5.51 6.56	6.88 6.08 6.50	6.70 5.63 6.05	7.16 5.00 5.88	6.18 5.12 5.75	7.71 5.32 6.41	15.70%
JOHN T. MYERS** MP 846.0	MAX 8.06 MIN 5.16 AVG 5.97	6.25 4.70 5.45	8.61 5.28 6.32	6.24 4.75 5.25	6.59 4.50 5.37	6.28 5.05 5.59	6.79 4.76 5.67	6.24 4.94 5.51	6.81 4.48 5.51	6.46 4.68 5.42	8.17 5.98 6.69	7.14 5.43 6.25	8.62 7.14 7.84	10.29 6.38 7.29	9.35 6.62 7.54	6.80 5.51 6.19	7.20 4.92 5.96	6.67 5.93 6.28	6.54 5.97 6.29	0.00%
SMITHLAND** MP 919.0	MAX 8.30 MIN 4.37 AVG 5.94	6.15 4.20 5.09	7.48 4.43 5.55	7.31 4.22 5.29	6.17 3.57 ~~4.60~~	6.42 3.49 ~~4.66~~	5.38 4.04 ~~4.70~~	5.23 3.73 ~~4.28~~	5.22 3.62 ~~4.39~~	7.65 3.90 5.17	6.26 4.47 5.00	6.69 5.01 5.75	6.89 5.10 5.59	7.26 4.95 5.73	8.30 5.60 6.39	7.50 5.87 6.67	7.52 5.94 6.49	7.42 6.53 6.82	8.33 6.29 6.76	26.50%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L August 2012

CALENDAR DAY	2-Aug	3-Aug	6-Aug	7-Aug	8-Aug	9-Aug	10-Aug	14-Aug	15-Aug	16-Aug	17-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	27-Aug	28-Aug	29-Aug	Monthly
JULIAN DAY	215	216	219	220	221	222	223	227	228	229	230	233	234	235	236	237	240	241	242	% Exceedance
MONTGOMERY MP 31.7	MAX 9.30 MIN 7.50 AVG 8.00	9.60 7.90 8.40	9.40 7.90 8.70	9.70 8.80 8.30	8.80 6.90 7.60	9.60 6.70 7.80	9.20 7.20 7.80	No Data Available	No Data Available	8.80 7.00 7.70	8.20 6.90 7.50	9.00 7.20 8.00	9.80 7.30 8.00	8.90 7.30 8.10	9.00 6.90 8.00	10.60 7.20 8.60	8.60 6.90 7.80	7.50 6.20 6.80	7.10 5.30 6.40	0.00%
HANNIBAL*** MP 126.4 UPSTREAM	MAX 8.54 MIN 6.84 AVG 7.71	9.08 7.10 7.93	8.79 6.26 7.34	9.23 6.68 7.80	8.60 6.47 7.47	7.43 6.30 6.91	9.15 7.29 8.16	8.54 7.82 8.15	8.13 7.62 7.86	9.02 6.87 7.73	7.68 6.83 7.19	8.28 6.93 7.77	8.18 7.35 7.86	8.45 7.35 8.03	8.69 7.23 7.91	8.30 7.11 7.62	8.31 7.91 8.15	8.07 7.11 7.48	7.41 6.92 7.19	0.00%
RACINE*** MP 237.5	MAX 7.70 MIN 6.42 AVG 6.99	7.52 6.61 7.01	No Data Available	5.15 4.54 ~~4.84~~	7.03 4.53 6.21	7.10 6.51 6.78	7.40 6.29 6.62	5.49 4.84 5.16	6.27 4.97 5.84	6.07 5.25 5.65	5.54 4.93 5.19	4.98 3.54 ~~4.30~~	6.84 ~~3.54~~ ~~3.54~~	6.51 6.26 6.37	6.60 6.21 6.35	6.74 6.21 6.46	6.79 6.00 6.41	6.60 6.20 6.40	6.31 5.36 5.75	11.10%
GREENUP*** MP 341.0 UPSTREAM	MAX 5.30 MIN 4.13 AVG ~~4.64~~	5.81 4.08 ~~4.88~~	5.74 4.42 5.06	7.94 4.61 5.68	6.22 ~~3.20~~ ~~4.26~~	6.10 ~~3.94~~ 5.00	5.09 ~~3.22~~ ~~4.26~~	6.10 5.21 5.50	5.76 5.23 5.45	5.64 4.90 5.30	6.38 5.54 5.92	6.26 4.92 5.51	6.00 4.70 5.38	5.76 4.73 5.24	7.85 5.40 6.26	No Data Available	6.94 4.87 5.97	6.17 5.30 5.60	6.22 5.16 5.64	22.20%
DOWNSTREAM	MAX 7.51 MIN 6.07 AVG 6.69	7.18 6.53 6.88	6.58 5.40 6.18	6.89 6.19 6.51	6.72 5.86 6.22	7.39 6.12 6.70	6.55 5.78 6.15	7.13 6.38 6.68	7.97 7.18 7.69	7.92 6.62 7.25	6.72 6.24 6.49	7.90 6.43 7.05	6.24 ~~4.68~~ ~~4.68~~	6.24 ~~4.54~~ ~~4.62~~	6.43 ~~4.68~~ ~~4.68~~	6.49 Data Available	5.29 5.16 6.58	8.45 7.73 8.22	8.03 8.42 8.72	11.10%
MARKLAND*** MP 531.5 D.O. #1 DS-Hydro	MAX 6.52 MIN 6.01 AVG 6.33	6.22 6.33 6.55	5.81 6.17 6.59	6.02 6.20 6.30	6.30 6.64 6.64	6.38 6.67 6.68	6.01 5.88 5.67	5.69 5.47 5.64	5.45 5.16 5.18	5.47 5.32 5.42	5.66 5.45 5.31	6.63 5.80 5.50	6.35 6.16 5.55	6.12 5.46 ~~2.94~~	6.17 5.85 5.65	6.66 6.25 6.79	6.43 5.59 ~~3.34~~	6.07 5.96 7.10	6.24 6.73 7.72	0.00% 0.00% 10.50% 0.00%
McALPINE*** MP 606.8	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
JOHN T. MYERS** MP 846.0	MAX 7.24 MIN 5.15 AVG 6.13	7.49 5.58 6.30	7.84 5.05 5.99	8.04 5.85 6.47	7.97 6.02 7.01	6.68 6.42 6.61	6.68 6.55 6.63	7.25 6.09 6.45	8.09 7.07 7.43	8.50 7.33 8.16	8.35 7.37 8.01	9.69 7.79 8.32	9.11 7.93 8.63	8.80 8.71 8.76	No Data Available	No Data Available	No Data Available	9.31 7.23 8.45	10.74 7.13 8.47	0.00%
SMITHLAND** MP 919.0	MAX 8.11 MIN 5.26 AVG 5.89	7.29 5.70 6.34	8.86 5.54 6.99	10.81 6.58 7.90	9.30 6.34 7.33	8.67 5.77 7.24	7.85 6.45 7.04	6.45 5.39 6.00	8.06 5.10 6.13	6.50 5.18 5.69	7.75 5.52 6.44	9.53 5.62 6.92	9.07 5.22 6.70	8.58 5.02 6.14	7.56 4.96 6.17	7.76 5.46 6.64	8.84 2.76 6.50	8.89 6.99 7.90	8.98 6.41 7.44	0.00%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L September 2012

CALENDAR DAY	4-Sep	5-Sep	6-Sep	7-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	Monthly
JULIAN DAY	248	249	250	251	254	255	256	257	258	261	262	263	264	265	268	269	270	271	272	% Exceedance
MONTGOMERY MP 31.7	MAX 6.50 MIN 5.30 AVG 6.10	6.40 7.10 6.00	7.30 7.10 7.20	6.70 5.60 6.10	7.00 6.20 6.60	7.00 6.40 6.70	7.00 6.40 6.80	7.40 6.40 6.90	9.40 6.90 7.60	9.00 6.90 7.60	8.50 7.00 7.70	8.30 7.20 7.80	7.90 7.20 7.60	8.00 7.00 7.60	8.70 8.00 8.30	8.70 7.90 8.20	9.00 7.80 8.40	8.40 7.80 8.20	8.50 7.80 8.20	0.00%
HANNIBAL*** MP 126.4 UPSTREAM	MAX 7.71 MIN 7.31 AVG 7.60	8.01 7.25 7.69	8.36 7.64 7.93	8.51 7.64 8.05	8.45 8.09 8.26	8.43 7.77 7.95	8.63 7.77 8.25	8.58 8.03 8.37	8.31 7.92 8.10	8.64 7.92 8.34	8.87 8.10 8.49	8.73 8.01 8.43	8.57 8.03 8.26	8.45 7.92 8.23	8.64 8.31 8.48	8.78 8.43 8.57	8.81 8.45 8.68	8.93 8.45 8.64	8.87 8.63 8.72	0.00%
RACINE*** MP 237.5	MAX * MIN * AVG *	* * *	5.76 5.40 5.55	5.76 5.31 5.50	5.37 5.07 5.21	5.95 4.60 5.34	6.09 5.15 5.68	6.09 5.66 5.87	5.97 5.67 5.82	6.76 6.19 6.54	6.74 6.08 6.38	6.34 5.30 5.67	6.17 5.26 5.66	6.05 5.70 5.90	5.82 5.45 5.70	6.26 5.65 6.01	6.26 6.10 6.19	7.00 6.17 6.48	7.00 6.49 6.71	0.00%
GREENPINE*** MP 341.0 UPSTREAM	MAX 5.59 MIN 4.58 AVG 5.29	5.59 4.63 5.02	5.93 4.63 5.16	6.05 4.37 5.11	6.29 4.27 5.31	5.62 4.56 5.21	7.30 4.56 5.62	7.54 4.87 5.87	6.89 5.18 5.79	7.27 5.24 5.99	5.64 4.61 5.24	5.86 4.39 5.31	6.07 5.16 5.67	6.41 5.04 5.76	6.70 6.10 6.38	7.03 6.05 6.47	* * *	6.36 5.98 6.22	6.12 5.74 5.88	5.80%
DONNASTREAM	MAX 6.17 MIN 5.04 AVG 5.20	5.62 5.11 5.25	5.62 4.99 5.18	6.43 4.99 5.45	7.25 6.62 7.02	7.37 6.96 7.15	8.66 7.37 8.19	9.05 8.06 8.48	9.02 6.84 7.91	14.02 5.78 6.95	7.15 6.94 7.04	8.06 6.98 7.20	8.38 7.03 7.45	8.52 7.08 7.34	* * *	10.15 7.25 7.60	7.80 7.08 7.32	7.85 7.13 7.27	10.90 7.01 7.59	0.00%
MARQUAND*** MP 531.5 D.O. #1	US-Loak 5.21 US-Hydro 5.54 US-Hydro 5.33 DS-Hydro 5.68	5.27 5.52 4.72 5.78 5.65	5.42 5.76 5.78 5.80	5.14 5.66 5.66 5.74	5.05 5.79 5.66 5.86	5.14 5.58 4.99 5.39	5.12 5.34 5.21 5.86	5.44 5.88 4.28 6.04 5.86	5.74 5.51 4.54 5.86	5.36 5.34 4.32 6.02	5.21 5.24 4.04 5.51	5.92 6.25 5.83 6.10	5.92 6.23 6.03 6.63	6.24 6.42 6.16 6.64	6.94 7.25 6.69 7.70	6.78 7.35 6.56 7.57	6.83 7.40 6.82 7.36	6.72 7.19 6.69 7.02	6.67 7.06 6.65 6.85	5.20% 0.00% 31.20% 0.00%
MCALPINE*** MP 606.8	MAX 5.51 MIN 4.96 AVG 5.23	5.82 5.04 5.32	6.15 4.91 5.32	5.74 5.16 5.43	5.77 5.36 5.57	5.84 5.04 5.36	5.81 4.80 5.37	5.70 5.48 5.59	6.34 5.47 5.82	6.07 5.54 5.74	6.08 5.54 5.75	6.36 6.01 6.17	6.15 5.61 5.90	6.36 5.62 5.98	6.53 6.08 6.30	6.38 6.08 6.28	6.65 6.23 6.41	7.01 6.48 6.75	6.91 6.78 6.85	0.00%
JOHN T. MYERS** MP 846.0	MAX 7.18 MIN 5.61 AVG 6.23	6.81 5.09 5.76	8.46 4.50 5.59	8.19 5.14 6.46	8.02 5.52 6.71	8.80 6.06 7.07	8.11 5.65 6.71	6.72 5.61 6.14	6.16 5.01 5.65	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
SAATHLE AND** MP 919.0	MAX 6.95 MIN 5.22 AVG 5.86	7.82 4.87 5.92	6.09 4.67 5.28	6.95 4.10 5.19	8.03 3.92 5.19	6.39 3.87 4.95	5.52 4.11 4.89	5.53 4.39 4.99	6.20 4.84 5.55	5.65 4.16 4.95	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	40.00%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L October 2012																															Monthly
CALENDAR DAY	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	29-Oct	30-Oct	31-Oct	% Exceedance	
JULIAN DAY	275	276	277	278	279	282	283	284	285	286	289	290	291	292	293	296	297	298	299	300	303	304	305								
MONTGOMERY MP 31.7	MAX	9.20	9.20	9.30	9.40	9.10	9.10	9.10	9.10	9.00	9.30	9.30	9.30	9.30	9.30	9.70	9.30	9.80	9.80	9.60	9.90	10.00	10.00	10.00	10.00	10.00	9.70	11.10		0.00%	
	MIN	8.60	8.70	8.80	8.80	8.70	8.50	8.40	8.50	8.40	8.80	8.40	8.80	8.80	9.00	9.40	9.40	9.50	9.50	9.50	9.70	9.90	9.80	9.80	9.80	9.40	10.80				
	AVG	8.90	9.00	9.10	9.20	9.10	8.90	8.80	8.80	8.80	9.00	9.00	9.40	9.30	9.40	9.30	9.40	9.50	9.50	9.50	9.70	9.90	9.80	9.80	9.80	9.50	11.00				
	AVG	8.90	8.90	9.30	9.06	9.02	9.23	9.09	9.24	9.26	9.34	9.36	9.54	9.50	9.47	9.38	9.32	9.62	9.65	9.71	9.60	9.48	9.25	9.72	11.19						
HANNIBAL*** MP 126.4 UPSTREAM	MAX	8.89	8.72	8.82	8.93	8.82	8.75	8.93	8.93	9.07	8.94	9.04	9.13	9.11	9.44	9.43	9.42	9.32	9.21	9.08	8.99	9.35	9.56	9.39	9.33	9.41	9.70	11.19		0.00%	
	MIN	8.81	8.88	9.06																											
	AVG																														
	AVG	8.81	8.88	9.06																											
BACINE*** MP 237.5	MAX	6.19	6.27	6.49	6.64	6.39	6.61	6.67	6.79	6.85	6.94	7.02	6.98	7.41	7.36	6.97	6.83	6.77	6.65	8.13	7.69	6.94	6.94	7.61	8.13						
	MIN	5.94	5.99	6.18	6.22	6.11	6.36	6.43	6.54	6.61	6.69	6.83	6.86	6.69	6.78	6.58	6.48	6.42	6.46	7.05	7.04	6.73	8.14								
	AVG	6.07	6.16	6.30	6.34	6.26	6.48	6.55	6.65	6.72	6.80	6.92	6.92	6.91	7.04	7.00	6.78	6.66	6.58	6.55	7.43	7.41	7.11	8.32							
	AVG	6.07	6.16	6.30	6.34	6.26	6.48	6.55	6.65	6.72	6.80	6.92	6.92	6.91	7.04	7.00	6.78	6.66	6.58	6.55	7.43	7.41	7.11	8.32							
GREENUP*** MP 341.0 UPSTREAM	MAX	5.28	5.57	6.38	6.00	6.12	7.02	6.65	6.64	6.82	6.94	7.44	7.58	7.22	6.82	7.37	7.49	7.78	7.66	7.78	7.25	7.37	7.52	7.01	7.80	7.40	8.90		0.00%		
	MIN	5.18	5.16	5.42	4.97	5.81	5.76	6.26	6.02	6.10	6.55	7.10	6.65	6.48	6.50	6.96	6.62	7.25	7.37	7.48	7.34	7.01	7.80	7.44	8.45						
	AVG	5.78	5.33	5.75	5.46	6.01	6.26	6.47	6.22	6.50	6.88	7.30	7.02	6.78	6.64	7.24	7.21	7.60	7.48	7.57	7.13	7.85	7.69	8.58							
	AVG	5.78	5.33	5.75	5.46	6.01	6.26	6.47	6.22	6.50	6.88	7.30	7.02	6.78	6.64	7.24	7.21	7.60	7.48	7.57	7.13	7.85	7.69	8.58							
DOWNSTREAM	MAX	6.86	8.30	10.80	11.04	7.46	12.19	10.75	9.19	10.10	12.84	8.86	14.42	11.16	10.61	12.38	15.67	9.60	12.58	9.24	8.78	11.83	8.04					0.00%			
	MIN	6.82	6.48	6.53	6.55	6.38	6.60	6.91	6.96	6.98	7.08	7.06	7.34	7.46	7.92	8.21	7.99	8.14	7.92	8.06	7.82	7.34	7.01	7.80							
	AVG	7.41	6.90	7.16	7.08	6.66	7.37	7.59	7.28	7.39	7.75	7.50	8.22	8.19	8.40	8.75	8.63	8.41	8.47	8.24	8.45	7.67	7.54	7.92							
	AVG	7.41	6.90	7.16	7.08	6.66	7.37	7.59	7.28	7.39	7.75	7.50	8.22	8.19	8.40	8.75	8.63	8.41	8.47	8.24	8.45	7.67	7.54	7.92							
MARKLAND*** MP 551.5 D.O. #1	US-LOCK	6.47	6.85	7.11	7.13	7.29	7.56	7.74	8.07	7.94	8.00	8.36	8.14	8.16	8.20	8.14	8.22	8.32	8.89	8.37	7.74	8.13	8.38	8.72					0.00%		
	DS-LOCK	6.61	6.96	7.23	7.16	7.51	7.48	7.35	7.50	7.01	6.66	7.54	7.22	7.17	7.49	7.55	7.35	7.32	7.66	7.87	7.57	8.14	8.63	9.16							
	US-Hydro	6.21	6.53	6.63	6.52	6.77	6.85	6.94	6.70	6.54	6.95	7.57	7.40	7.41	7.38	7.19	7.51	7.59	8.04	7.94	7.63	7.75	8.10								
	DS-Hydro	6.55	7.01	7.28	7.32	7.56	7.76	7.96	8.18	8.24	8.43	8.24	8.04	7.99	7.90	8.02	7.97	8.18	8.60	8.49	8.34	8.44	8.56	8.90							
McALPINE*** MP 606.8	MAX	6.99	6.86	7.06	7.22	7.44	7.90	8.54	8.65	8.52	8.92	8.49	8.54	8.39	8.47	8.56	8.40	8.47	8.51	8.39	8.47	9.03	9.03	9.01					0.00%		
	MIN	6.83	6.76	6.87	7.04	7.14	7.44	7.75	8.13	8.18	8.22	8.23	8.35	8.21	8.15	8.46	8.30	8.27	8.37	8.27	8.35	8.77	8.89	8.95							
	AVG	6.90	6.81	6.96	7.12	7.28	7.65	8.12	8.35	8.35	8.49	8.34	8.44	8.27	8.33	8.51	8.35	8.38	8.42	8.35	8.37	8.89	8.95								
	AVG	6.90	6.81	6.96	7.12	7.28	7.65	8.12	8.35	8.35	8.49	8.34	8.44	8.27	8.33	8.51	8.35	8.38	8.42	8.35	8.37	8.89	8.95								

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L May 2013

CALENDAR DAY	1-May	2-May	3-May	6-May	7-May	8-May	9-May	10-May	11-May	14-May	15-May	16-May	17-May	20-May	21-May	22-May	23-May	24-May	28-May	29-May	30-May	31-May	Monthly % Exceedance
JULIAN DAY	121	122	123	126	127	128	129	130	133	134	135	136	137	140	141	142	143	144	148	149	150	151	
MONTGOMERY MP 31.7	MAX 11.70 MIN 11.30 AVG 11.50	11.70 11.40 11.50	11.80 11.40 11.60	11.80 11.10 11.45	11.20 10.80 11.00	11.20 10.20 10.70	10.80 10.40 10.60	10.90 10.70 10.80	10.20 10.00 10.10	10.80 10.30 10.55	10.40 10.10 10.25	10.80 10.30 10.55	10.50 10.20 10.35	10.70 9.30 10.00	10.10 9.50 9.80	10.40 9.30 9.85	9.80 9.80 9.45	9.80 9.00 9.40	9.90 9.40 9.65	10.20 9.70 9.95	10.50 9.60 10.05	9.90 9.30 9.60	0.00%
HANNIBAL*** MP 126.4 UPSTREAM	MAX No MIN Data AVG Available	10.29 10.10 10.17	10.22 10.04 10.14	No Data Available	10.61 9.03 9.38	No Data Available	9.71 9.47 9.54	9.71 8.94 9.45	9.57 8.94 9.19	9.66 9.26 9.50	12.39 9.12 9.75	10.29 8.82 9.59	8.99 8.54 8.69	9.09 8.49 8.60	9.77 9.14 9.28	9.62 9.14 9.42	9.21 8.88 9.05	9.17 8.57 8.81	9.36 8.69 9.05	9.45 8.33 9.06	8.96 7.10 8.70	9.74 8.66 9.05	0.00%
BAKING*** MP 231.5	MAX 9.38 MIN 9.03 AVG 9.15	9.17 8.80 8.99	8.97 8.78 8.86	8.70 8.51 8.60	8.86 8.57 8.71	8.78 8.50 8.65	8.65 8.11 8.48	8.82 8.11 8.64	8.44 8.07 8.31	8.46 8.08 8.22	8.29 7.99 8.09	8.05 7.83 7.96	7.87 7.57 7.75	7.91 7.66 7.79	8.95 7.78 8.32	8.53 8.27 8.43	8.62 7.75 8.15	8.06 7.71 7.88	7.39 6.70 7.06	6.76 6.51 6.69	6.99 6.43 6.78	7.55 6.80 7.06	0.00%
GREENUP*** MP 34.0 UPSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
DOWNSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
MARBLEND*** MP 531.5	US-LOCK 8.29 DS-LOCK 9.93 US-Hydro 9.73 DS-Hydro 9.94	8.37 9.93 9.65 9.83	8.16 9.82 9.67 9.75	7.90 9.65 8.96 9.45	7.34 9.23 8.64 9.08	6.64 8.75 8.57 8.57	6.91 9.08 8.34 8.67	7.78 9.01 8.22 8.89	8.28 8.73 8.21 8.90	8.25 8.67 8.11 8.99	8.24 8.68 8.72 9.01	8.23 8.74 8.77 9.16	8.19 8.74 8.21 9.13	7.55 8.27 8.21 8.68	7.17 7.95 8.01 8.47	7.23 7.93 8.19 8.75	7.41 8.01 8.23 8.93	7.45 8.18 8.16 8.92	7.27 8.32 8.23 9.38	7.54 8.39 8.32 9.63	8.03 8.30 8.34 9.82	7.94 8.23 8.24 9.77	0.00% 0.00% 0.00%
McALPINE*** MP 606.8	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available

* Indicates problem with instrument
 ** Indicates ORSANCO data
 *** Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L June 2013																					
CALENDAR DAY	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	Monthly % Exceedance
JULIAN DAY	154	155	156	157	158	161	162	163	164	165	168	169	170	171	172	175	176	177	178	179	
MONTGOMERY MP 31.7	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	6.70 8.60 9.10	9.20 8.60 8.80	8.90 8.70 8.80	8.90 8.50 8.70	9.20 8.50 8.70	9.10 8.80 8.90	8.80 8.60 8.60	8.90 8.60 8.70	9.70 8.70 8.90	9.00 8.60 8.80	9.00 8.20 8.80	9.50 8.10 8.80	9.20 8.10 8.60	9.60 8.40 9.00	9.00 8.50 8.50	8.40 7.20 7.20	0.00%
HANNIBAL*** MP 126.4 UPSTREAM	MAX 9.92 MIN 7.41 AVG 9.25	9.35 8.97 9.10	10.11 8.12 9.01	9.09 8.19 8.65	10.35 7.61 8.39	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	0.00%	
RACINE*** MP 237.5	MAX 6.68 MIN 6.38 AVG 6.48	6.48 6.13 6.30	6.45 5.91 6.21	6.45 6.19 6.33	6.79 6.26 6.51	6.52 6.08 6.25	6.43 6.08 6.23	6.59 6.26 6.44	6.83 6.20 6.51	6.83 6.26 6.48	6.53 6.23 6.38	7.62 6.31 6.98	7.20 6.60 6.89	6.91 6.50 6.65	6.77 6.46 6.58	6.47 6.10 6.24	6.97 6.08 6.44	6.70 6.37 6.53	6.42 6.08 6.21	6.30 6.08 6.19	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	6.70 6.07 6.24	5.52 5.33 5.42	6.34 5.42 6.13	6.34 5.59 5.91	5.88 5.52 5.64	5.83 5.50 5.59	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
DOWNTOWN MP 511.5	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	7.06 6.77 6.87	6.77 6.26 6.47	6.98 6.58 6.93	6.98 6.55 6.83	6.70 6.36 6.55	6.77 6.46 6.66	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
MARKLAND*** MP 531.5	US-LOCK 6.92 DS-LOCK 7.89 US-Hydro 7.55 DS-Hydro 8.65	6.72 7.74 7.32 8.38	6.61 7.59 7.17 8.44	6.24 7.27 6.95 8.15	6.40 7.24 6.96 8.04	5.73 6.66 5.94 6.75	5.97 6.80 6.18 7.08	5.83 6.85 6.14 7.04	5.71 6.29 5.81 6.67	5.79 6.52 5.45 6.63	5.38 5.88 5.45 5.99	5.20 5.87 5.30 5.95	5.08 5.92 5.46 5.92	5.16 6.11 5.92 6.02	5.34 6.29 6.31 6.20	5.28 6.31 6.19 6.59	5.24 6.19 6.42 6.58	5.26 6.21 6.56 6.75	5.52 6.29 6.42 6.60	5.44 5.99 6.51 6.44	0.00% 0.00% 5.00% 0.00%
MCALPINE*** MP 606.8	MAX 8.50 MIN 8.03 AVG 8.25	8.25 7.68 7.98	8.21 7.66 7.85	7.97 7.38 7.65	8.70 7.42 8.03	6.96 6.65 6.82	6.94 6.56 6.78	6.81 6.43 6.62	6.80 6.30 6.53	6.65 5.93 6.45	6.01 5.02 5.56	5.80 5.67 5.75	5.75 5.50 5.65	5.73 5.46 5.62	5.92 5.67 5.79	6.05 5.93 6.00	6.05 5.93 5.99	6.24 6.00 6.14	6.28 5.89 6.11	6.21 6.03 6.11	0.00%
JOHN T. MATERS** MP 846.0	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.11 6.94 7.01	7.32 6.72 7.02	7.29 6.43 6.85	6.87 6.37 6.57	7.48 6.32 6.84	0.00%
SMITHLAND** MP 919.0	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	6.34 6.11 6.24	6.44 6.15 6.29	6.44 6.20 6.28	6.25 6.02 6.15	6.09 5.87 5.97	0.00%

*Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L July 2013

CALENDAR DAY	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	Monthly % Exceedance
JULIAN DAY	182	183	184	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212		
MONTGOMERY MP 31.7	MAX No	8.70 Data	8.80 8.70	8.90 8.60	8.80 8.80	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	8.80 8.50	0.00%
HANNIBAL*** MP 126.4 UPTSTREAM	MAX Data	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	0.00%
RAKCEP*** MP 341.0 UPTSTREAM	MAX 5.91 AVG	6.22 5.91 6.05	6.34 5.89 6.02	6.34 5.97 6.09	6.41 6.05 6.20	8.23 6.25 7.01	8.95 8.65 8.84	8.95 8.51 8.63	8.95 8.51 8.30	8.47 8.10 8.30	8.47 7.89 8.10	8.06 7.80 7.93	7.95 7.56 7.79	7.82 7.47 7.63	7.68 7.37 7.49	7.47 6.77 7.09	6.81 6.46 6.63	6.81 6.50 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	6.81 6.51 6.39	0.00%
GREENUP*** MP 341.0 UPTSTREAM	MAX Data	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	0.00%
DOWNSTREAM	MAX Data	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
MARLAND*** MP 311.5 D.O. #1	US-look DS-look US-1060 DS-1060	6.03 6.71 6.39 6.93	5.71 6.46 6.27 6.52	5.24 6.04 5.96 5.99	5.26 6.07 5.76 5.90	5.06 5.56 5.48 5.66	5.20 5.91 5.75 5.87	5.14 6.09 5.82 5.94	5.17 6.35 5.45 5.87	5.10 6.35 5.45 5.92	5.40 5.99 5.11 5.55	5.70 6.08 5.11 5.48	5.91 6.20 5.16 5.60	6.23 6.39 5.26 5.97	6.70 6.40 5.67 5.07	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	6.31 6.63 6.20 6.46	0.00%	
McALPINE*** MP 606.8	MAX MIN AVG	6.38 6.01 6.22	6.46 6.28 6.37	6.36 5.91 6.14	5.93 4.44 5.31	5.54 Data Available	6.01 5.10 5.30	6.15 5.17 5.38	6.32 5.71 5.98	6.35 5.10 5.89	5.85 5.24 5.62	5.82 5.14 5.78	5.79 5.68 5.73	5.90 5.64 5.83	6.14 5.80 6.02	6.63 5.80 6.21	6.70 5.80 6.37	6.31 5.96 6.13	6.49 5.87 6.22	6.68 6.42 6.57	6.41 6.28 6.36											0.00%
JOHN T. MYERS** MP 846.0	MAX MIN AVG	6.96 6.42 6.71	6.38 6.09 6.19	6.51 6.09 6.31	6.60 5.85 6.52	6.96 6.43 6.71	6.50 5.90 6.23	5.98 5.72 5.92	5.94 5.92 5.81	5.94 5.79 5.86	6.68 6.39 6.57	6.68 6.47 6.58	6.68 6.35 6.42	6.43 6.30 6.37	6.42 6.32 6.54	6.43 6.28 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	6.43 6.30 6.54	0.00%	
SMITTLAND** MP 919.0	MAX MIN AVG	5.86 5.37 5.55	5.56 5.42 5.48	5.57 5.39 5.48	5.59 5.41 5.51	5.96 5.80 5.90	5.93 5.62 5.80	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	5.93 5.62 5.78	0.00%	

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L September 2013

CALENDAR DAY	3-Sep	4-Sep	5-Sep	6-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	24-Sep	25-Sep	26-Sep	27-Sep	30-Sep	Monthly
JULIAN DAY	246	247	248	249	252	253	254	255	256	259	260	261	262	263	266	267	268	269	270	273	% Exceedance
MONTGOMERY MP 31.7	MAX 8.60 MIN 8.20 AVG 8.40	8.50 8.20 8.40	8.60 8.20 8.40	8.70 8.20 8.40	8.80 8.30 8.50	8.60 8.00 8.30	8.60 8.10 8.40	8.80 8.10 8.30	8.70 8.10 8.40	8.20 7.80 8.00	9.00 7.70 8.20	8.40 7.90 8.10	8.60 7.80 8.20	9.00 8.00 8.40	8.60 8.20 8.40	8.80 8.20 8.50	9.20 8.60 8.80	9.40 8.60 9.00	9.80 8.70 9.00	9.50 8.70 9.00	0.00%
FLANNIBAL*** MP 126.4 UPSTREAM	MAX Data MIN Available AVG	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available
RACINE*** MP 341.0 MP 237.5	MAX 5.49 MIN 5.19 AVG 5.30	5.38 5.16 5.27	5.38 5.17 5.26	5.45 5.14 5.24	5.35 5.12 5.23	5.35 5.09 5.19	5.31 5.07 5.15	5.45 5.14 5.26	6.49 5.14 5.89	5.57 5.29 5.39	5.42 5.11 5.26	6.11 5.13 5.51	5.91 5.34 5.62	5.50 5.14 5.36	5.17 4.90 5.02	5.19 4.89 5.07	5.44 5.12 5.23	5.39 5.10 5.22	5.34 5.01 5.12	5.33 5.01 5.16	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX Data MIN Available AVG	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available
DOWNSTREAM	MAX Data MIN Available AVG	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available
MARLBAND*** MP 531.5 D.O. #1 US-Hydro	US-Lock 6.67 DS-Lock 6.26 US-Hydro 7.36 DS-Hydro 5.93	6.56 6.01 7.17 6.04	6.48 6.09 7.03 6.15	6.41 6.31 6.86 6.06	6.34 5.78 6.48 5.63	6.36 5.59 6.35 5.59	6.49 5.21 6.27 5.44	6.47 5.13 6.15 5.43	6.26 6.02 5.95 5.40	5.53 5.77 5.24 5.54	5.26 5.64 5.02 5.48	5.16 5.21 5.02 5.35	5.11 5.16 5.01 5.35	4.89 5.12 5.01 5.31	5.88 6.47 6.06 6.18	6.19 6.41 6.09 6.11	5.75 5.98 5.73 5.70	6.02 6.24 5.99 6.11	6.31 6.51 6.33 6.47	6.08 5.86 6.01 6.29	5.00% 0.00% 0.00% 0.00%
McALPINE*** MP 606.8	MAX 6.73 MIN 5.92 AVG 6.21	6.48 5.58 6.13	7.17 6.29 6.63	7.20 6.62 6.86	6.96 6.23 6.46	6.40 5.76 6.19	6.01 5.22 5.77	6.37 5.62 6.02	6.50 5.93 6.28	6.43 6.13 6.29	6.79 6.31 6.48	6.64 6.38 6.52	6.96 6.40 6.57	6.65 6.39 6.53	6.26 4.87 6.03	5.99 5.17 5.77	5.93 4.89 5.74	6.52 5.47 6.12	7.05 6.31 6.62	6.82 6.70 6.76	0.00%
JOHN T. MYERS** MP 846.0	MAX Data MIN Available AVG	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	9.22 8.23 8.83	8.52 7.53 8.01	8.04 7.07 7.40	7.77 7.16 7.49	8.06 7.50 7.66	7.63 6.98 7.37	8.28 6.71 7.29	7.61 6.92 7.19	0.00%
SMITHLAND** MP 919.0	MAX 7.18 MIN 5.92 AVG 6.53	7.12 6.23 6.67	7.40 5.69 6.19	6.54 5.33 5.81	6.35 5.21 5.73	7.49 5.18 5.96	5.95 4.89 5.59	9.52 4.81 6.92	7.09 5.73 6.34	6.05 5.10 5.65	6.18 4.86 5.49	6.22 5.00 5.50	6.45 5.10 5.72	6.36 5.92 6.15	7.38 6.30 6.77	7.33 6.60 7.01	7.01 6.27 6.64	7.35 6.44 6.80	7.75 6.65 7.09	6.85 6.41 6.67	0.00%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L October 2013

CALNDAR DAY	1-Oct	2-Oct	3-Oct	4-Oct	7-Oct	8-Oct	9-Oct	11-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	28-Oct	29-Oct	30-Oct	31-Oct	Monthly
JULIAN DAY	274	275	276	277	280	281	282	284	287	288	289	290	291	294	295	296	297	298	301	302	303	304	% Excess/short
MONTGOMERY MP 31.7	MAX 8.80 MIN 8.60 AVG 8.90	9.50 8.50 8.80	9.20 8.40 8.80	9.20 8.20 8.60	8.20 7.80 8.00	8.30 7.80 8.10	8.30 7.80 8.10	8.70 7.90 8.30	8.90 8.50 8.70	9.00 8.60 8.90	9.20 8.60 8.90	9.00 8.50 8.70	9.10 8.50 8.80	9.80 9.60 9.70	10.10 10.00 9.90	10.30 10.00 10.10	10.50 10.20 10.30	10.60 10.30 10.50	11.10 10.90 11.00	11.50 11.40 11.60	11.80 11.60 11.80	12.00 11.60 11.80	0.00%
HANNAH MP 126.4 UPSTREAM	MAX No MIN Data AVG Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available
RATONNE MP 237.5	MAX 5.33 MIN 5.05 AVG 5.16	5.30 5.00 5.14	5.24 4.94 5.06	5.23 4.94 5.03	5.22 4.90 ~~4.92~~	5.22 4.90 5.04	5.27 4.98 5.10	5.25 4.96 5.08	5.22 4.93 ~~5.00~~	5.25 4.94 5.07	5.11 4.88 ~~4.92~~	5.12 4.83 ~~4.90~~	5.19 4.86 5.01	5.32 4.97 5.13	5.09 5.01 5.39	5.28 5.31 5.53	5.66 5.25 5.43	5.59 5.25 5.40	5.81 5.48 5.64	5.77 5.40 5.57	5.77 5.41 5.56	5.70 5.31 5.47	13.60%
GREENUP MP 341.0 UPSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available
DOWNSTREAM	MAX No MIN Data AVG Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available	No Data Data Available
MARKLAND MP 331.5 D.O. #1 DS-Holbo	US-look 5.97 DS-look 5.79 US-Holbo 5.84 DS-Holbo 6.18	6.00 5.76 5.79 6.12	5.99 5.57 5.63 6.16	5.84 6.20 5.96 6.21	6.59 6.95 6.68 6.57	6.16 6.47 6.35 6.15	5.71 6.24 5.95 5.77	5.63 5.75 5.72 5.53	6.15 5.64 6.28 6.13	6.24 6.38 6.66 6.26	6.09 6.01 6.85 6.38	6.55 6.01 6.82 6.34	6.41 5.92 6.70 6.31	6.86 7.32 7.35 7.00	7.34 7.59 7.67 7.27	7.27 7.44 7.74 7.35	7.59 7.39 7.87 7.46	7.79 7.37 7.96 7.52	8.04 8.16 8.22 7.92	8.10 8.49 8.37 8.06	8.29 8.30 8.59 8.25	8.71 8.46 8.51 8.31	0.00% 0.00% 0.00% 0.00%
McALPINE MP 606.8	MAX 6.79 MIN 6.49 AVG 6.60	6.68 6.33 6.50	7.13 6.33 6.59	7.22 6.31 6.75	6.86 6.40 6.68	6.79 6.51 6.58	6.57 6.43 6.52	6.27 6.25 6.68	6.92 6.56 6.56	6.33 6.19 6.26	6.26 6.17 6.21	6.37 6.12 6.26	7.13 6.33 6.43	7.57 7.07 7.30	7.81 7.62 7.73	7.98 7.69 7.85	9.68 7.91 8.05	8.13 7.98 8.07	8.72 8.38 8.65	8.84 8.70 8.77	8.79 8.62 8.72	No Data Available	0.00%
JOHN T. MYERS MP 846.0	MAX 7.86 MIN 7.02 AVG 7.35	8.15 7.09 7.47	8.40 7.13 7.66	8.57 7.31 7.78	7.60 7.17 7.43	7.15 6.64 6.78	6.86 6.52 6.78	6.68 6.12 6.32	7.03 6.53 6.83	7.22 6.77 7.01	7.47 6.84 7.19	7.95 7.05 7.42	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
SATTHE AND MP 919.0	MAX 6.81 MIN 6.32 AVG 6.59	6.82 6.25 6.41	6.84 5.97 6.42	6.76 5.87 6.32	7.19 6.67 6.96	6.98 6.20 6.60	6.25 5.86 6.12	5.25 5.03 5.16	5.80 5.46 5.62	6.02 5.50 5.87	6.24 5.74 6.02	6.53 5.95 6.18	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%

**Indicates problem with instrument
 ***Indicates hydroelectric dam
 All data is provisional except for Markland

Daily Dissolved Oxygen, mg/L May 2014

CALNDAR DAY	1-May	2-May	5-May	6-May	8-May	9-May	12-May	13-May	14-May	15-May	16-May	19-May	20-May	21-May	22-May	23-May	27-May	28-May	30-May	Monthly % Exceedance	
JULIAN DAY	121	122	125	126	128	129	132	133	134	135	136	139	140	141	142	143	147	148	150		
MONTGOMERY MP 31.7	MAX 11.60 MIN 11.20 AVG 11.40	11.40 11.20 11.30	11.90 11.70 11.80	12.40 11.80 12.10	12.10 11.70 11.80	11.90 11.60 11.70	11.30 10.90 11.10	11.20 10.60 10.90	10.80 10.20 10.60	10.20 9.50 9.80	9.90 9.50 9.80	10.90 10.00 10.40	11.00 10.70 10.90	11.20 11.00 11.10	11.20 11.00 11.10	11.70 11.00 11.20	11.20 10.90 11.00	11.00 10.80 10.60	10.20 9.80 10.00	0.00%	
HANNIBAL*** MP 126.4 UPSTREAM	MAX No MIN Data AVG Available	9.78 9.23 9.62	9.77 9.33 9.55	9.83 9.39 9.56	10.88 9.57 10.06	9.92 9.48 9.79	9.92 9.48 9.79	9.39 9.21 9.30	9.66 9.21 9.41	9.77 9.12 9.53	9.23 8.60 8.95	9.74 9.05 9.30	11.04 8.87 9.80	11.03 8.54 9.25	9.29 8.73 9.06	9.15 8.70 8.91	11.96 8.39 10.12	8.88 7.49 7.89	10.73 9.00 10.30	0.00%	
RACINE*** MP 237.5	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	8.49 8.19 8.30	8.46 8.11 8.30	8.27 7.88 8.04	8.25 7.88 8.01	9.06 7.93 8.21	8.63 7.90 7.75	8.09 7.17 7.75	7.21 6.69 6.96	7.21 6.74 6.92	7.22 6.74 6.97	7.10 6.64 6.85	7.12 6.61 6.76	7.47 6.71 7.02	7.47 6.67 7.04	7.24 6.68 6.91	0.00%
KYGER MP 260.0	MAX 10.16 MIN 10.14 AVG 10.15	10.26 10.14 10.18	10.27 10.14 10.19	10.29 10.25 10.28	10.19 9.81 10.00	9.97 9.71 9.83	9.82 9.52 9.68	9.60 9.38 9.49	9.49 9.28 9.38	9.39 9.14 9.26	9.32 9.16 9.21	10.19 9.77 9.91	10.22 9.80 9.95	9.90 9.41 9.71	9.49 9.32 9.38	9.98 9.32 9.61	9.49 9.00 9.25	9.19 8.75 8.91	10.00 7.32 8.56	0.00%	
GREENUP*** MP 341.0 UPSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%	
DOWNSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	8.83 6.89 7.96	No Data Available	No Data Available	8.52 7.66 8.21	No Data Available	No Data Available	8.35 7.58 7.98	No Data Available	9.84 5.23 7.26	7.46 7.20 7.37	7.70 6.17 7.31	No Data Available	No Data Available	No Data Available	No Data Available	0.00%	
MARKLAND*** MP 531.5	US-LOCK 8.40 DS-LOCK 8.10 US-Hydro 8.50 DS-Hydro 8.40	8.40 7.90 8.30 8.20	8.10 7.80 8.00 7.60	8.00 7.80 8.00 7.70	8.40 8.20 5.60 8.00	8.40 8.10 8.50 8.00	9.70 9.10 8.60 8.30	9.70 9.00 8.30 7.70	8.90 8.30 7.70 7.50	9.00 8.50 7.60 7.90	8.90 8.30 7.70 7.60	8.60 7.90 7.60 *	8.30 7.60 7.20 7.10	8.00 7.40 7.10 7.00	8.20 7.60 7.10 7.00	8.20 7.60 7.20 7.00	8.50 7.70 7.40 6.80	8.70 8.00 7.90 7.00	9.00 8.20 8.00 7.20	0.00% 0.00% 0.00% 0.00%	
MCALPINE*** MP 606.8	MAX 8.03 MIN 7.64 AVG 7.86	7.64 7.24 7.45	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.78 7.44 7.64	6.95 6.23 6.75	No Data Available	No Data Available	7.16 6.98 7.09	7.11 6.84 7.00	7.82 6.31 7.20	No Data Available	8.31 7.96 8.19	0.00%	
OLMSTEAD MP 964.6	MAX 8.03 MIN 7.64 AVG 7.86	7.64 7.24 7.45	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.78 7.44 7.64	6.95 6.23 6.75	No Data Available	No Data Available	7.16 6.98 7.09	7.11 6.84 7.00	7.82 6.31 7.20	No Data Available	8.31 7.96 8.19	0.00%	

* Indicates problem with instrument
 ** Indicates ORSANCO data
 *** Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L June 2014

CALENDAR DAY	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	30-Jun	Monthly % Exceedance
JULIAN DAY	153	154	155	156	157	160	161	162	163	164	167	168	169	170	171	174	175	176	177	178	181	
MONTGOMERY MP 31.7	MAX	10.00	10.30	10.50	10.20	10.00	10.00	9.70	9.40	8.90	9.10	9.10	9.20	9.30	9.30	9.00	9.00	8.90	8.90	9.10	9.20	
	MIN	9.40	9.50	9.10	9.10	9.10	8.80	8.70	8.50	8.40	8.50	9.00	9.00	9.10	9.00	8.90	8.70	8.60	8.50	8.60	8.90	
	AVG	9.80	9.80	9.70	9.80	9.70	9.40	9.20	9.10	8.90	8.80	9.00	9.10	9.20	9.20	8.90	8.90	8.70	8.70	8.90	9.10	0.00%
HANNIBAL*** MP 125.4	MAX	9.14	9.50	9.56	8.70	8.27	8.93	8.84	8.38	8.54	11.57	8.24	10.08	8.48	8.66	8.61	8.57	8.51	8.37	8.48	8.64	
	MIN	8.73	9.06	8.67	8.16	8.01	8.50	8.25	8.30	8.25	8.79	7.83	7.25	8.01	8.28	7.71	8.43	8.25	8.19	8.12	8.06	
	AVG	8.96	9.24	9.20	8.44	8.14	8.64	8.45	8.41	8.31	8.79	8.33	8.60	8.34	8.26	8.45	8.25	7.88	8.23	8.29	8.28	8.37
RACINE*** MP 237.5	MAX	8.03	7.94	9.16	9.16	8.01	7.74	7.32	7.21	7.11	7.14	7.00	10.41	8.46	7.62	7.17	6.99	7.04	6.99	7.08	7.13	
	MIN	7.69	7.58	7.55	7.39	7.28	7.44	7.02	6.91	6.78	6.75	6.76	6.78	7.45	7.17	6.73	6.73	6.73	6.68	6.72	6.88	
	AVG	7.79	7.74	8.04	7.74	7.45	7.44	7.14	7.02	6.92	6.92	6.82	6.86	7.70	7.35	7.35	6.90	6.80	6.82	6.82	6.94	0.00%
RYDER MP 260.0	MAX	9.14	8.17	8.83	8.71	8.62	8.37	8.22	8.09	7.72	7.68	7.68	8.02	No	7.70	7.72	7.20	6.78	6.79	7.18	6.78	
	MIN	7.72	5.22	4.90	8.51	8.27	7.98	7.87	7.64	7.48	7.42	7.42	7.72	Data	7.51	7.38	6.53	6.14	6.54	6.54	6.15	
	AVG	8.19	7.39	7.95	8.59	8.50	8.25	8.01	7.88	7.63	7.57	7.57	7.91	Available	7.60	7.57	6.79	6.53	6.50	6.68	6.40	0.00%
GREENUP*** MP 341.0	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	NA
DOWNSTREAM	MAX	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
	MIN	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	NA
MARLAND*** MP 531.5	US-LOCK	8.90	8.70	8.70	8.70	8.50	7.90	7.50	7.50	7.30	7.10	7.10	7.30	7.30	7.30	7.30	6.70	6.80	6.70	6.60	6.30	0.00%
	DS-LOCK	8.10	8.10	7.40	7.40	*	7.20	7.60	7.40	7.10	7.10	7.40	7.50	7.40	7.40	7.30	7.10	6.90	6.60	6.70	6.50	0.00%
	US-Hydro	7.90	7.70	7.60	7.30	6.80	7.20	7.30	7.00	6.90	7.00	7.10	7.10	7.10	7.10	6.80	6.20	6.00	6.30	6.60	6.30	0.00%
McALPINE*** MP 606.8	MAX	8.62	8.55	8.78	8.41	8.71	6.97	6.92	No	No	7.54	No	7.88	8.22	8.24	7.97	6.98	6.63	7.00	7.54	No	
	MIN	8.26	8.37	8.22	7.52	7.37	5.13	5.03	Data	Data	6.80	Data	7.48	7.44	7.52	7.55	6.54	6.35	6.53	6.46	Data	
	AVG	8.47	8.43	8.42	8.09	8.00	6.06	6.12	Available	Available	7.23	Available	7.66	7.82	7.85	7.74	6.75	6.47	6.73	6.69	Available	0.00%
OLMSTEAD MP 964.6	Inst data	6.90	7.10	7.10	7.20	7.00	6.40	6.40	7.00	7.00	6.90	6.80	6.80	6.50	6.80	6.80	6.60	6.50	6.50	6.20	5.70	0.00%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L July 2014																								
CALENDAR DAY	1-Jul	2-Jul	3-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	28-Jul	29-Jul	30-Jul	31-Jul	Monthly % Exceedance	
UTAHAN DAY	182	183	184	188	189	190	191	192	193	195	196	197	198	199	202	203	204	205	206	209	210	211	212	
MONTGOMERY MP 11.7	MAX 9.10	8.70	8.80	9.10	9.10	9.20	9.20	9.40	9.40	9.40	8.60	8.80	8.80	8.60	9.00	9.60	9.40	9.30	9.50	8.70	8.40	8.40		
	MIN 8.80	8.70	8.60	8.50	8.60	8.60	8.50	8.60	8.60	8.50	8.30	8.10	8.30	8.10	8.30	8.30	8.60	8.30	8.10	8.10	7.80	7.80		
	AVG 8.90	8.80	8.70	8.80	8.70	8.80	8.80	8.90	8.90	8.90	8.60	8.50	8.50	8.40	8.50	8.70	8.80	8.70	8.70	8.40	8.10	8.10	0.00%	
HANNAH*** MP 126.4	MAX 8.30	10.88	8.56	7.41	7.65	8.55	8.60	8.51	9.84	10.64	10.64	7.53	7.62	7.79	8.16	9.24	8.18	8.42	8.91	8.91	8.90	8.90		
	MIN 8.05	8.05	7.20	7.11	7.17	6.59	8.10	7.27	8.15	7.13	7.13	7.16	7.47	7.89	7.62	7.20	7.05	6.21	7.88	7.88	7.13	7.29		
	AVG 8.17	8.43	8.00	7.29	7.46	7.91	8.34	8.05	8.63	7.93	7.93	7.50	7.55	7.66	7.72	8.28	7.70	7.08	8.55	8.55	7.73	8.36	0.00%	
BAITNE*** MP 237.5	MAX 7.08	7.06	7.17	7.30	7.12	7.10	7.18	7.14	9.90	7.43	12.24	11.23	12.64	6.85	6.72	6.76	6.91	6.99	7.14	7.14	7.14	8.08		
	MIN 6.79	6.80	6.80	7.11	7.00	6.95	6.91	6.92	7.14	7.14	6.95	7.07	7.30	6.40	6.43	6.48	6.60	6.65	6.84	6.83	6.83	6.84		
	AVG 6.88	6.89	6.96	7.20	7.06	6.99	6.98	7.01	7.52	7.23	7.46	7.84	7.84	6.61	6.54	6.61	6.68	6.79	6.94	6.95	7.38	7.39	0.00%	
RYGER MP 260.0	MAX 6.61	6.42	6.54	7.13	6.97	7.12	7.29	7.27	7.84	7.70	6.81	6.43	6.12	5.71	5.83	6.02	7.06	7.07	7.31	7.48	7.44	7.22		
	MIN 6.04	5.78	6.18	6.84	6.82	6.86	6.85	6.97	7.20	6.67	6.47	6.03	5.49	5.47	5.50	5.50	5.51	6.86	6.89	7.06	7.12	6.98		
	AVG 6.26	6.10	6.33	6.97	6.90	6.96	7.04	7.10	7.51	7.10	6.68	6.17	5.93	5.57	5.66	5.77	6.64	6.97	7.10	7.10	7.28	7.14	0.00%	
GREENUP*** MP 141.0	MAX 5.71	5.71	5.71	5.71	5.71	6.72	No	No	No	6.34	6.34	6.12	6.41	5.30	5.66	5.23	5.95	4.90	5.69	5.52	5.52	5.44		
	MIN 4.15	4.15	4.15	4.15	5.52	5.95	Data	Data	Data	5.23	5.23	5.42	5.45	4.32	4.32	4.25	4.58	4.30	5.45	5.02	5.02	5.15		
	AVG 5.13	5.13	5.13	5.13	6.45	6.21	Available	Available	Available	5.91	5.91	5.62	6.03	4.72	5.12	4.58	5.06	4.62	5.53	5.21	5.42	4.66	21.00%	
DOWNSTREAM	MAX 6.67	6.67	6.67	6.67	6.67	6.77	6.48	No	No	7.42	7.42	6.41	6.96	4.58	4.68	6.10	6.10	7.99	7.42	7.90	6.50	10.70		
	MIN 6.00	6.00	6.00	6.00	6.00	6.07	Data	Data	Data	6.02	6.02	5.59	5.02	4.03	3.72	3.60	5.28	5.69	5.93	5.74	5.57	5.66		
	AVG 6.39	6.39	6.39	6.39	6.36	6.29	Available	Available	Available	6.32	6.32	5.82	5.39	4.08	4.08	5.10	5.64	6.17	6.11	6.14	5.96	6.38	10.50%	
SARKLAND*** MP 531.5	US-LOCK 6.20	6.30	6.40	6.90	6.90	7.00	7.10	6.70	7.00	7.10	7.20	7.20	6.90	6.40	6.30	6.50	6.40	6.30	5.90	5.90	6.00	6.50		
	US-Hydro 6.20	6.40	6.40	6.70	6.80	6.80	6.80	6.50	6.50	6.80	7.20	7.00	6.80	6.60	6.20	6.30	5.70	6.40	6.00	6.20	6.20	*		
	DS-Hydro 6.10	6.40	6.40	6.80	6.70	6.80	6.80	6.40	6.40	6.80	7.00	6.80	6.40	6.20	6.30	6.00	5.90	6.10	5.70	5.80	5.80	6.10		
	DS-Hydro 6.10	6.20	6.30	6.70	6.60	6.70	6.70	6.00	6.50	5.80	7.20	6.80	6.60	6.50	6.10	6.30	6.10	6.10	6.20	6.20	6.10	6.20	0.00%	
MALENE*** MP 606.8	MAX 6.28	6.24	6.37	No	No	5.58	6.02	6.14	5.83	6.53	5.85	5.81	5.81	6.12	6.14	6.27	6.35	6.31	6.68	6.75	6.48	6.41		
	MIN 6.20	6.07	5.89	Data	Data	4.12	5.18	5.65	5.55	5.18	5.26	5.73	5.67	6.01	5.80	5.55	6.20	5.96	6.33	6.47	6.42	6.38		
	AVG 6.18	6.14	6.12	Available	Available	5.30	5.57	5.99	5.80	5.47	5.63	5.78	5.73	6.06	6.02	6.14	6.27	6.13	6.52	6.61	6.57	6.16	0.00%	
CLAYSTEAD MP 908.6	Test data	5.80	5.80	5.90	6.20	6.10	7.30	6.60	*	*	*	*	*	*	*	*	*	*	*	*	*	0.00%		

***Indicates problem with instrument
**Indicates ORSANCO data
***Indicates hypoxic/dim

Daily Dissolved Oxygen, mg/L August 2014

CALENDAR DAY	1-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	26-Aug	27-Aug	28-Aug	29-Aug	Monthly % Exceedance
JULIAN DAY	213	216	217	218	219	220	223	224	225	226	227	230	231	232	233	234	234	237	238	239	240	
MONTGOMERY	MAX 9.10 MIN 8.80 AVG 8.90	9.00 8.30 8.70	8.80 8.20 8.50	8.50 7.80 8.20	8.80 7.80 8.30	No Data Available	10.20 8.60 9.20	9.20 8.60 8.90	8.90 8.30 8.60	8.30 8.20 8.30	8.70 8.20 8.30	9.10 8.80 8.90	9.30 9.00 9.10	9.60 9.00 9.20	9.50 8.50 9.20	10.90 8.50 8.80	8.90 8.40 8.70	8.50 8.20 8.50	8.70 8.20 8.40	8.80 8.20 8.50	9.40 8.20 8.30	
THANNIBAL***	MAX 8.30 MIN 8.03 AVG 8.17	9.21 8.01 8.36	8.39 7.95 8.16	8.34 7.64 8.05	8.24 7.83 7.98	8.12 7.86 8.00	8.04 7.17 7.77	7.92 7.04 7.26	8.04 7.11 7.20	7.76 7.05 7.48	8.85 7.65 8.18	8.25 8.04 8.16	8.57 7.95 8.16	8.57 7.95 8.15	8.46 7.80 8.20	8.10 4.11 7.33	8.10 4.11 7.33	8.27 7.94 7.33	8.66 8.10 8.06	8.15 7.46 7.86	8.15 7.46 7.86	
BAKNE***	MAX 7.38 MIN 6.63 AVG 6.95	6.81 6.37 6.58	6.81 6.39 6.52	8.26 6.44 6.76	10.57 6.71 7.80	9.93 6.73 7.76	8.28 6.01 7.15	8.32 6.93 7.47	7.28 6.83 7.30	7.60 6.83 7.13	No Data Available	7.35 6.44 6.71	7.93 6.49 6.73	7.93 6.47 6.75	8.50 6.48 6.83	8.32 6.63 7.16	10.22 7.23 8.62	No Data Available	8.13 7.17 7.56	No Data Available	8.13 7.17 7.56	
KYGER	MAX 7.13 MIN 6.91 AVG 7.02	7.13 6.79 6.94	7.13 6.79 6.92	7.13 6.51 6.74	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.31 6.74 7.01	No Data Available	7.28 7.03 7.15	7.16 6.94 7.05	7.10 6.86 6.95	No Data Available	7.12 6.74 6.92	7.85 7.39 7.63	7.36 7.02 7.13	7.36 7.00 7.15	7.18 6.90 7.03	6.75 6.43 6.56	
GREENP***	MAX 5.69 MIN 4.87 AVG 5.21	6.00 4.83 5.24	8.28 4.80 5.41	5.50 4.80 5.08	5.64 4.70 5.19	5.40 4.56 4.97	5.28 4.70 4.97	5.47 4.39 5.04	5.45 4.73 5.23	5.40 4.87 5.01	5.21 4.87 5.01	5.14 4.50 4.54	6.10 4.32 5.53	6.10 4.52 5.53	5.50 4.78 5.21	5.35 3.43 4.88	5.35 3.43 4.88	5.47 4.58 4.93	5.64 4.87 5.47	5.52 5.02 5.19	6.02 5.21 5.62	
UPSTREAM	MAX 7.18 MIN 5.64 AVG 6.05	7.46 5.38 5.81	7.46 5.76 6.18	7.30 5.42 6.03	8.02 5.18 5.87	8.26 5.18 5.92	6.79 4.92 5.42	6.86 5.04 6.00	7.42 5.71 6.18	8.74 5.71 6.35	10.08 5.66 6.14	7.68 5.64 6.12	8.90 5.64 6.27	8.90 5.64 6.27	7.87 6.29 7.08	7.30 5.78 6.30	7.30 5.78 6.30	10.56 5.18 6.43	7.75 5.81 6.36	8.47 6.22 7.04	10.27 6.32 7.04	
DOWNSTREAM	MAX 7.18 MIN 5.64 AVG 6.05	7.46 5.38 5.81	7.46 5.76 6.18	7.30 5.42 6.03	8.02 5.18 5.87	8.26 5.18 5.92	6.79 4.92 5.42	6.86 5.04 6.00	7.42 5.71 6.18	8.74 5.71 6.35	10.08 5.66 6.14	7.68 5.64 6.12	8.90 5.64 6.27	8.90 5.64 6.27	7.87 6.29 7.08	7.30 5.78 6.30	7.30 5.78 6.30	10.56 5.18 6.43	7.75 5.81 6.36	8.47 6.22 7.04	10.27 6.32 7.04	
MARLAND***	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MCALPINE***	MAX 6.48 MIN 6.19 AVG 6.34	7.81 6.57 7.18	8.08 6.74 7.37	7.37 6.99 7.14	6.97 6.63 6.75	6.88 6.48 6.71	6.92 6.40 6.70	6.51 5.40 6.25	5.28 4.88 5.10	5.07 4.87 4.84	5.19 4.84 5.00	4.94 4.66 5.00	5.25 4.60 4.92	5.50 5.10 5.27	5.51 4.91 5.27	5.20 4.91 5.05	4.82 4.68 4.75	4.78 4.61 4.69	4.85 4.67 4.76	5.26 4.67 4.85	5.28 5.05 5.14	
OLANSTEAD	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 200.0	MAX 7.13 MIN 6.91 AVG 7.02	7.13 6.79 6.94	7.13 6.79 6.92	7.13 6.51 6.74	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.31 6.74 7.01	No Data Available	7.28 7.03 7.15	7.16 6.94 7.05	7.10 6.86 6.95	No Data Available	7.12 6.74 6.92	7.85 7.39 7.63	7.36 7.02 7.13	7.36 7.00 7.15	7.18 6.90 7.03	6.75 6.43 6.56	
MP 214.0	MAX 5.69 MIN 4.87 AVG 5.21	6.00 4.83 5.24	8.28 4.80 5.41	5.50 4.80 5.08	5.64 4.70 5.19	5.40 4.56 4.97	5.28 4.70 4.97	5.47 4.39 5.04	5.45 4.73 5.23	5.40 4.87 5.01	5.21 4.87 5.01	5.14 4.50 4.54	6.10 4.32 5.53	6.10 4.52 5.53	5.50 4.78 5.21	5.35 3.43 4.88	5.35 3.43 4.88	5.47 4.58 4.93	5.64 4.87 5.47	5.52 5.02 5.19	6.02 5.21 5.62	
MP 237.5	MAX 7.38 MIN 6.63 AVG 6.95	6.81 6.37 6.58	6.81 6.39 6.52	8.26 6.44 6.76	10.57 6.71 7.80	9.93 6.73 7.76	8.28 6.01 7.15	8.32 6.93 7.47	7.28 6.83 7.30	7.60 6.83 7.13	No Data Available	7.35 6.44 6.71	7.93 6.49 6.73	7.93 6.47 6.75	8.50 6.48 6.83	8.32 6.63 7.16	10.22 7.23 8.62	No Data Available	8.13 7.17 7.56	No Data Available	8.13 7.17 7.56	
MP 260.0	MAX 7.13 MIN 6.91 AVG 7.02	7.13 6.79 6.94	7.13 6.79 6.92	7.13 6.51 6.74	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.31 6.74 7.01	No Data Available	7.28 7.03 7.15	7.16 6.94 7.05	7.10 6.86 6.95	No Data Available	7.12 6.74 6.92	7.85 7.39 7.63	7.36 7.02 7.13	7.36 7.00 7.15	7.18 6.90 7.03	6.75 6.43 6.56	
MP 284.0	MAX 5.69 MIN 4.87 AVG 5.21	6.00 4.83 5.24	8.28 4.80 5.41	5.50 4.80 5.08	5.64 4.70 5.19	5.40 4.56 4.97	5.28 4.70 4.97	5.47 4.39 5.04	5.45 4.73 5.23	5.40 4.87 5.01	5.21 4.87 5.01	5.14 4.50 4.54	6.10 4.32 5.53	6.10 4.52 5.53	5.50 4.78 5.21	5.35 3.43 4.88	5.35 3.43 4.88	5.47 4.58 4.93	5.64 4.87 5.47	5.52 5.02 5.19	6.02 5.21 5.62	
MP 311.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 331.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 351.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 371.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 391.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 411.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 431.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 451.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 471.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 491.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 511.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.40	5.90 6.10 5.30	5.60 6.20 5.40	5.90 6.20 5.40	5.90 6.10 5.40	5.90 6.10 5.40	6.10 6.30 5.90	6.40 6.80 6.10	7.00 7.20 5.20	6.80 6.90 5.20	6.80 6.80 4.20	6.80 6.80 4.20	6.80 6.80 4.20	
MP 531.5	MAX 6.40 MIN 6.10 AVG 6.20	6.50 6.20 5.80	6.30 6.00 5.50	6.30 6.20 5.10	6.30 6.10 5.40	6.00 5.80 5.00	5.80 6.00 4.80	5.60 5.30 5.00	6.00 6.20 5.4													

***Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L September 2014

CALENDAR DAY JULIAN DAY	2-Sep 245	3-Sep 246	4-Sep 247	5-Sep 248	6-Sep 252	10-Sep 253	11-Sep 254	12-Sep 255	13-Sep 258	16-Sep 259	17-Sep 260	18-Sep 261	19-Sep 262	21-Sep 266	24-Sep 267	25-Sep 268	26-Sep 269	29-Sep 272	30-Sep 273	Monthly % Exceedance
MONTGOMERY MP 31.7	MAX 8.50	9.40	8.90	9.10	No	8.90	9.20	8.60	8.50	8.70	9.00	9.60	9.20	8.90	9.20	9.20	9.20	9.20	9.20	0.00%
	MIN 8.00	7.80	7.90	7.90	Data	8.00	8.20	7.80	7.80	8.20	8.40	8.50	8.50	8.20	8.20	8.20	8.20	8.80	8.80	
	AVG 8.20	8.20	8.30	8.30	Available	8.30	8.60	8.20	8.10	8.40	8.70	8.80	8.90	8.50	8.50	8.50	8.70	9.20	9.30	
HANDBAL*** MP 136.4	MAX 8.12	8.12	8.12	8.94	*	8.55	No	No	No	Data	No	Data	No	Data	8.58	No	No	No	No	
	MIN 6.62	6.62	6.71	7.68	*	7.28	Data	Data	Data	Available	Available	Available	Data	Data	8.22	Data	Data	Data	Data	
	AVG 7.58	7.58	7.79	8.38	*	8.01	Available	Available	Available	Available	Available	Available	Available	Available	8.37	Available	Available	Available	Available	0.00%
RAJINE*** MP 237.5	MAX 7.35	8.18	7.73	7.30	7.68	7.05	7.07	6.85	6.77	6.77	7.84	9.34	8.49	7.54	7.56	8.86	8.21	7.10	6.99	
	MIN 6.40	6.28	7.24	6.85	6.75	6.74	6.72	6.40	6.24	6.09	6.09	7.07	7.47	7.12	7.04	7.11	7.12	6.59	6.46	
	AVG 6.72	6.93	7.51	7.05	6.91	6.85	6.88	6.60	6.44	6.35	6.72	7.96	7.98	7.27	7.28	7.68	7.60	6.78	6.64	0.00%
KYGER MP 260.0	MAX 6.25	6.81	6.79	7.02	6.51	6.30	6.30	6.25	6.28	5.79	5.60	5.78	5.52	Data	No	No	No	No	No	
	MIN 6.19	6.47	6.61	6.85	6.20	6.06	6.11	5.82	5.71	5.47	5.08	4.97	4.97	Available	Available	Available	Available	Available	Available	
	AVG 6.22	6.61	6.70	6.93	6.37	6.19	6.21	6.04	5.87	5.66	5.45	5.39	5.28	Available	Available	Available	Available	Available	Available	0.00%
GREENUP*** MP 341.0	MAX 5.78	5.78	8.71	6.05	5.23	5.86	5.62	5.37	5.83	9.19	9.19	5.62	5.37	6.50	6.50	6.60	6.06	6.24	8.74	
	MIN 5.16	5.16	4.18	4.90	4.51	4.66	4.84	4.99	5.04	5.21	5.21	4.97	4.94	5.76	5.76	5.57	5.74	5.57	5.57	
	AVG 5.50	5.50	5.28	5.39	4.76	5.48	5.16	5.43	5.23	5.78	5.78	5.38	5.19	6.12	6.12	6.01	6.36	5.90	6.60	1.00%
DOWNSTREAM	MAX 7.99	7.99	7.78	6.55	6.12	6.17	9.62	7.32	8.66	10.97	10.97	5.74	6.24	6.48	6.48	6.67	6.70	5.69	7.14	
	MIN 6.79	6.79	5.74	5.69	5.26	5.30	5.33	5.40	4.99	4.99	6.15	5.42	5.28	6.10	6.10	6.19	6.17	5.21	5.18	
	AVG 7.03	7.63	6.37	5.85	5.46	5.77	5.90	5.83	5.62	6.15	6.15	5.59	5.43	6.31	6.31	6.40	6.40	5.50	6.84	0.00%
MARLAND*** MP 531.5	US-Loak 6.30	6.00	5.50	5.70	6.30	6.30	6.30	6.30	6.10	5.70	5.80	5.50	6.20	6.80	6.70	6.60	6.60	6.60	6.40	0.00%
	DS-Loak 6.50	6.10	6.10	5.80	6.20	6.40	6.40	6.60	6.40	5.70	5.50	*	6.70	7.50	6.30	6.10	6.10	6.20	6.10	0.00%
	DS-Hydro 5.00	4.90	5.00	5.60	5.60	6.10	5.50	5.60	5.60	5.60	5.30	5.50	5.70	6.20	6.20	6.10	6.00	6.30	6.20	0.00%
CLANSTEAD MP 964.6	Inst data 7.10	7.00	6.30	6.60	6.70	*	*	*	*	*	*	*	*	*	*	*	*	7.90	8.00	0.00%

*Indicates problem with instrument
 **Indicates ORSANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L October 2014

CALENDAR DAY	1-Oct	2-Oct	3-Oct	6-Oct	7-Oct	8-Oct	9-Oct	10-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	20-Oct	21-Oct	22-Oct	24-Oct	27-Oct	28-Oct	30-Oct	31-Oct	Monthly % Exceedance			
JULIAN DAY	274	275	276	279	280	281	282	283	286	287	288	289	290	293	294	295	297	300	302	303	304				
MONTGOMERY	MAX 8.50	9.10	9.00	8.70	8.80	8.90	9.00	9.20	10.00	10.00	10.30	10.30	10.30	10.20	10.40	10.50	11.00	10.80	11.20	11.10	11.20	0.00%			
MIN	8.60	8.50	8.30	8.40	8.30	8.40	8.60	8.80	9.70	9.70	9.80	10.10	10.00	9.70	10.20	10.30	10.60	10.60	10.90	10.80	10.80				
AVG	9.00	8.90	8.60	8.60	8.60	8.70	8.80	9.00	9.80	9.80	10.10	10.20	10.20	10.00	10.30	10.30	10.80	10.70	11.10	11.00	11.10	0.00%			
HANNAH***	MAX Data Available	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	No Data	9.17	9.23	9.32	9.26	10.04	9.65	9.42	9.81			
MIN	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	8.78	8.79	8.88	8.96	9.09	9.18	9.12	9.56	9.27	9.40	0.00%
AVG	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	9.26	9.26	9.10	9.07	9.15	9.23	9.20	9.92	9.33	9.40	0.00%
RAJNE***	MAX 6.80	6.78	6.79	7.13	7.22	7.11	8.59	8.03	7.18	7.32	7.29	7.31	7.40	7.47	9.40	8.13	7.63	7.15	7.22	7.35	7.49	7.49	0.00%		
MIN	6.26	6.26	6.39	6.73	6.80	6.59	6.59	7.37	6.67	6.67	6.85	6.89	6.95	7.05	7.09	7.49	6.99	6.73	6.86	6.95	7.09	7.09	0.00%		
AVG	6.45	6.49	6.60	6.60	6.96	6.97	6.83	7.43	7.61	6.87	6.97	7.04	7.10	7.14	7.27	7.70	7.80	7.29	6.84	7.05	7.18	7.24	0.00%		
KYGER	MAX 8.85	8.25	No Data	No Data	7.46	7.42	No Data	No Data	No Data	No Data	No Data	No Data	7.64	No Data	No Data	8.64	8.87	9.04	9.12	9.20	No Data	No Data	0.00%		
MIN	8.01	7.88	Data Available	Data Available	7.28	7.32	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	7.24	Data Available	Data Available	8.56	8.71	8.90	9.01	9.03	Data Available	Data Available	0.00%		
AVG	8.30	8.06	Data Available	Data Available	7.76	7.38	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	7.47	Data Available	Data Available	8.59	8.79	8.98	9.08	9.10			0.00%		
GREENUP***	MAX 5.98	5.98	6.70	6.31	6.31	6.70	6.53	6.53	6.77	6.96	6.77	6.96	7.24	No Data	No Data	8.56	8.87	9.04	9.12	9.20	9.01	9.01	0.00%		
MIN	4.51	5.95	5.95	5.74	5.52	5.52	6.38	6.07	6.07	6.56	6.45	6.62	7.24	No Data	No Data	8.56	8.71	8.90	9.01	9.03	9.03	9.03	0.00%		
AVG	5.70	5.96	6.26	6.06	6.08	6.08	6.47	6.28	6.38	6.54	6.73	6.57	6.89	7.14	7.27	7.70	7.80	7.29	6.84	7.05	7.16	7.16	0.00%		
DOWNTOWN	MAX 7.75	7.70	7.37	6.58	6.72	6.65	6.48	6.79	7.27	7.42	7.03	7.50	*	7.70	7.56	7.68	7.42	7.51	7.92	7.75	7.08	7.08	0.00%		
MIN	7.18	7.15	6.77	6.29	6.29	6.29	6.34	6.53	6.72	6.82	6.38	6.62	*	6.96	6.96	7.34	6.91	6.77	6.38	6.31	6.62	6.62	0.00%		
AVG	7.45	7.43	7.08	6.47	6.48	6.48	6.54	6.66	6.96	7.09	6.84	6.91	*	7.52	7.41	7.54	7.17	7.02	6.73	7.28	6.85	6.85	0.00%		
MARLIN***	MAX 6.80	6.69	6.70	6.70	6.80	6.80	6.90	7.10	7.50	7.60	7.80	8.00	7.70	8.00	8.20	8.30	9.20	8.70	9.00	8.90	9.00	9.00	0.00%		
MIN	6.20	6.20	6.20	6.90	6.90	7.00	6.40	7.10	7.50	7.60	7.70	7.80	7.90	8.20	8.20	8.30	9.00	8.80	9.20	9.10	9.00	9.00	0.00%		
AVG	6.50	6.50	6.50	6.70	6.70	6.70	6.70	6.90	7.20	7.20	7.60	7.60	7.60	8.00	8.10	8.40	8.60	8.60	8.70	8.80	8.80	8.80	0.00%		
US-Hydro	MAX 6.00	5.90	5.60	6.30	6.10	6.40	6.30	6.20	6.20	6.30	7.10	7.10	7.00	7.80	7.80	7.40	8.00	7.90	7.90	8.30	8.20	8.20	0.00%		
McM PINE***	MAX 6.93	6.43	5.90	6.04	6.10	6.29	6.24	6.35	5.96	6.20	6.47	6.44	6.68	6.44	7.04	7.05	7.07	7.12	7.34	7.34	7.37	7.37	0.00%		
MIN	6.00	5.86	5.59	5.78	5.85	5.97	6.04	6.14	5.77	5.93	6.48	6.53	6.53	6.75	6.94	6.98	6.96	7.02	7.22	7.24	7.24	7.24	0.00%		
AVG	6.42	6.07	5.70	5.90	5.98	6.14	6.13	6.23	5.85	6.08	6.37	6.57	6.60	6.85	6.98	7.03	7.01	7.07	7.28	7.29	7.30	7.30	0.00%		
OLMSTEAD	MAX 8.20	8.60	8.40	9.20	9.10	8.80	8.60	8.90	8.70	9.20	10.00	10.70	7.30	7.30	7.30	7.70	7.90	8.00	8.20	8.30	8.20	8.20	0.00%		
MIN	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	Data Available	0.00%		

*Indicates problem with instrument
 **Indicates ORS/ANCO data
 ***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L May 2015

CALENDAR DAY	1-May	5-May	7-May	11-May	12-May	13-May	14-May	15-May	16-May	19-May	20-May	21-May	22-May	26-May	27-May	28-May	29-May	Monthly
JULIAN DAY	121	125	127	131	132	133	134	135	138	139	140	141	142	146	147	148	149	* Exceedance
MONTGOMERY MP 31.7	MAX 12.10 MIN 11.80 AVG 12.00	11.70 11.40 11.60	11.40 11.10 11.30	11.60 10.60 10.90	12.30 10.50 10.80	10.60 9.90 10.30	9.00 9.40 9.70	9.90 9.20 9.30	10.30 9.80 10.00	10.20 9.60 9.80	10.10 9.60 9.40	9.70 9.30 9.30	9.50 9.20 9.30	11.00 10.10 10.50	10.80 10.30 10.40	10.90 9.80 10.20	11.60 9.70 10.40	0.00%
RACINE*** MP 237.5	MAX No Data MIN Available AVG Available	No Data Available	No Data Available	5.70 5.47 5.52	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
GREENUP*** MP 341.0 UPSTREAM	MAX * MIN * AVG *	* * *	* * *	9.40 9.05 9.25	9.67 9.26 9.44	9.82 9.19 9.54	9.84 9.22 9.54	9.58 9.14 9.32	8.47 7.22 7.88	8.42 7.25 7.73	8.42 7.25 7.73	7.25 6.84 7.06	7.20 6.46 6.72	* * *	* * *	No Data Available	* * *	0.00%
DOWNSTREAM	MAX * MIN * AVG *	* * *	* * *	8.45 7.94 8.18	8.54 7.54 7.85	8.45 7.10 7.47	7.61 7.01 7.30	7.73 6.74 7.22	6.50 5.86 6.19	6.14 5.59 5.87	6.14 5.59 5.87	10.92 4.94 5.49	10.92 4.94 6.19	7.94 7.39 7.64	7.39 6.17 6.70	No Data Available	6.26 5.47 5.86	0.00%
MARKLAND*** MP 531.5	US-Loak 7.30 DS-Loak 9.80 US-Hydro 7.40 DS-Hydro 8.10	8.20 10.10 10.00 8.50	8.30 9.90 9.80 7.60	10.40 10.20 10.70 8.60	10.60 10.20 10.70 8.50	11.00 10.20 10.70 8.80	11.70 10.50 11.20 8.90	12.20 10.70 11.60 8.50	10.60 8.60 9.50 7.10	* 8.40 8.00 7.40	* 8.00 7.80 6.50	* 8.10 7.40 6.80	* 8.06 7.30 6.30	8.80 7.50 6.40 5.90	8.80 7.60 * 6.10	8.70 7.70 6.60 6.10	8.80 7.40 7.30 6.10	0.00% 0.00% 0.00% 0.00%
MCALPINE*** MP 606.8	MAX 9.01 MIN 8.85 AVG 8.94	8.00 7.68 7.85	8.20 7.95 8.07	7.58 7.33 7.47	7.67 7.45 7.29	12.08 7.70 9.75	12.74 11.46 12.05	12.23 11.38 11.91	9.79 9.17 9.51	9.14 8.90 9.01	9.08 8.67 8.86	8.65 8.49 8.58	8.90 8.56 8.60	9.01 8.27 8.58	8.63 7.48 7.96	8.01 7.50 7.75	7.50 6.82 7.20	0.00%
OLDSTEAD MP 964.6	Post data 8.10	8.00	8.70	9.00	9.00	9.00	9.20	8.60	8.00	7.70	8.00	8.00	7.80	8.30	8.00	7.90	8.20	0.00%

*Indicates problem with instrument
***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L June 2015																																
CALENDAR DAY	1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun	29-Jun	30-Jun	Monthly % Exceedance	
JULIAN DAY	152	153	154	155	156	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185
MONTGOMERY MP 11.7	MAX 11.60 MIN 9.70 AVG 10.40	9.20 8.60 8.80	8.90 8.80 8.70	9.10 8.80 9.00	9.20 8.80 9.00	9.30 8.90 9.10	9.20 8.80 9.00	9.30 8.90 9.10	9.20 8.80 9.00	9.40 9.00 9.10	9.50 9.00 9.20	9.50 9.00 9.20	9.50 8.80 8.60	8.80 8.60 8.20	8.80 8.60 8.20	8.90 8.60 8.20	9.10 8.80 9.00	9.10 8.80 9.00	9.10 8.80 9.00	9.10 8.80 9.00	8.80 8.50 8.30	8.80 8.50 8.30	8.80 8.50 8.30	9.20 8.60 8.90	9.00 8.80 8.90	9.30 8.60 8.90	9.30 8.60 8.90	9.30 8.60 8.90	9.30 8.60 8.90	0.00%		
ROCKNE MP 237.5	MAX 7.31 MIN 6.99 AVG 7.11	7.13 6.88 6.96	7.06 6.68 6.86	6.66 6.45 6.51	6.72 6.50 6.54	6.33 6.27 6.29	6.50 6.32 6.37	6.45 6.23 6.30	7.51 7.44 7.47	No Data 7.47	6.07 5.83 5.97	5.77 5.55 5.67	5.77 5.55 5.67	5.89 5.69 5.77	5.95 5.85 5.88	5.83 5.68 5.73	6.33 5.66 6.06	6.37 6.17 6.22	6.52 6.15 6.22	6.54 6.28 6.39	6.54 6.60 6.65	6.74 6.38 6.54	7.68 6.86 6.93	6.54 6.38 6.54	6.54 6.38 6.54	6.54 6.38 6.54	6.54 6.38 6.54	6.54 6.38 6.54	6.54 6.38 6.54	0.00%		
GREENUP MP 341.0 UPSTREAM	MAX * MIN * AVG *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	NA		
DOWNSTREAM	MAX 8.59 MIN 4.66 AVG 6.06	8.30 5.83 6.96	8.30 5.78 6.68	7.25 6.05 6.99	7.11 5.98 6.83	8.30 5.54 6.80	5.66 5.14 5.45	5.33 4.38 5.02	5.06 4.61 4.80	6.14 5.18 5.30	5.90 5.18 5.30	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	No Data 5.18	9.00%	
MARLE MP 531.5	US-LOCK 7.80 US-LOCK 7.10 US-LOCK 6.20 US-LOCK 6.20	7.70 7.10 6.20 6.20	7.10 7.10 6.20 6.20	7.00 7.10 6.20 6.20	7.20 7.20 6.40 6.40	6.90 6.50 5.90 5.20	6.60 6.40 5.90 5.40	6.60 6.50 6.20 5.40	6.50 6.50 6.10 5.00	6.50 6.50 6.10 5.00	6.80 6.40 6.40 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	7.20 6.80 6.80 5.30	0.00%			
MARLE MP 606.8	MAX 7.92 MIN 6.23 AVG 7.13	7.83 7.26 7.23	8.02 7.43 7.20	7.85 7.57 7.65	7.77 7.20 6.39	7.13 6.82 6.92	7.18 6.84 6.98	7.25 6.68 7.01	7.80 7.04 7.23	8.61 7.22 7.82	8.12 7.54 7.93	7.42 6.59 6.50	6.80 6.14 6.33	6.59 6.21 6.48	6.23 5.83 6.03	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	* * *	0.00%		
CLANSTEAD MP 964.6	best data	8.50	8.64	8.80	8.20	7.70	8.20	8.00	7.40	7.40	7.40	6.80	6.40	5.80	5.60	5.70	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	9.00%	

*Indicates problem with measurement
 **Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L July 2015

CALENDAR DAY JULIAN DAY	1-Jul	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	30-Jul	31-Jul	Monthly % Exceedance
MONTGOMERY MP 31.7	MAX 9.50 MIN 9.30 AVG 9.40	9.60 9.40 9.50	9.80 9.20 9.50	9.80 9.00 9.20	9.20 8.80 9.00	9.10 8.80 8.90	9.00 8.80 8.90	9.00 8.70 8.80	9.10 8.80 8.90	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.70 8.80	9.00 8.60 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.00 8.70 8.80	9.00 8.80 8.90	9.00 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	9.10 8.80 8.90	0.00%	
BAKENE*** MP 217.5	MAX 7.22 MIN 6.94 AVG 7.07	7.08 6.88 6.95	7.34 7.17 7.22	7.76 7.60 7.66	7.69 7.51 7.56	8.18 7.85 8.01	8.44 8.14 8.29	8.18 7.46 7.78	8.01 7.92 7.95	7.47 7.18 7.30	6.75 6.57 6.62	No Data Available	6.62 6.44 6.49	6.59 6.43 6.49	7.11 6.82 6.97	6.83 6.68 6.77	6.83 6.52 6.59	No Data Available	6.70 6.44 6.56	6.84 6.58 6.70											0.00%	
GREENUP*** MP 141.0 UPSTREAM	MAX No MIN Available AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
DOWNSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%
MARKLAND*** MP 531.5	US-LOCK 6.20 DS-LOCK 6.60 US-Hydro 5.90 DS-Hydro 5.70	7.50 6.40 5.60 6.20	7.50 7.00 6.40 6.20	6.80 7.20 6.60 5.80	6.90 7.30 6.60 6.00	7.00 7.40 6.80 6.50	6.70 7.00 6.50 6.40	6.40 6.60 6.10 6.20	6.50 6.40 6.00 6.10	6.50 6.40 6.00 6.10	6.30 6.40 6.20 6.10	5.90 6.20 5.10 5.10	5.90 6.20 5.10 5.10	5.90 6.20 5.10 5.00	5.90 6.20 5.10 5.00	6.20 6.40 6.00 5.40	6.60 6.60 6.40 5.40	6.80 6.60 6.40 5.50	7.00 6.80 6.80 5.80	7.70 7.20 7.70 6.40	7.20 7.10 6.70 5.15.9	7.50 7.10 7.10 5.80									0.00% 0.00% 0.00% 5.00%	
MAUPINE*** MP 606.8	MAX * MIN * AVG *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	* * * *	14.00%		
OLINSTEAD MP 964.6	Max data 5.00	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	35.00%

* Indicates problem with instrument
***Indicates hydrologic dam

Daily Dissolved Oxygen, mg/L August 2015

CALENDAR DAY UTIAN DAY	3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	10-Aug	11-Aug	17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	31-Aug	Monthly
	215	216	217	218	219	222	223	229	230	231	232	233	236	237	238	239	240	243	% Excessance
MONTGOMERY MP 31.7	MAX 9.60	8.70	8.60	8.40	7.80	9.40	8.70	7.80	8.00	7.70	7.10	7.10	No	8.00	7.50	7.70	8.10	11.00	
	MIN 7.00	6.00	6.30	5.70	6.40	6.90	5.90	6.40	6.70	6.30	6.20	5.50	Data	5.70	5.70	5.90	6.10	6.30	0.00%
	AVG 8.00	7.50	7.40	7.10	7.10	7.80	7.40	7.20	7.20	7.00	6.60	6.40	Available	6.50	6.80	6.60	6.90	7.90	
RACINE*** MP 237.5	MAX 6.85	6.92	6.56	6.51	6.38	5.87	5.99	6.00	7.43	6.75	6.32	6.06	6.42	6.99	7.30	7.37	7.08	6.64	
	MIN 6.60	6.42	6.36	6.53	6.14	5.68	5.69	5.60	6.81	6.19	6.05	5.90	6.13	5.43	6.92	7.05	6.79	6.57	0.00%
	AVG 6.73	6.55	6.40	6.40	6.27	5.72	5.81	5.77	7.12	6.51	6.08	5.96	6.23	6.44	7.11	7.19	6.95	6.48	
GREENUP*** MP 341.0	MAX Data	No	No	No	No	No	No	No	6.70	6.02	3.98	4.25	No	5.40	5.35	5.78	5.64	No	
	MIN Data	Data	Data	Data	Data	Data	Data	Data	4.42	4.22	3.62	3.60	Available	4.01	3.96	3.04	4.68	Data	
	AVG Available	Available	Available	Available	Available	Available	Available	5.34	~~4.48~~	~~4.22~~	~~3.89~~	~~3.88~~	Available	~~4.82~~	~~4.73~~	5.45	5.17	Available	67.00%
DOWNSTREAM	MAX No	No	No	No	No	No	No	No	9.38	8.18	6.17	5.71	No	4.90	7.10	4.87	4.90	No	
	MIN Data	Data	Data	Data	Data	Data	Data	Data	6.26	5.93	4.78	4.56	Data	~~3.16~~	~~3.29~~	4.25	4.75	Data	
	AVG Available	Available	Available	Available	7.16	Available	Available	7.08	6.84	5.47	~~4.89~~	5.23	Available	~~4.05~~	~~3.82~~	~~4.58~~	~~4.01~~	Available	50.00%
MARKLAND*** MP 531.5	US-LOCK 6.90	7.00	7.00	7.10	6.90	6.20	No	5.90	5.60	5.30	5.50	5.80	6.10	*	6.00	5.50	6.80	6.60	0.00%
	DS-LOCK 6.70	6.80	6.70	6.30	6.80	5.70	Data	5.70	5.30	5.70	5.60	5.00	5.30	6.50	5.40	5.90	6.40	5.00	0.00%
	US-Hydro 6.30	6.40	*	*	*	5.80	Available	5.80	5.50	5.20	5.40	5.10	5.30	~~4.98~~	5.40	*	6.50	5.50	8.00%
	DS-Hydro 5.90	5.30	5.30	5.40	5.40	4.50	*	5.20	~~4.28~~	~~4.08~~	~~4.08~~	~~4.08~~	5.30	~~4.98~~	~~4.88~~	~~4.68~~	5.40	5.10	41.00%
MCLEANE*** MP 606.8	MAX 7.44	7.61	7.42	7.15	6.75	6.39	6.97	6.53	5.39	5.35	5.32	5.51	6.18	7.20	7.40	8.21	7.55	7.85	
	MIN 5.87	7.02	6.97	6.56	6.50	5.42	4.94	5.23	4.86	4.82	5.18	4.28	4.95	4.63	5.17	5.17	5.07	5.31	
	AVG 6.73	7.27	7.16	6.87	6.60	6.16	5.92	6.04	5.10	5.13	5.25	5.02	5.37	5.45	6.06	6.21	6.18	6.16	0.00%
OLMSTEAD MP 964.6	last data ~~4.80~~	5.30	5.40	5.50	5.60	5.80	6.40	6.70	6.60	6.60	6.20	6.40	6.50	7.20	6.90	6.60	6.60	7.00	6.00%

* indicates problem with instrument
 *** indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L September 2015

CALENDAR DAY	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	Monthly % Exceedance	
JULIAN DAY	244	245	246	247	251	252	253	254	257	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	
MONTGOMERY NP-11.7	MAX 6.60 MIN 8.90 AVG 8.90	11.90 7.40 9.10	12.30 7.00 8.90	11.60 5.00 8.40	10.80 5.00 7.30	9.80 4.90 7.20	9.90 5.40 7.00	8.20 5.20 6.70	No Data Available	7.60 4.90 5.60	10.50 6.70 7.00	9.00 6.70 7.60	10.00 6.90 8.60	8.90 6.90 7.90	9.40 7.20 8.10	9.70 5.50 7.40	9.70 7.50 8.60	9.40 6.80 8.30	8.40 6.20 7.60	8.40 6.50 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	8.40 6.20 7.60	0.00%		
BLAINE*** NP-23.5	MAX 6.81 MIN 6.52 AVG 6.68	6.57 6.34 6.37	6.35 6.12 6.19	6.07 5.16 5.82	5.44 5.16 5.13	7.17 6.41 6.71	6.55 6.21 6.40	5.68 5.32 5.54	5.15 4.45 5.02	6.28 4.99 5.17	6.33 5.89 6.01	6.36 6.01 6.16	6.19 5.94 6.06	6.30 6.11 6.20	6.30 6.07 6.20	6.40 6.32 6.22	6.61 6.32 6.45	6.65 6.40 6.51	6.56 6.28 6.35	6.33 6.25 6.28	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	6.31 6.19 6.24	0.00%			
GREENP*** NP-14.0	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	5.71 4.73 5.26	6.74 5.70 5.06	5.69 4.49 5.06	5.42 4.34 4.88	5.42 4.34 4.88	8.23 5.13 5.13	4.56 4.34 4.34	4.56 4.34 4.34	7.18 3.86 4.45	7.18 4.10 4.45	4.87 4.10 4.45	4.87 4.10 4.45	8.58 4.52 7.58	7.04 5.57 5.57	7.04 5.57 5.57	7.56 6.41 7.03	6.94 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	6.55 5.90 5.90	53.00%		
DOWNSTREAM	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	7.12 5.78 5.96	6.02 5.42 5.71	5.64 5.47 5.52	5.57 5.21 5.39	5.57 5.21 5.39	5.78 5.38 5.55	6.22 5.18 5.43	9.12 5.09 5.37	5.35 4.68 5.13	5.35 4.68 5.13	5.42 4.51 5.04	5.42 4.51 5.04	9.41 4.97 5.65	6.48 4.68 5.49	6.48 4.68 5.49	6.17 5.09 5.48	5.78 5.28 5.48	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	8.40 5.35 6.24	0.00%		
MARLAND*** NP-53.5	MAX 6.20 MIN 5.80 AVG 5.93	6.10 5.80 5.10	6.00 5.00 5.20	6.00 5.10 5.20	6.30 5.00 5.10	6.40 5.00 5.10	5.40 4.50 5.00	4.50 4.20 4.80	5.40 4.50 5.00	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	5.90 4.50 5.20	10.00%			
MALEPINE*** NP-606.8	MAX 7.76 MIN 6.14 AVG 7.01	8.62 7.14 7.81	8.55 7.65 8.01	9.24 7.71 8.37	6.77 5.32 5.84	6.40 5.35 5.90	6.30 5.11 5.84	6.39 5.11 5.86	8.59 7.43 7.43	9.30 7.80 8.40	7.75 7.04 7.34	6.97 5.75 6.31	7.50 6.84 7.70	8.61 7.82 8.14	9.63 7.15 8.14	9.87 6.36 8.10	9.40 6.61 7.64	7.22 6.10 6.71	8.23 6.45 7.31	7.44 7.15 7.20	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%			
GLASTEAD NP-764.6	MAX 6.80 MIN 7.01 AVG 6.90	7.90 7.60 7.75	7.60 7.40 7.50	8.00 7.40 7.70	7.40 7.60 7.50	6.80 6.80 6.80	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	7.40 7.40 7.40	0.00%			

*Indicates problem with instrument
**Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L October 2015

CALENDAR DAY	1-Oct	2-Oct	6-Oct	7-Oct	8-Oct	9-Oct	12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	19-Oct	20-Oct	21-Oct	22-Oct	23-Oct	26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	Monthly % Exceedance
JULIAN DAY	274	275	279	280	281	282	283	286	287	288	289	292	293	294	295	296	299	300	301	302	303	
MONTGOMERY	MAX 8.10	8.40	8.90	8.90	9.40	9.50	9.00	8.60	9.00	9.10	8.60	9.10	9.40	9.20	10.00	10.00	9.90	9.80	9.80	10.00	10.40	0.00%
MP 71.7	MIN 8.30	7.60	8.30	8.00	8.40	8.20	7.80	8.00	8.00	8.10	7.50	8.00	8.20	8.60	8.60	8.90	9.20	9.10	9.10	9.40	9.80	
	AVG 7.80	8.10	8.60	8.50	8.90	8.80	8.40	8.30	8.60	8.40	8.10	8.50	8.60	8.90	9.20	9.40	9.40	9.40	9.50	9.70	10.20	
RACINE***	MAX 8.02	7.02	6.46	*	*	*	6.27	6.43	7.84	6.31	6.55	6.42	8.45	6.56	7.06	6.26	6.02	6.06	6.14	7.10	6.22	
MP 237.5	MIN 7.32	6.73	6.24	*	*	*	5.93	6.00	7.05	6.34	6.12	6.04	8.06	6.06	6.07	5.90	5.75	5.79	5.75	6.57	5.77	
	AVG 7.65	6.91	6.30	*	*	*	6.05	6.18	7.25	6.61	6.25	6.21	8.27	6.15	6.36	6.02	5.84	5.90	5.93	6.78	6.01	0.00%
GREENUP***	MAX 6.58	6.62	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
MP 241.0	MIN 5.95	5.54	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
UPSTREAM	AVG 6.32	5.77	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
DOWNSTREAM	MAX 6.31	5.52	6.19	6.46	7.37	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
	MIN 5.47	4.56	5.88	6.05	6.72	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	Data	
	AVG 6.04	5.01	6.05	6.30	7.03	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	Available	0.00%
MARQUANP**	US-Lock 7.00	7.70	6.80	7.00	7.70	7.70	8.20	8.40	8.60	8.40	8.30	7.30	7.60	7.70	7.70	7.80	7.80	8.10	8.00	7.90	7.90	0.00%
MP 331.5	DS-Lock 7.60	8.00	7.10	7.50	7.70	7.70	7.80	8.30	8.40	8.30	7.50	7.20	7.40	7.10	7.10	7.40	7.40	7.90	8.40	8.40	8.40	0.00%
	US-Hydro 6.70	7.60	6.90	6.40	7.20	7.30	7.60	7.80	8.10	8.10	6.90	7.10	7.10	7.40	7.10	7.40	7.70	8.00	8.00	8.00	8.00	0.00%
	DS-Hydro *	6.30	*	*	6.30	6.30	7.40	7.30	7.90	7.60	7.20	7.10	6.90	6.80	6.70	6.90	7.60	7.50	7.40	7.50	7.40	0.00%
MAI PUNE***	MAX 7.43	6.36	6.00	5.51	5.39	5.28	No	No	No	6.53	6.44	5.91	6.23	6.54	6.56	6.72	6.73	6.67	6.54	6.75	6.82	
MP 606.8	MIN 6.25	5.51	5.47	5.29	5.22	4.98	Data	Data	Data	6.40	5.44	5.29	5.71	5.99	6.03	6.43	6.68	6.51	6.48	6.51	6.77	
	AVG 6.76	5.74	5.83	5.41	5.31	5.13	Available	Available	Available	6.46	5.87	5.68	5.93	6.12	6.28	6.59	6.71	6.61	6.51	6.60	6.80	0.00%
OLMSTEAD	best data 7.40	7.10	7.20	7.20	8.10	8.00	8.30	8.30	8.80	8.50	8.30	9.00	9.00	9.10	9.20	9.10	8.80	8.80	8.80	8.50	8.20	0.00%

*Indicates problem with instrument
**Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L May 2016

CALENDAR DAY	3-May	5-May	6-May	9-May	10-May	11-May	12-May	13-May	16-May	19-May	20-May	21-May	24-May	26-May	27-May	31-May	Monthly % Exceedance
JULIAN DAY	124	126	127	130	131	132	133	134	137	140	141	144	145	147	148	152	
MONTGOMERY MP 31.7	MAX 10.30 MIN 10.10 AVG 10.20	10.40 9.70 10.00	10.10 9.80 10.00	10.50 10.00 10.20	10.90 10.20 10.40	10.40 10.20 10.30	10.50 10.30 10.40	10.90 10.20 10.50	10.60 9.80 10.20	10.70 10.70 10.50	No Data Available	10.40 10.10 10.20	10.60 10.10 10.20	10.20 9.80 9.90	9.90 9.40 9.70	9.20 8.50 8.80	0.00%
WILLOW ISLAND *** MP 161.7 Upstream	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	10.11 10.04 10.07	No Data Available	9.39 9.29 9.35	9.58 9.49 9.53	10.04 9.93 9.99	9.75 9.66 9.71	9.28 9.10 9.17	9.06 8.93 9.02	8.47 8.20 8.37	0.00%
WILLOW ISLAND *** MP 161.7 Downstream	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	10.04 10.02 10.03	No Data Available	9.59 9.56 9.57	9.72 9.68 9.70	10.23 10.17 10.20	10.07 9.99 10.02	9.65 9.61 9.64	9.50 9.43 9.46	9.02 8.98 9.00	0.00%
RACINE *** MP 237.5	MAX 10.62 MIN 10.16 AVG 10.39	10.90 10.61 10.76	10.82 10.73 10.78	10.82 10.58 10.70	5.92 5.60 5.74	5.81 5.47 5.55	5.65 5.40 5.44	5.88 5.59 5.67	6.00 5.62 5.78	5.60 5.28 5.36	5.50 5.25 5.34	No Data Available	No Data Available	6.29 5.89 6.00	6.21 5.79 5.91	5.99 5.52 5.67	0.00%
GREENUP *** MP 341.0 Upstream	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.18 6.98 7.10	7.51 7.01 7.42	7.49 7.32 7.39	7.54 7.32 7.43	0.00%
GREENUP *** MP 341.0 Downstream	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	7.54 6.55 6.81	7.18 6.56 6.96	6.67 6.53 6.61	7.87 7.70 7.79	0.00%
MEIDAHL *** MP 436.2 Upstream	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	8.77 8.75 8.76	No Data Available	8.82 8.81 8.81	8.86 8.85 8.86	8.94 8.90 8.92	8.86 8.84 8.85	8.86 8.84 8.85	8.78 8.69 8.74	8.99 8.56 8.78	0.00%
MEIDAHL *** MP 436.2 Tailrace	MAX No MIN Data AVG Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	8.77 8.75 8.76	No Data Available	9.08 8.97 9.04	9.07 8.95 9.00	9.09 9.00 9.04	8.95 8.86 8.91	8.95 8.88 8.92	8.96 8.66 8.89	9.07 8.58 8.89	0.00%
MARKLAND *** MP 531.5	DS-Egido US-Hydro 7.60	7.80 6.90	8.00 7.20	8.60 7.70	8.80 8.00	9.00 8.20	8.90 8.00	8.70 7.90	8.80 8.00	8.90 8.90	9.10 9.00	9.00 8.90	8.80 8.70	8.80 8.70	8.80 8.70	8.70 8.50	
MALPINE *** MP 606.8	MAX 7.64 MIN 6.94 AVG 7.25	6.93 6.78 6.86	6.95 6.66 6.76	7.39 7.34 7.37	7.25 5.83 6.65	7.68 6.32 7.26	7.86 6.56 7.14	7.61 5.54 6.46	8.00 7.65 7.80	8.28 7.69 8.05	8.36 8.34 8.35	8.61 8.51 8.58	8.57 8.45 8.51	8.28 8.26 8.28	No Data Available	No Data Available	0.00%
CLAMSTEAD MP 964.6	Insta Data 7.20	7.30	7.70	7.80	7.70	7.60	7.60	7.40	7.40	7.70	7.80	8.10	8.00	8.10	8.00	7.70	0.00%

* Indicates problem with instrument
*** Indicates hydrologic dam

Daily Dissolved Oxygen, mg/L June 2016

CALENDAR DAY	1-Jun	2-Jun	3-Jun	6-Jun	7-Jun	8-Jun	9-Jun	10-Jun	13-Jun	14-Jun	15-Jun	16-Jun	17-Jun	20-Jun	21-Jun	22-Jun	24-Jun	27-Jun	28-Jun	29-Jun	30-Jun	Monthly % Exceedance
MONTGOMERY MP 11.7	MAX 8.90	8.90	8.60	8.20	8.20	8.30	8.50	8.50	8.20	8.70	8.68	8.50	8.50	7.60	8.10	8.10	7.80	7.80	7.80	7.70	7.60	0.00%
	MIN 8.10	8.00	7.90	7.20	7.20	7.40	7.50	7.50	7.40	8.06	7.60	7.50	7.60	7.00	7.00	7.00	7.20	7.10	7.00	7.00	7.10	
	AVG 8.60	8.50	8.30	7.60	7.90	7.90	7.90	7.90	7.90	8.39	8.10	7.60	8.20	7.50	7.40	7.60	7.50	7.50	7.40	7.30	7.10	
WILLOW ISLAND*** MP 161.7 Upstream	MAX 8.28	10.58	10.16	10.01	9.73	9.41	8.90	8.98	7.94	8.68	9.30	9.74	9.14	9.67	9.14	9.11	6.96	8.14	7.38	6.92	8.75	0.00%
	MIN 8.15	9.81	9.82	9.11	9.41	9.00	8.82	8.42	7.77	8.06	8.36	8.71	8.40	8.74	8.33	8.32	6.71	7.77	6.55	6.58	6.90	
	AVG 8.23	10.04	9.96	9.47	9.60	9.12	8.87	8.66	7.82	8.39	8.89	9.22	8.61	8.95	8.79	8.57	6.80	7.95	6.87	6.74	7.25	
WILLOW ISLAND*** MP 161.7 Downstream	MAX 8.92	9.96	10.03	9.84	9.69	9.22	8.91	9.09	8.44	8.76	10.26	9.74	9.70	10.32	9.85	10.30	8.13	8.13	7.92	7.78	7.77	0.00%
	MIN 8.84	9.83	9.81	9.67	9.47	9.22	8.91	8.79	8.21	8.43	9.43	9.41	9.08	9.50	9.48	9.29	7.50	7.50	7.37	7.10	7.10	
	AVG 8.89	9.90	9.93	9.77	9.58	9.06	8.87	8.98	8.31	8.59	9.40	9.69	9.34	9.73	9.69	9.70	7.83	7.77	7.56	7.35	7.35	
RACINE*** MP 237.5	MAX 5.95	5.84	5.70	5.53	5.60	5.60	5.89	5.89	9.09	8.13	8.26	4.62	4.78	4.81	4.78	4.78	4.49	5.19	5.13	5.17	5.25	55.00%
	MIN 5.51	5.32	5.36	5.09	5.18	5.41	5.68	5.65	8.26	Available	Available	4.42	4.43	4.46	4.79	4.79	4.81	4.83	4.86	4.87	4.92	
	AVG 5.63	5.51	5.43	5.27	5.35	5.66	5.65	5.65	8.26	Available	Available	4.42	4.43	4.46	4.79	4.79	4.81	4.83	4.86	4.87	4.92	
IRONTON MP 253.0	MAX 7.49	7.82	8.38	8.04	7.73	7.39	7.25	7.13	8.04	9.79	10.32	9.50	7.70	8.16	8.28	8.28	7.04	5.89	5.62	5.80	6.14	0.00%
	MIN 7.20	7.35	6.74	7.49	7.49	7.10	6.96	6.82	7.13	7.58	9.02	8.02	8.68	7.66	7.08	7.08	6.89	5.00	5.42	5.78	5.94	
	AVG 7.30	7.50	7.57	7.66	7.63	7.22	7.11	6.95	7.60	8.27	9.72	8.68	7.11	7.57	7.89	7.89	7.08	5.31	5.50	5.90	6.17	
GREENPOND*** MP 341.0 Upstream	MAX 7.94	8.21	8.21	9.43	8.23	7.92	7.49	7.32	7.78	8.88	9.38	9.55	7.82	8.31	8.33	8.33	7.38	5.93	6.36	6.31	6.48	0.00%
	MIN 7.75	7.97	7.97	8.09	7.80	7.39	7.22	6.72	7.20	7.49	7.75	8.09	7.25	7.32	7.46	7.46	7.30	5.87	5.93	6.02	6.24	
	AVG 7.85	8.12	8.12	8.35	8.05	7.62	7.37	7.07	7.38	7.96	8.35	8.73	7.40	7.85	8.01	8.01	7.30	5.48	6.17	6.17	6.35	
MELDALE*** MP 436.2 Upstream	MAX 9.04	9.55	9.38	8.62	8.49	8.51	8.50	8.24	10.19	8.59	9.14	8.97	7.98	8.71	8.74	8.31	7.04	5.89	5.62	5.80	6.14	0.00%
	MIN 8.45	9.15	8.99	8.46	8.37	8.22	8.35	7.71	8.61	7.19	8.19	7.77	7.41	8.48	8.48	7.94	6.89	5.00	5.42	5.78	5.94	
	AVG 8.98	9.29	9.12	8.52	8.44	8.33	8.42	8.00	9.80	7.63	8.63	8.39	7.66	8.61	8.61	7.94	6.89	5.12	5.52	5.79	6.05	
MELDALE*** MP 436.2 Trace	MAX 9.03	9.27	9.32	8.83	9.11	9.15	9.11	9.02	8.68	8.71	8.47	8.01	8.04	8.79	8.86	8.53	7.38	5.91	5.86	6.24	6.44	0.00%
	MIN 8.94	8.91	9.06	8.50	9.09	9.06	9.06	8.40	8.50	8.64	7.72	7.73	8.41	8.31	8.22	7.23	4.89	5.68	5.94	6.13	6.13	
	AVG 9.00	9.13	9.18	8.70	9.10	9.10	9.08	8.75	8.53	8.47	8.19	7.83	7.83	8.54	8.73	8.37	7.50	5.76	6.05	6.05	6.24	
MARKLAND*** MP 531.5 US-Hydro	MAX 8.50	8.50	8.40	8.00	7.90	7.30	7.60	7.30	7.60	7.40	6.90	6.90	7.50	7.00	7.10	7.20	6.20	5.00	5.00	5.00	5.30	14.00%
	MIN 8.50	8.50	8.40	7.90	7.90	7.30	7.60	7.30	7.60	7.40	6.90	6.90	7.50	7.00	7.10	7.20	6.20	5.00	5.00	5.00	5.30	
	AVG 7.60	7.59	7.57	7.55	7.44	7.22	6.89	6.88	6.36	6.34	6.01	6.94	7.94	6.01	6.32	6.58	6.48	5.12	4.75	5.10	5.24	
NEALPOND*** MP 606.8	MAX 7.46	7.33	6.92	7.42	7.03	6.82	6.29	5.88	5.33	5.26	5.82	6.39	5.85	5.84	6.12	5.76	6.12	4.55	4.76	4.76	5.13	14.00%
	MIN 7.54	7.49	7.19	7.49	7.20	7.09	6.27	6.61	6.08	5.70	5.66	6.36	7.33	5.05	6.06	6.44	6.05	4.62	4.62	4.62	5.13	
	AVG 7.50	7.49	7.19	7.49	7.20	7.09	6.27	6.61	6.08	5.70	5.66	6.36	7.33	5.05	6.06	6.44	6.05	4.62	4.62	4.62	5.13	
Confluence*** MP 720.7	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
Confluence*** MP 720.7 Downstream	MAX 8.42	8.12	8.12	8.12	8.09	7.03	7.44	7.38	8.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	0.00%
	MIN 8.34	8.34	8.34	8.34	8.34	7.03	7.44	7.44	7.44	11.56	8.44	8.15	9.72	7.18	6.84	5.50	7.63	6.10	6.05	5.48	5.75	
	AVG 8.37	8.37	8.37	8.37	8.37	7.03	7.44	7.44	7.44	11.56												

[illegible]

Daily Dissolved Oxygen, mg/L August 2016

CALENDAR DAY	1-Aug	3-Aug	4-Aug	5-Aug	8-Aug	9-Aug	10-Aug	11-Aug	12-Aug	15-Aug	16-Aug	17-Aug	18-Aug	19-Aug	22-Aug	23-Aug	24-Aug	25-Aug	26-Aug	29-Aug	30-Aug	Monthly % Exceedance	
CLAYTON DRY	214	216	217	218	221	222	223	224	225	228	229	230	231	232	233	236	237	238	239	242	243		
MONTGOMERY NP 11.7	MAX 7.10 MIN 6.00 AVG 6.50	6.50 4.90 5.70	7.00 4.90 5.90	7.00 5.00 6.00	9.10 5.00 6.60	9.10 4.90 7.10	8.60 5.00 6.90	8.60 5.60 7.20	9.20 5.60 7.90	9.00 5.00 6.40	7.00 5.00 6.30	7.10 5.00 6.50	7.20 5.00 6.60	7.40 6.50 6.80	7.50 6.50 7.00	8.00 6.50 7.00	8.10 6.60 7.20	8.60 6.50 7.40	8.50 6.60 7.60	8.50 6.60 7.60	9.30 6.50 7.80	0.00%	
WILLOW ISLAND*** NP 161.7 Upstream	MAX 6.25 MIN 4.92 AVG 5.71	7.19 6.65 6.83	7.28 6.98 7.11	8.86 6.77 7.47	7.16 6.77 7.47	8.26 7.96 8.11	8.52 7.93 8.18	7.90 7.56 7.78	7.42 7.28 7.52	7.58 6.91 7.24	7.12 7.17 7.46	7.43 5.87 6.42	7.32 7.10 7.13	7.20 6.35 6.87	6.78 6.20 6.74	6.77 6.55 6.69	10.03 6.99 8.04	9.40 7.55 8.57	7.68 7.38 7.51	8.39 7.58 7.83	7.83 7.41 7.62	0.00%	
WILLOW ISLAND*** NP 161.7 Downstream	MAX 6.84 MIN 6.75 AVG 6.80	6.96 6.76 6.84	7.33 7.18 7.22	8.40 7.53 7.90	8.62 7.53 7.98	8.51 8.27 8.38	8.51 7.31 7.51	7.84 7.33 7.39	7.42 7.35 7.46	7.50 6.91 7.22	8.06 7.57 7.61	8.06 6.95 6.67	8.06 6.51 6.50	6.51 6.46 6.38	6.44 6.36 6.38	6.90 6.43 6.72	8.67 7.31 7.84	8.66 8.03 8.28	8.66 7.31 7.15	8.66 8.03 7.15	7.95 7.56 7.73	0.00%	
RAKINE*** NP 237.5	MAX 6.90 MIN 6.56 AVG 6.64	6.75 6.37 6.49	6.60 7.48 6.44	6.60 7.48 7.81	8.33 7.52 7.95	8.22 7.16 7.31	7.69 6.69 7.06	6.67 6.27 6.52	6.76 6.21 6.54	7.56 7.32 7.45	7.30 7.38 7.54	7.94 7.08 7.10	8.76 8.13 8.41	7.78 7.06 7.41	6.81 6.40 6.52	7.33 6.55 6.99	7.74 7.34 7.47	7.85 7.60 7.72	7.84 7.56 7.67	7.95 7.49 7.68	7.69 7.35 7.56	0.00%	
BRINTON NP 235.0	MAX 6.10 MIN 6.10 AVG 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	0.00%	
GREENBAY*** NP 341.0 UPSTREAM	MAX 5.83 MIN 5.47 AVG 5.62	6.31 5.21 5.52	5.86 5.16 5.45	6.19 4.84 5.35	5.81 4.27 5.35	5.02 4.15 5.02	5.02 4.15 5.02	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	6.14 3.50 5.19	NA
GREENBAY*** NP 341.0 Downstream	MAX 5.35 MIN 5.12 AVG 5.23	5.74 5.07 5.43	5.98 5.45 5.45	6.92 6.02 5.99	6.87 6.02 6.29	6.88 6.09 6.57	6.88 6.09 6.57	7.19 6.77 6.96	6.80 6.41 6.49	7.79 6.74 7.23	5.88 5.63 5.75	5.76 5.51 5.63	5.90 5.72 5.78	5.74 5.59 5.67	6.45 6.26 6.36	6.04 5.86 5.15	6.32 6.07 6.17	8.67 7.31 7.84	6.43 5.95 6.11	6.21 5.92 6.05	6.26 5.41 5.62	6.22 5.41 5.62	0.00%
WEDLAKE*** NP 439.2 Tributary	MAX 5.71 MIN 5.35 AVG 5.46	5.56 5.14 5.36	5.80 5.25 5.48	6.66 5.74 6.42	6.45 5.74 6.01	6.79 6.15 6.43	7.64 6.76 6.43	7.15 6.40 7.35	7.50 7.17 7.30	6.75 6.40 6.16	5.70 5.70 6.16	7.11 5.64 6.48	7.11 5.64 6.48	5.84 5.62 5.76	6.64 6.16 6.41	6.20 5.05 5.21	6.19 5.34 5.44	8.67 7.31 7.84	6.19 5.34 5.44	5.97 5.31 5.82	6.22 5.31 5.82	6.24 5.31 5.82	0.00%
MARLBAND*** NP 511.5 US-Hydro	MAX 4.29 MIN 4.08 AVG 4.25	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	4.40 4.07 4.23	19.00%
MARLBAND*** NP 606.8	MAX 5.43 MIN 4.86 AVG 5.25	5.75 5.36 5.50	5.34 4.67 4.81	4.67 4.55 4.62	6.30 5.53 5.92	6.63 6.03 6.57	6.64 6.06 6.66	8.05 6.66 7.27	8.01 6.78 7.45	8.17 6.78 7.45	8.25 7.65 7.84	8.26 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	8.35 7.54 7.84	10.00%
CANADIAN*** NP 720.7 Upstream	MAX 6.94 MIN 6.01 AVG 6.44	6.79 6.21 6.31	6.79 6.68 6.74	7.13 6.78 7.05	7.03 6.51 6.86	7.07 6.51 6.73	7.52 6.98 7.18	7.54 6.88 7.18	6.79 6.45 6.63	9.66 9.47 9.26	9.58 8.97 9.29	8.94 8.59 8.72	8.26 7.85 8.05	7.30 6.94 7.13	6.56 6.22 6.34	7.05 6.84 6.92	6.82 6.40 6.58	6.91 6.69 6.77	7.00 6.66 6.88	7.17 6.86 7.03	7.17 6.86 7.03	7.17 6.86 7.03	5.00%
CANADIAN*** NP 720.7 Downstream	MAX 7.01 MIN 5.45 AVG 6.25	6.09 5.93 5.99	6.61 6.47 6.52	7.05 6.47 6.84	6.87 6.47 6.70	7.62 7.09 7.24	7.81 7.55 7.69	8.18 7.54 7.88	7.44 7.35 7.40	11.43 10.83 11.16	11.07 10.22 10.70	10.32 9.46 9.87	9.01 8.42 8.70	7.61 7.11 7.38	8.06 7.17 7.69	7.55 7.17 7.47	7.10 7.17 7.47	7.26 7.04 7.20	7.65 7.23 7.32	7.54 7.23 7.41	7.39 7.23 7.41	7.39 7.23 7.41	0.00%
SHANAHAN*** NP 918.5 Upstream	MAX 5.94 MIN 5.55 AVG 5.77	5.61 5.37 5.46	6.10 5.66 6.00	6.97 6.46 6.56	9.91 9.44 9.00	10.11 9.44 9.88	13.59 11.50 10.90	10.82 10.09 10.49	9.31 8.64 9.03	7.57 6.88 7.21	7.32 6.55 6.86	7.03 6.25 6.51	6.38 5.03 5.65	5.58 5.47 5.52	7.05 6.17 6.58	5.99 5.81 5.81	6.41 6.28 6.28	6.81 6.66 6.74	6.89 6.18 6.47	8.19 5.81 6.54	6.70 6.37 6.54	6.70 6.37 6.54	0.00%
SHANAHAN*** NP 918.5 Downstream	MAX 6.63 MIN 5.74 AVG 6.07	5.95 5.73 5.82	6.55 6.17 6.38	7.14 6.76 7.02	9.25 8.49 8.99	10.50 10.30 10.41	12.15 9.66 10.44	10.53 9.04 9.59	9.15 8.75 8.96	7.46 7.03 7.25	7.27 6.83 7.10	6.90 6.07 6.29	5.94 4.97 5.40	5.94 4.97 5.25	6.83 6.08 6.48	6.43 5.86 6.14	6.43 5.86 6.14	6.43 5.86 6.14	6.43 5.86 6.14	6.43 5.86 6.14	6.43 5.86 6.14	6.43 5.86 6.14	0.00%
CLINSTEAD NP 964.6	MAX 6.10 MIN 6.10 AVG 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	6.10 6.10 6.10	0.00%

***Indicates problem with instrument
***Indicates hydroelectric dam

Daily Dissolved Oxygen, mg/L, September 2016

CALENDAR DAY	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	Monthly		
JULIAN DAY	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	% Exceedance		
MONTGOMERY	MAX 8.30	8.30	10.20	8.60	9.10	8.70	7.00	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	7.40	0.00%		
NP 31.7	MIN 6.50	6.40	5.60	4.90	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	5.80	0.00%		
AVG 7.40	7.40	7.40	7.70	6.90	7.90	7.60	6.30	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	7.60	0.00%		
WILLOW ISLAND***	MAX 7.58	6.57	6.64	8.04	8.40	8.40	7.85	7.49	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	7.38	0.00%		
NP 161.7	MIN 7.35	6.24	5.28	7.25	8.11	7.00	7.16	6.88	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	7.24	0.00%		
Upstream	AVG 7.40	6.52	6.07	7.70	8.19	7.34	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.32	0.00%		
WILLOW ISLAND***	MAX 7.84	7.18	6.72	7.22	8.15	8.12	7.47	7.46	7.51	7.19	7.13	6.61	6.14	6.46	6.44	6.45	6.71	6.72	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	0.00%		
NP 161.7	MIN 7.39	6.82	6.46	6.90	7.94	7.33	7.04	6.86	6.88	6.83	6.99	6.42	5.99	6.33	6.03	6.10	6.24	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	6.44	0.00%	
Downstream	AVG 7.65	7.04	6.53	7.07	8.04	7.61	7.25	7.07	7.19	7.07	7.06	6.51	6.07	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	6.37	0.00%		
ROCKY***	MAX 9.37	8.10	6.70	6.05	6.53	6.50	6.66	6.51	9.08	9.13	7.35	6.40	6.17	7.11	7.50	7.85	7.66	7.84	7.78	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	7.84	0.00%	
NP 279.5	MIN 8.42	7.57	6.42	6.25	6.24	6.34	6.28	6.23	8.52	8.64	6.85	5.97	5.04	7.18	7.19	7.37	7.57	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	7.53	0.00%	
AVG 9.03	7.81	6.47	6.33	6.33	6.31	6.42	6.44	6.35	8.76	8.33	7.24	6.17	6.12	7.40	7.27	7.55	7.48	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	0.00%	
BOSTON	MAX 6.30	6.20	8.80	8.00	7.80	7.20	10.50	10.50	8.40	7.90	7.70	6.10	6.40	6.80	6.10	6.20	8.10	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	0.00%	
NP 235.0	MIN 5.70	5.00	5.20	5.00	5.10	5.10	5.20	5.10	5.40	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	0.00%	
US-Hydro	AVG 5.70	5.00	5.20	5.00	5.10	5.10	5.20	5.10	5.40	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	0.00%	
MEADOW***	MAX 7.16	6.61	6.74	6.09	5.09	5.47	5.06	5.42	5.63	5.56	5.75	5.02	5.34	5.53	5.66	5.68	5.40	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	5.51	0.00%	
NP 346.2	MIN 6.04	6.52	6.14	5.64	5.51	5.35	5.56	5.41	5.39	5.54	5.07	5.09	5.03	5.28	5.21	5.20	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	5.28	0.00%
Upstream	AVG 7.05	6.48	6.37	5.81	5.59	5.39	5.65	5.31	5.50	5.49	5.62	5.24	5.22	5.17	5.22	5.52	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	0.00%	
MEADOW***	MAX 6.88	6.47	7.11	7.04	6.61	5.71	7.15	6.69	7.13	6.76	6.99	5.27	5.38	5.60	5.33	5.95	6.50	6.57	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	6.60	0.00%	
NP 346.2	MIN 6.77	6.19	6.57	6.52	5.55	5.55	5.68	6.03	5.34	5.50	4.08	5.15	5.00	5.11	5.48	5.35	6.18	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	5.90	0.00%	
Downstream	AVG 6.82	6.38	6.89	6.75	5.94	5.59	6.61	6.39	6.52	6.32	6.14	5.12	5.22	5.21	5.20	5.84	5.83	6.35	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31	0.00%	
MARKLAND***	MAX 6.10	6.00	5.20	5.00	5.10	5.10	5.20	5.10	5.40	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	5.20	45.00%	
NP 311.5	MIN 5.70	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	90.00%	
US-Hydro	AVG 5.70	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	90.00%	
NOALPINE***	MAX 5.95	5.95	6.43	4.66	5.51	5.39	6.19	5.94	6.61	10.53	6.77	6.96	7.07	7.11	5.76	5.78	7.03	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	6.09	10.00%
NP 066.8	MIN 5.85	5.74	5.64	4.63	5.21	5.33	5.78	5.75	5.82	6.99	5.88	6.09	6.39	6.22	4.67	5.00	6.04	5.35	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	10.00%	
AVG 5.85	5.74	5.64	4.63	5.21	5.33	5.78	5.75	5.82	6.99	5.88	6.09	6.39	6.22	4.67	5.00	6.04	5.35	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	6.49	10.00%	
CORNBUR***	MAX 6.60	6.51	6.20	6.67	7.28	6.78	5.71	5.39	5.62	5.98	5.92	8.50	5.93	5.97	6.21	6.27	5.46	8.14	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	5.88	0.00%
NP 720.7	MIN 6.53	6.34	5.93	6.36	6.04	6.56	5.54	5.88	5.44	5.78	5.44	6.89	5.66	5.51	6.02	5.74	5.27	5.02	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	5.43	0.00%	
Upstream	AVG 6.57	6.36	6.08	6.55	6.64	6.32	5.67	5.44	5.51	5.88	5.54	7.65	5.81	5.75	6.14	5.98	5.33	5.97	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	5.69	0.00%	
CORNBUR***	MAX 6.46	6.26	7.45	7.81	7.41	6.70	6.54	7.39	7.28	6.58	7.55	7.51	6.17	7.08	7.57	7.68	7.60	8.11	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	0.00%	
NP 720.7	MIN 6.16	4.90	6.57	7.03	7.33	6.47	5.65	6.87	6.50	6.21	7.40	7.26	5.90	6.69	7.43	7.61	7.53	7.52	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	8.42	0.00%	
Downstream	AVG 6.56	5.66	7.17	7.56	7.37	6.58	5.92	6.89	6.56	6.36	7.47	7.41	6.02	6.89	7.52	7.65	7.57	7.61	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	0.00%	
SHANLAND***	MAX 5.30	6.08	8.53	6.69	6.88	6.27	7.20	8.09	7.44	5.77	7.16	3.70	3.06	6.48	5.11	5.55	5.31	4.79	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	5.87	0.00%
NP 181.5	MIN 4.81	5.86	2.43	6.52	6.23	6.04	6.69	6.38	4.72	4.55	6.15	3.13	2.88	4.68	4.43	4.43	4.37	4.27	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	0.00%	
Upstream	AVG 5.04	5.99	3.57	6.60	6.54	6.21	6.86	7.23	5.89	5.26	6.65	3.42	2.97	5.34	4.83	4.86	4.72	4.27	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	5.71	0.00%	
SHANLAND***	MAX 6.35	6.76	6.45	6.82	6.87	6.37	7.65	7.94	5.65	6.74	5.58	4.53	4.85	6.08	5.42	5.34	5.62	5.65	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	5.83	0.00%	
NP 181.5	MIN 6.10	6.16	5.42	5.94	6.41	6.26	6.24	5.96	1.45	5.21	4.87	4.69	4.59	5.02	4.87	5.05	5.31	5.44	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	0.00%	
Downstream	AVG 6.19	6.46	5.95	6.35	6.68	6.30	6.51	6.88	3.99	5.21	4.87	4.69	4.59	5.02	4.87																		

Daily Dissolved Oxygen, mg/L October 2016

CALENDAR DAY	3-Oct	4-Oct	6-Oct	7-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	24-Oct	25-Oct	26-Oct	27-Oct	28-Oct	31-Oct	Monthly % Exceedance	
MONTGOMERY NP 11.7	MAX 8.50 MIN 7.60 AVG 8.00	8.10 7.10 7.60	8.70 8.00 8.30	8.70 8.20 8.50	9.10 8.40 8.80	9.00 8.50 8.70	9.20 8.50 9.00	9.50 8.60 9.00	9.40 8.70 9.00	9.40 8.50 8.90	9.30 8.50 8.90	9.40 8.40 9.00	9.40 8.70 9.00	9.20 8.50 8.60	9.80 9.40 9.60	10.10 9.70 9.90	10.70 10.30 10.20	10.60 10.10 10.50	10.40 10.10 10.20	10.90 10.50 10.70	0.00%	
WILLOW ISLAND*** NP 101.7 Upstream	MAX 7.21 MIN 7.11 AVG 7.15	7.24 7.24 7.31	7.84 7.32 7.50	7.42 7.35 7.39	7.82 7.69 7.72	7.75 7.70 7.75	7.97 7.83 7.88	8.18 7.92 8.04	8.09 7.92 8.00	8.39 8.07 8.20	8.17 7.98 8.04	8.69 8.54 8.62	8.77 8.62 8.69	9.03 8.68 8.78	9.68 9.50 9.58	9.90 9.77 9.83	9.85 9.79 9.82	10.44 10.37 10.39	10.11 9.93 10.00	10.73 10.63 10.67	0.00%	
WILLOW ISLAND*** NP 101.7 Downstream	MAX 6.61 MIN 6.47 AVG 6.52	6.75 6.71 6.73	7.53 7.22 7.36	7.51 7.28 7.38	7.75 7.68 7.72	7.78 7.65 7.72	7.97 7.86 7.88	7.94 7.84 7.90	8.07 7.84 7.98	8.17 8.20 8.29	8.16 8.11 8.14	8.50 8.31 8.43	8.49 8.35 8.42	8.67 8.53 8.58	9.73 9.48 9.61	9.97 9.88 9.94	9.92 9.88 9.90	10.17 10.09 10.12	10.46 10.40 10.43	11.43 11.38 11.41	0.00%	
BAKERS*** NP 237.5	MAX 7.79 MIN 7.26 AVG 7.41	7.79 7.28 7.48	7.79 7.35 7.48	10.12 9.35 9.47	8.12 7.88 8.01	8.42 8.05 8.17	8.52 8.14 8.31	9.99 9.14 9.37	9.50 8.70 8.95	8.51 8.24 8.38	8.34 8.06 8.18	8.25 7.98 8.07	8.31 7.97 8.05	8.18 7.81 7.94	7.74 7.31 7.45	7.87 7.32 7.57	7.85 7.32 7.50	7.64 7.26 7.43	No Data Available	No Data Available	0.00%	
IRON TON NP235.0	Iron Data	6.40	5.80	6.10	6.20	6.60	6.60	6.60	7.20	6.70	7.70	7.00	6.90	7.00	7.50	7.30	7.40	7.40	7.90	8.00	8.40	0.00%
GREENP*** NP 341.0 UPSTREAM	MAX 5.42 MIN 5.09 AVG 5.22	5.83 5.21 5.53	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	NA	
GREENP*** NP 341.0 Downstream	MAX 6.02 MIN 5.85 AVG 5.95	6.48 5.86 6.08	6.34 5.71 5.74	6.80 5.74 6.13	6.24 5.76 5.87	8.66 5.78 6.94	7.22 6.86 6.97	7.32 6.86 7.07	7.39 6.70 6.84	6.48 6.41 6.45	6.45 6.07 6.24	7.17 6.29 6.89	7.03 6.70 6.83	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	No Data Available	0.00%	
NEEDVILLE*** NP 436.2 Upstream	MAX 7.17 MIN 5.91 AVG 6.24	6.25 6.21 6.23	6.96 6.75 6.86	7.24 7.09 7.17	7.41 7.12 7.37	7.82 7.76 7.79	8.26 8.16 8.23	8.30 8.16 8.46	8.25 8.13 8.46	9.15 8.74 8.93	8.83 8.50 8.73	8.17 6.72 7.49	7.96 7.58 7.79	7.20 7.08 7.12	7.51 7.38 7.46	7.55 7.47 7.50	7.44 7.40 7.42	7.44 7.41 7.43	7.62 7.58 7.61	7.93 7.90 7.91	0.00%	
NEEDVILLE*** NP 436.2 Tailrace	MAX 7.35 MIN 5.99 AVG 6.41	6.29 6.18 6.25	6.84 6.75 6.80	7.48 7.25 7.54	7.57 7.43 7.48	7.82 7.76 7.80	8.29 8.16 8.21	8.49 8.33 8.46	8.46 8.33 8.37	8.99 8.67 8.82	8.68 8.49 8.58	8.13 6.97 7.23	7.87 7.51 7.69	7.14 7.01 7.06	7.57 7.42 7.50	7.61 7.52 7.57	7.52 7.46 7.50	7.52 7.49 7.52	7.76 7.68 7.73	8.08 8.00 8.03	0.00%	
MARKLAND*** NP 551.5	DS-Hydro C&H-Hydro	5.50 5.50	5.50 5.20	6.00 6.30	6.50 6.00	5.90 6.00	6.00 6.10	6.40 6.40	6.50 6.40	6.50 6.40	7.20 6.90	NA 7.20	6.40 7.20	6.90 7.00	7.60 7.10	7.30 7.20	7.40 7.60	7.40 7.60	7.70 7.90	8.10 8.20	0.00%	
MALPEQUE*** NP 606.8	MAX 7.50 MIN 7.27 AVG 7.37	7.28 6.56 6.88	7.01 6.62 6.82	7.02 6.63 6.84	8.36 7.89 8.24	8.28 8.13 8.19	8.28 8.06 8.20	8.34 8.06 8.22	8.27 7.57 7.97	7.98 7.63 7.78	8.08 7.50 7.88	8.12 7.11 7.54	8.37 7.71 8.14	8.43 8.12 8.31	8.86 8.57 8.74	8.91 8.70 8.77	9.15 9.03 9.06	9.20 9.07 9.13	9.24 9.07 9.18	10.14 9.68 9.95	0.00%	
Crofton*** NP 720.7 Upstream	MAX 5.87 MIN 5.80 AVG 5.85	5.86 5.77 5.85	6.04 5.77 5.87	5.97 5.77 5.83	7.01 6.94 6.94	7.34 7.11 6.79	6.92 6.82 6.78	6.84 6.82 6.83	6.83 6.82 6.83	7.50 7.13 7.13	7.29 7.07 7.21	6.94 6.59 6.79	6.92 6.66 6.77	7.67 7.45 7.58	7.65 7.45 7.56	7.52 7.40 7.40	7.63 7.59 7.61	7.76 7.65 7.71	7.89 7.62 7.64	7.99 7.62 7.64	0.00%	
Crofton*** NP 720.7 Downstream	MAX 8.81 MIN 8.56 AVG 8.72	7.92 7.76 7.82	8.83 8.86 8.77	8.96 9.02 8.91	9.92 9.60 9.81	9.92 9.54 9.89	9.75 9.25 9.58	9.38 9.44 9.48	9.94 9.79 9.88	9.70 9.65 9.50	8.94 8.87 8.92	8.71 8.61 8.66	8.76 8.67 8.71	9.05 8.72 8.92	9.76 9.46 9.59	9.27 9.16 9.24	9.31 9.16 9.15	9.21 9.09 9.15	9.26 9.17 9.23	9.59 9.45 9.52	0.00%	
Simla*** NP918.5 Upstream	MAX 5.74 MIN 5.74 AVG 5.98	6.08 6.38 5.98	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	6.08 6.38 6.08	0.00%	
Simla*** NP918.5 Downstream	MAX 6.17 MIN 5.96 AVG 6.11	6.84 6.70 6.77	7.50 7.04 7.30	7.21 7.04 7.16	7.56 7.10 7.27	7.54 7.26 7.45	7.78 7.25 7.46	7.88 7.16 7.46	8.18 7.18 8.22	7.61 7.33 7.41	7.41 7.31 7.35	7.48 7.48 7.61	7.45 7.45 7.61	7.52 7.43 7.52	7.43 7.30 7.43	9.30 8.94 9.16	8.07 7.76 7.92	7.78 7.78 7.81	7.83 7.81 7.84	7.86 7.83 7.84	10.00%	
CLASSTAD NP 94.6	Iron Data	7.20	7.10	7.40	7.60	8.60	8.60	8.60	7.80	7.70	7.70	8.20	8.20	8.30	7.80	7.10	7.20	8.00	7.50	7.30	0.00%	

***Indicates problem with instrument
***Indicates hydroelectric dam

APPENDIX E

Temperature Data

2012-2016

APPENDIX E. Temperature Data, deg F, Monthly for Days 1 through 31																																			
Year	Month	Station	Mile	Source	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2012	Jan	Montgomery	31.7	USACE	77.18																														
2012	Jan	Montgomery	31.7	USACE		77.18	73.76	73.76	72.66	72.68	73.04																								
2012	Jan	Montgomery	31.7	USACE			83.84	82.40				86.18	86.36	85.46	84.20	84.20																			
2012	Jan	Montgomery	31.7	USACE			82.76	81.68				80.60	83.30	82.58			82.94																		
2012	Jan	Montgomery	31.7	USACE					79.52	79.34																									
2012	Jan	Montgomery	31.7	USACE							69.92																								
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															
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2012	Jan	Montgomery	31.7	USACE																															
2012	Jan	Montgomery	31.7	USACE																															

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APPENDIX E. Temperature Data, deg F, Monthly for Days 1 through 31

Year	Month	Station	Mile	Source	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
2013	Aug	Canneton	720	OSASCO	80.96	81.54	81.27	81.39	83.71	81.77	81.55	82.72	82.56	82.42	82.67	83.10	82.51	81.99	81.97	80.67	80.29	80.89	83.80	81.30	81.97	81.55	82.35	82.78	83.19	83.26	83.37	83.77	84.31	84.22	84.61
2013	Aug	Canneton	720	OSASCO	84.69	84.69	84.42	84.34	84.31	84.74	83.46	83.19	84.65	84.76	84.61	83.57	82.51	82.49	81.99	81.97	80.49	81.39	81.01	80.80	81.27	80.51	79.84	78.64	78.24	81.90	81.37	81.26	81.80	81.28	80.91
2016	Jun	Canneton	720	Electric Co	70.99		70.99			72.97	73.20	73.72	74.30	74.73		78.30	78.84	78.66	78.19	79.84						79.88	80.10	82.06							
2016	Jul	Canneton	720	Electric Co	80.64			79.29	78.33	78.99	77.59	78.73	78.89	78.93		78.48	78.89	78.93		81.01	81.23	81.75	81.90	82.04			82.98	82.54	82.94	82.71	83.55	83.32	84.60	84.29	84.60
2016	Aug	Canneton	720	Electric Co	85.33		83.77	83.77	83.82		83.14	83.50	83.61	83.44	83.71		84.20	84.38	84.36	84.06						81.88	81.66	81.50	81.07	82.04	82.71	83.92	84.29	84.60	
2016	Sept	Canneton	720	Electric Co	83.98	83.84				83.43	83.21	83.80				74.32	74.52	74.07	73.99	73.77	78.01	78.22	72.72	72.95	73.11	73.51	72.59		70.63	69.75	69.51	68.65	68.22	73.63	78.53
2016	Oct	Canneton	720	Electric Co						76.96	76.39																								68.05
2016	Jun	Canneton D/S	720	Electric Co						70.68		73.15	73.54	73.89	74.64	75.00																			68.05
2016	Jul	Canneton D/S	720	Electric Co	80.98					79.32	78.40	77.54	76.96																						
2016	Aug	Canneton D/S	720	Electric Co	85.51			83.66	83.84	83.88																									
2016	Sept	Canneton D/S	720	Electric Co																															
2016	Oct	Canneton D/S	720	Electric Co																															
2016	Jun	Canneton D/S	720	Electric Co																															
2016	Jul	Canneton D/S	720	Electric Co																															
2016	Aug	Canneton D/S	720	Electric Co																															
2016	Sept	Canneton D/S	720	Electric Co																															
2016	Oct	Canneton D/S	720	Electric Co																															
2016	Jun	Canneton D/S	720	Electric Co																															
2016	Jul	Canneton D/S	720	Electric Co																															
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2016	Oct	Canneton D/S	720	Electric Co																															
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2016	Sept	Canneton D/S	720	Electric Co																															
2016	Oct	Canneton D/S	720	Electric Co																															
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2016	Jul	Canneton D/S	720	Electric Co																															
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2016	Jul	Canneton D/S	720	Electric Co																															
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2016	Aug	Canneton D/S	720	Electric Co																															
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2016	Oct	Canneton D/S	720	Electric Co																															
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2016	Sept	Canneton D/S	720	Electric Co																															
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2016	Jun	Canneton D/S	720	Electric Co																															
2016	Jul	Canneton D/S	720	Electric Co																															
2016	Aug	Canneton D/S	720	Electric Co																															
2016	Sept	Canneton D/S	720	Electric Co																															
2016	Oct	Canneton D/S	720	Electric Co																															
2016	Jun	Canneton D/S	720	Electric Co																															
2016	Jul	Canneton D/S	720	Electric Co																															
2016	Aug	Canneton D/S	720	Electric Co																															
2016	Sept	Canneton D/S	720	Electric Co																															
2016	Oct	Canneton D/S	720	Electric Co																															

APPENDIX F

**Biological (fish population and
macroinvertebrate) Data**

2011-2016

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	m ORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
0.1	Emsworth	2012	B	7.24	Very Poor	22.83	Fair
0.4	Emsworth	2012	C	33.95	Good	26.34	Fair
1.7	Emsworth	2012	A	7.16	Very Poor	32.58	Good
average pool values				26.64	Fair	41.45	Very Good
6.7	Dashields	2013	A	26.75	Fair	36.65	Good
7.1	Dashields	2013	C	9.92	Very Poor	18.80	Poor
7.3	Dashields	2013	C	35.46	Good	36.63	Good
7.6	Dashields	2013	C	36.19	Good	39.63	Good
8.6	Dashields	2013	C	32.94	Good	46.02	Very Good
8.9	Dashields	2013	B	28.71	Fair	28.88	Fair
8.9	Dashields	2013	C	46.08	Very Good	60.00	Excellent
10.0	Dashields	2013	B	24.06	Fair	10.63	Poor
10.8	Dashields	2013	C	43.09	Very Good	17.84	Poor
11.2	Dashields	2013	C	12.39	Poor	6.40	Very Poor
11.2	Dashields	2013	B	11.15	Poor	37.33	Good
11.5	Dashields	2013	D	46.20	Very Good	13.26	Poor
11.9	Dashields	2013	B	39.40	Good	39.57	Good
12.3	Dashields	2013	B	33.26	Good	34.43	Good
12.6	Dashields	2013	C	37.07	Good	6.67	Very Poor
average pool values				30.85	Good	28.85	Fair
13.4	Montgomery	2015	C	43.62	Very Good	23.13	Fair
14.1	Montgomery	2015	B	41.07	Very Good	14.48	Poor
19.2	Montgomery	2015	C	42.10	Very Good	42.72	Very Good
20.5	Montgomery	2015	C	38.82	Good	27.56	Fair
21.0	Montgomery	2015	C	32.80	Good	24.20	Fair
22.0	Montgomery	2015	B	32.66	Good	13.81	Poor
24.0	Montgomery	2015	C	31.55	Good	14.45	Poor
24.8	Montgomery	2015	D	18.61	Poor	39.35	Good
25.1	Montgomery	2015	B	43.23	Very Good	11.21	Poor
26.3	Montgomery	2015	C	26.35	Fair	15.59	Poor
27.6	Montgomery	2015	C	19.60	Poor	28.66	Fair
29.6	Montgomery	2015	D	40.87	Very Good	20.02	Fair
30.0	Montgomery	2015	B	21.73	Fair	0.00	Very Poor
30.3	Montgomery	2015	C	36.42	Good	23.95	Fair
30.8	Montgomery	2015	C	15.62	Poor	24.34	Fair
average pool values				32.34	Good	21.56	Fair
32.3	New Cumberland	2011	D	35.47	Good	-	-
33.6	New Cumberland	2011	C	42.40	Very Good	-	-
34.2	New Cumberland	2011	C	25.43	Fair	10.08	Poor
35.2	New Cumberland	2011	C	44.97	Very Good	46.63	Very Good

*Generated from MH Data

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	mORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
35.6	New Cumberland	2011	B	15.21	Poor	37.30	Good
37.2	New Cumberland	2011	D	24.48	Fair	42.98	Very Good
39.0	New Cumberland	2011	C	13.84	Poor	44.10	Very Good
41.0	New Cumberland	2011	C	26.98	Fair	36.31	Good
42.0	New Cumberland	2011	B	24.69	Fair	60.00	Excellent
42.7	New Cumberland	2011	B	18.46	Poor	42.41	Very Good
43.5	New Cumberland	2011	B	15.97	Poor	24.51	Fair
47.0	New Cumberland	2011	A	8.40	Very Poor	46.22	Very Good
49.4	New Cumberland	2011	C	20.90	Fair	28.92	Fair
52.2	New Cumberland	2011	A	13.03	Poor	44.64	Very Good
52.5	New Cumberland	2011	B	29.57	Fair	28.70	Fair
average pool values				23.99	Fair	37.91	Good
55.2	Pike Island	2012	C	43.36	Very Good	18.98	Poor
56.8	Pike Island	2012	E	35.12	Good	28.95	Fair
57.5	Pike Island	2012	C	40.34	Very Good	-	-
63.1	Pike Island	2012	D	16.29	Poor	30.11	Good
64.2	Pike Island	2012	B	44.04	Very Good	22.05	Fair
64.9	Pike Island	2012	A	28.41	Fair	34.76	Good
65.1	Pike Island	2012	C	32.70	Good	29.96	Fair
66.8	Pike Island	2012	C	25.16	Fair	28.46	Fair
70.0	Pike Island	2012	B	37.31	Good	29.07	Fair
71.4	Pike Island	2012	C	45.54	Very Good	16.95	Poor
72.1	Pike Island	2012	C	31.43	Good	22.00	Fair
75.2	Pike Island	2012	A	13.37	Poor	36.23	Good
75.4	Pike Island	2012	C	31.54	Good	23.27	Fair
80.2	Pike Island	2012	C	17.52	Poor	29.24	Fair
83.7	Pike Island	2012	D	34.15	Good	42.13	Very Good
average pool values				31.75	Good	28.01	Fair
84.9	Hannibal	2013	C	42.23	Very Good	13.24	Poor
86.7	Hannibal	2013	C	42.88	Very Good	48.72	Very Good
88.6	Hannibal	2013	C	43.76	Very Good	29.33	Fair
94.3	Hannibal	2013	C	44.26	Very Good	24.33	Fair
96.5	Hannibal	2013	C	42.92	Very Good	34.44	Good
99.5	Hannibal	2013	B	26.74	Fair	39.50	Good
103.2	Hannibal	2013	C	18.58	Poor	26.36	Fair
105.3	Hannibal	2013	B	25.24	Fair	38.99	Good
107.7	Hannibal	2013	C	17.99	Poor	42.21	Very Good
109.7	Hannibal	2013	C	26.96	Fair	59.12	Excellent
111.1	Hannibal	2013	B	44.80	Very Good	25.17	Fair
111.9	Hannibal	2013	B	37.11	Good	60.00	Excellent

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	mORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
116.5	Hannibal	2013	D	40.42	Very Good	44.14	Very Good
118.6	Hannibal	2013	C	22.35	Fair	43.07	Very Good
122.2	Hannibal	2013	E	35.42	Good	48.83	Very Good
average pool values				34.11	Good	38.50	Good
126.9	Willow Island	2016	B	45.61	Very Good	15.27	Poor
128.8	Willow Island	2016	D	38.44	Good	19.69	Poor
131.8	Willow Island	2016	C	37.27	Good	46.16	Very Good
133.3	Willow Island	2016	C	43.95	Very Good	28.22	Fair
133.8	Willow Island	2016	D	35.40	Good	25.41	Fair
140.0	Willow Island	2016	C	28.30	Fair	28.92	Fair
140.3	Willow Island	2016	D	41.76	Very Good	41.34	Very Good
141.9	Willow Island	2016	D	18.84	Poor	51.27	Excellent
147.8	Willow Island	2016	C	27.25	Fair	37.84	Good
150.1	Willow Island	2016	D	33.56	Good	26.52	Fair
156.2	Willow Island	2016	C	29.32	Fair	16.08	Poor
156.5	Willow Island	2016	D	35.23	Good	18.48	Poor
157.0	Willow Island	2016	C	42.56	Very Good	24.91	Fair
157.8	Willow Island	2016	D	46.40	Very Good	28.92	Fair
160.9	Willow Island	2016	B	32.91	Good	13.86	Poor
average pool values				35.79	Good	28.19	Fair
170.1	Belleville	2014	C	33.26	Good	58.63	Excellent
172.1	Belleville	2014	C	34.71	Good	40.99	Very Good
173.8	Belleville	2014	D	28.70	Fair	-	-
175.5	Belleville	2014	C	36.29	Good	38.66	Good
176.6	Belleville	2014	B	10.85	Poor	27.09	Fair
180.3	Belleville	2014	C	29.56	Fair	36.66	Good
181.3	Belleville	2014	D	20.13	Fair	19.75	Poor
184.5	Belleville	2014	D	34.65	Good	43.85	Very Good
190.6	Belleville	2014	C	15.06	Poor	46.99	Very Good
192.1	Belleville	2014	D	25.44	Fair	18.76	Poor
192.1	Belleville	2014	B	37.68	Good	20.87	Fair
197.9	Belleville	2014	D	0.00	Very Poor	43.35	Very Good
199.5	Belleville	2014	D	24.58	Fair	27.97	Fair
199.7	Belleville	2014	A	13.54	Poor	24.64	Fair
199.9	Belleville	2014	E	22.55	Fair	40.88	Very Good
average pool values				24.47	Fair	34.94	Good
204.8	Racine	2015	C	47.73	Very Good	41.04	Very Good
205.5	Racine	2015	C	31.02	Good	38.06	Good
208.0	Racine	2015	D	34.93	Good	12.44	Poor
208.4	Racine	2015	C	31.09	Good	17.36	Poor

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	mORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
209.6	Racine	2015	C	38.04	Good	31.27	Good
210.0	Racine	2015	B	38.59	Good	-	-
211.5	Racine	2015	B	26.54	Fair	12.20	Poor
213.9	Racine	2015	C	33.65	Good	18.17	Poor
214.7	Racine	2015	E	16.12	Poor	28.86	Fair
217.4	Racine	2015	D	32.57	Good	12.53	Poor
221.0	Racine	2015	D	20.09	Fair	-	-
222.1	Racine	2015	D	35.95	Good	32.05	Good
223.1	Racine	2015	E	21.58	Fair	20.65	Fair
232.4	Racine	2015	D	35.61	Good	26.33	Fair
236.0	Racine	2015	B	19.67	Poor	23.61	Fair
average pool values				30.88	Good	24.20	Fair
238.7	RC Byrd	2013	C	42.82	Very Good	54.85	Excellent
239.2	RC Byrd	2013	C	30.81	Good	-	-
240.8	RC Byrd	2013	B	24.10	Fair	48.89	Very Good
249.7	RC Byrd	2013	D	18.14	Poor	27.34	Fair
252.5	RC Byrd	2013	C	49.26	Very Good	42.73	Very Good
253.0	RC Byrd	2013	C	41.72	Very Good	24.97	Fair
258.0	RC Byrd	2013	E	27.55	Fair	23.59	Fair
260.9	RC Byrd	2013	C	44.76	Very Good	25.95	Fair
261.3	RC Byrd	2013	D	45.52	Very Good	60.00	Excellent
263.9	RC Byrd	2013	D	46.04	Very Good	35.66	Good
268.6	RC Byrd	2013	E	27.04	Fair	29.80	Fair
270.3	RC Byrd	2013	D	19.38	Poor	60.00	Excellent
270.9	RC Byrd	2013	D	10.47	Poor	60.00	Excellent
278.0	RC Byrd	2013	E	14.96	Poor	45.95	Very Good
278.1	RC Byrd	2013	C	19.49	Poor	38.52	Good
average pool values				30.80	Good	41.30	Very Good
280.8	Greenup	2016	C	49.59	Very Good	31.80	Good
280.9	Greenup	2016	C	54.20	Excellent	19.10	Poor
281.8	Greenup	2016	C	45.91	Very Good	28.86	Fair
284.9	Greenup	2016	C	40.52	Very Good	33.59	Good
300.6	Greenup	2016	C	47.30	Very Good	21.40	Fair
301.4	Greenup	2016	B	49.15	Very Good	17.05	Poor
303.3	Greenup	2016	C	38.97	Good	24.07	Fair
305.3	Greenup	2016	D	47.83	Very Good	22.14	Fair
321.3	Greenup	2016	C	37.43	Good	21.56	Fair
324.6	Greenup	2016	C	42.06	Very Good	26.45	Fair
334.6	Greenup	2016	D	44.73	Very Good	17.45	Poor

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	mORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
335.5	Greenup	2016	E	38.42	Good	17.43	Poor
339.7	Greenup	2016	E	49.73	Very Good	20.46	Fair
340.1	Greenup	2016	E	40.17	Very Good	24.36*	Fair
340.4	Greenup	2016	E	42.22	Very Good	17.85	Poor
average pool values				44.55	Very Good	22.90	Fair
344.6	Meldahl	2012	A	60.00	Excellent	24.24	Fair
348.0	Meldahl	2012	C	43.63	Very Good	36.05	Good
360.8	Meldahl	2012	E	45.53	Very Good	49.21	Very Good
374.2	Meldahl	2012	D	21.96	Fair	43.18	Very Good
374.8	Meldahl	2012	C	43.61	Very Good	-	-
376.3	Meldahl	2012	E	38.42	Good	41.58	Very Good
387.3	Meldahl	2012	E	35.72	Good	45.76	Very Good
392.7	Meldahl	2012	D	26.20	Fair	35.52	Good
394.9	Meldahl	2012	D	41.74	Very Good	23.78	Fair
395.1	Meldahl	2012	E	48.83	Very Good	34.25	Good
402.6	Meldahl	2012	E	60.00	Excellent	16.28	Poor
405.3	Meldahl	2012	C	18.84	Poor	23.65	Fair
431.5	Meldahl	2012	D	33.41	Good	17.28	Poor
433.0	Meldahl	2012	E	37.93	Good	18.50	Poor
434.7	Meldahl	2012	C	42.57	Very Good	10.53	Poor
average pool values				39.89	Good	29.99	Fair
451.8	Markland	2014	C	44.84	Very Good	-	-
459.2	Markland	2014	D	41.39	Very Good	37.09	Good
460.3	Markland	2014	B	31.43	Good	20.49	Fair
465.3	Markland	2014	C	44.63	Very Good	-	-
466.2	Markland	2014	D	42.26	Very Good	38.33	Good
466.5	Markland	2014	B	46.04	Very Good	20.40	Fair
474.6	Markland	2014	B	54.65	Excellent	25.52	Fair
485.9	Markland	2014	D	28.12	Fair	51.84	Excellent
498.6	Markland	2014	E	33.88	Good	25.81	Fair
510.1	Markland	2014	D	20.39	Fair	12.30	Poor
512.6	Markland	2014	D	36.02	Good	16.77	Poor
513.9	Markland	2014	D	42.05	Very Good	19.88	Poor
520.8	Markland	2014	B	43.23	Very Good	24.25	Fair
524.3	Markland	2014	D	17.89	Poor	36.44	Good
530.5	Markland	2014	D	38.87	Good	19.19	Poor
average pool values				37.71	Good	26.79	Fair
549.9	McAlpine	2014	D	34.86	Good	30.43	Good
561.1	McAlpine	2014	A	52.66	Excellent	24.23	Fair
562.2	McAlpine	2014	D	47.36	Very Good	25.14	Fair

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	mORFIn Score	mORFIn Biological Condition	ORMIn Score	ORMIn Biological Condition
567.6	McAlpine	2014	C	44.74	Very Good	18.91	Poor
568.3	McAlpine	2014	C	48.07	Very Good	36.16	Good
569.1	McAlpine	2014	D	57.30	Excellent	46.17	Very Good
570.1	McAlpine	2014	D	52.67	Excellent	48.83	Very Good
572.1	McAlpine	2014	C	46.41	Very Good	25.78	Fair
572.8	McAlpine	2014	D	27.80	Fair	27.64	Fair
577.9	McAlpine	2014	C	42.95	Very Good	39.86	Good
587.4	McAlpine	2014	C	34.12	Good	19.74	Poor
591.4	McAlpine	2014	C	50.69	Excellent	30.23	Good
591.8	McAlpine	2014	C	46.03	Very Good	-	-
596.2	McAlpine	2014	D	32.67	Good	36.15	Good
597.5	McAlpine	2014	D	40.92	Very Good	-	-
average pool values				43.95	Very Good	31.48	Good
607.9	Cannelton	2016	C	24.44	Fair	-	-
616.6	Cannelton	2016	E	29.13	Fair	21.95	Fair
619.8	Cannelton	2016	C	45.68	Very Good	-	-
620.5	Cannelton	2016	E	38.17	Good	16.36	Poor
623.6	Cannelton	2016	D	51.32	Excellent	-	-
626.3	Cannelton	2016	C	46.58	Very Good	-	-
630.1	Cannelton	2016	D	40.19	Very Good	-	-
633.3	Cannelton	2016	C	34.89	Good	35.33	Good
652.1	Cannelton	2016	C	41.57	Very Good	16.83	Poor
667.3	Cannelton	2016	C	46.77	Very Good	28.62*	Fair
680.5	Cannelton	2016	D	34.21	Good	17.72	Poor
702.8	Cannelton	2016	E	60.00	Excellent	20.62	Fair
714.1	Cannelton	2016	C	43.55	Very Good	18.39	Poor
718.1	Cannelton	2016	E	46.33	Very Good	14.55	Poor
719.4	Cannelton	2016	C	44.29	Very Good	14.89	Poor
average pool values				41.81	Very Good	20.53	Fair
722.4	Newburgh	2012	D	59.08	Excellent	23.04	Fair
723.4	Newburgh	2012	E	43.00	Very Good	-	-
730.6	Newburgh	2012	B	42.64	Very Good	-	-
734.4	Newburgh	2012	D	40.01	Very Good	27.34	Fair
737.5	Newburgh	2012	D	49.66	Very Good	42.08	Very Good
741.3	Newburgh	2012	D	60.00	Excellent	24.92	Fair
742.6	Newburgh	2012	D	38.39	Good	40.10	Very Good
745.5	Newburgh	2012	D	52.47	Excellent	26.84	Fair
746.4	Newburgh	2012	D	46.89	Very Good	40.46	Very Good
754.4	Newburgh	2012	C	40.08	Very Good	26.43	Fair
768.1	Newburgh	2012	E	42.23	Very Good	27.96	Fair

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	m ORFln Score	mORFln Biological Condition	ORMIn Score	ORMIn Biological Condition
769.5	Newburgh	2012	D	49.48	Very Good	21.02	Fair
772.1	Newburgh	2012	D	42.95	Very Good	24.90	Fair
772.4	Newburgh	2012	D	23.99	Fair	18.36	Poor
774.6	Newburgh	2012	D	58.59	Excellent	7.22	Very Poor
average pool values				45.96	Very Good	26.97	Fair
779.4	JT Myers	2015	C	24.10	Fair	26.22	Fair
789.8	JT Myers	2015	C	44.21	Very Good	44.94	Very Good
790.4	JT Myers	2015	D	50.87	Excellent	43.76	Very Good
800.2	JT Myers	2015	D	22.02	Fair	-	-
800.6	JT Myers	2015	C	45.04	Very Good	40.60	Very Good
808.0	JT Myers	2015	D	45.60	Very Good	33.21	Good
808.7	JT Myers	2015	D	33.85	Good	41.64	Very Good
813.9	JT Myers	2015	D	31.88	Good	39.43	Good
815.6	JT Myers	2015	D	36.49	Good	48.91	Very Good
830.5	JT Myers	2015	D	41.94	Very Good	-	-
831.6	JT Myers	2015	C	59.78	Excellent	27.55	Fair
831.9	JT Myers	2015	E	41.13	Very Good	40.30	Very Good
832.8	JT Myers	2015	C	45.92	Very Good	35.12	Good
836.1	JT Myers	2015	D	10.90	Poor	43.29	Very Good
845.2	JT Myers	2015	D	37.61	Good	36.66	Good
average pool values				38.09	Good	38.59	Good
846.8	Smithland	2013	E	34.91	Good	12.15	Poor
847.1	Smithland	2013	D	24.09	Fair	6.20	Very Poor
863.0	Smithland	2013	E	0.00	Very Poor	60.00	Excellent
866.9	Smithland	2013	D	29.23	Fair	-	-
878.1	Smithland	2013	D	28.91	Fair	42.09	Very Good
878.4	Smithland	2013	D	17.81	Poor	47.92	Very Good
882.2	Smithland	2013	E	33.03	Good	60.00	Excellent
883.3	Smithland	2013	E	30.53	Good	55.25	Excellent
893.7	Smithland	2013	D	41.40	Very Good	41.30	Very Good
895.9	Smithland	2013	D	39.86	Good	60.00	Excellent
909.9	Smithland	2013	D	40.53	Very Good	60.00	Excellent
912.9	Smithland	2013	E	36.05	Good	53.83	Excellent
913.5	Smithland	2013	D	30.79	Good	45.84	Very Good
914.0	Smithland	2013	E	37.23	Good	11.91	Poor
917.7	Smithland	2013	B	43.81	Very Good	22.70	Fair
average pool values				31.21	Good	41.37	Very Good
923.3	Olmsted	2014	D	40.69	Very Good	43.41	Very Good
924.4	Olmsted	2014	D	50.70	Excellent	33.12	Good
925.4	Olmsted	2014	D	17.51	Poor	46.89	Very Good

Appendix F. Biological Pool Results							
Mile Point	Pool	Year	Habitat Type	<i>m</i> ORFI _n Score	<i>m</i> ORFI _n Biological Condition	ORMI _n Score	ORMI _n Biological Condition
927.2	Olmsted	2014	D	20.96	Fair	42.74	Very Good
932.0	Olmsted	2014	D	37.24	Good	41.44	Very Good
932.8	Olmsted	2014	C	55.61	Excellent	26.08	Fair
933.2	Olmsted	2014	D	47.20	Very Good	3.58	Very Poor
940.1	Olmsted	2014	C	46.68	Very Good	-	-
942.5	Olmsted	2014	D	23.94	Fair	32.61	Good
944.5	Olmsted	2014	D	31.31	Good	45.74	Very Good
945.8	Olmsted	2014	C	39.98	Good	39.45	Good
948.0	Olmsted	2014	D	30.53	Good	39.64	Good
954.6	Olmsted	2014	D	39.26	Good	20.64	Fair
955.5	Olmsted	2014	D	38.15	Good	-	-
961.2	Olmsted	2014	D	35.85	Good	22.16	Fair
average pool values				37.04	Good	33.65	Good
966.9	Open Water	2014	D	18.96	Poor	-	-
968.7	Open Water	2014	C	19.81	Poor	-	-
974.0	Open Water	2014	D	30.39	Good	-	-
976.9	Open Water	2014	E	0.00	Very Poor	-	-
980.4	Open Water	2014	D	9.56	Very Poor	-	-
980.8	Open Water	2014	D	5.25	Very Poor	-	-

APPENDIX G
Bacteria Data
2012-2016

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
1.4M	Pittsburgh	01-May-12		157	64
1.4M	Pittsburgh	22-May-12		206	97
1.4M	Pittsburgh	24-May-12		153	97
1.4M	Pittsburgh	29-May-12		1,100	330
1.4M	Pittsburgh	31-May-12		1,500	800
			Geometric Mean	382	174
4.3	Pittsburgh	01-May-12		80	60
4.3	Pittsburgh	22-May-12		97	57
4.3	Pittsburgh	24-May-12		122	63
4.3	Pittsburgh	29-May-12		900	360
4.3	Pittsburgh	31-May-12		1,500	600
			Geometric Mean	264	136
1.4M	Pittsburgh	05-Jun-12		670	170
1.4M	Pittsburgh	12-Jun-12		630	170
1.4M	Pittsburgh	19-Jun-12		590	340
1.4M	Pittsburgh	21-Jun-12		80	70
1.4M	Pittsburgh	26-Jun-12		96	40
			Geometric Mean	286	122
4.3	Pittsburgh	05-Jun-12		420	170
4.3	Pittsburgh	12-Jun-12		1,045	460
4.3	Pittsburgh	19-Jun-12		550	190
4.3	Pittsburgh	21-Jun-12		100	70
4.3	Pittsburgh	26-Jun-12		300	160
			Geometric Mean	373	175
1.4M	Pittsburgh	03-Jul-12		160	60
1.4M	Pittsburgh	10-Jul-12		350	170
1.4M	Pittsburgh	17-Jul-12		340	150
1.4M	Pittsburgh	24-Jul-12		530	120
1.4M	Pittsburgh	31-Jul-12		470	180
			Geometric Mean	343	127
4.3	Pittsburgh	03-Jul-12		124	51
4.3	Pittsburgh	17-Jul-12		310	60
4.3	Pittsburgh	19-Jul-12		2,600	1,700
4.3	Pittsburgh	24-Jul-12		420	210
4.3	Pittsburgh	31-Jul-12		580	230
			Geometric Mean	476	191
1.4M	Pittsburgh	07-Aug-12		4,500	3,500
1.4M	Pittsburgh	14-Aug-12		490	160
1.4M	Pittsburgh	21-Aug-12		240	150
1.4M	Pittsburgh	23-Aug-12		280	120
1.4M	Pittsburgh	28-Aug-12		250	280
			Geometric Mean	517	309
4.3	Pittsburgh	07-Aug-12		6,700	2,500
4.3	Pittsburgh	14-Aug-12		530	180
4.3	Pittsburgh	21-Aug-12		1,100	350
4.3	Pittsburgh	23-Aug-12		7,300	4,800
4.3	Pittsburgh	28-Aug-12		1,800	230
			Geometric Mean	2198	705
1.4M	Pittsburgh	04-Sep-12		510	220
1.4M	Pittsburgh	11-Sep-12		470	130
1.4M	Pittsburgh	20-Sep-12		2,100	1,100
1.4M	Pittsburgh	25-Sep-12		236	100
1.4M	Pittsburgh	27-Sep-12		6,300	2,800
			Geometric Mean	944	388
4.3	Pittsburgh	04-Sep-12		830	320
4.3	Pittsburgh	11-Sep-12		150	450
4.3	Pittsburgh	20-Sep-12		4,300	1,700
4.3	Pittsburgh	25-Sep-12		269	84
4.3	Pittsburgh	27-Sep-12		8,300	3,600
			Geometric Mean	1036	594

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
1.4M	Pittsburgh	02-Oct-12		1,000	250
1.4M	Pittsburgh	09-Oct-12		420	160
1.4M	Pittsburgh	16-Oct-12		360	143
1.4M	Pittsburgh	23-Oct-12		380	160
4.3	Pittsburgh	02-Oct-12		1,200	270
4.3	Pittsburgh	09-Oct-12		1,100	310
4.3	Pittsburgh	16-Oct-12		247	47
4.3	Pittsburgh	23-Oct-12		380	120
86.8	Wheeling	01-May-12		4	4
86.8	Wheeling	08-May-12		100	24
86.8	Wheeling	15-May-12		30	24
86.8	Wheeling	22-May-12		80	12
86.8	Wheeling	29-May-12		52	4
			Geometric Mean	35	10
92.8	Wheeling	01-May-12		900	718
92.8	Wheeling	08-May-12		6,000	6,000
92.8	Wheeling	15-May-12		260	60
92.8	Wheeling	22-May-12		104	24
92.8	Wheeling	29-May-12		96	40
			Geometric Mean	426	190
86.8	Wheeling	05-Jun-12		110	40
86.8	Wheeling	12-Jun-12		4	4
86.8	Wheeling	19-Jun-12		36	8
86.8	Wheeling	21-Jun-12		8	20
86.8	Wheeling	26-Jun-12		60	12
			Geometric Mean	24	13
92.8	Wheeling	05-Jun-12		140	180
92.8	Wheeling	12-Jun-12		410	136
92.8	Wheeling	19-Jun-12		2,700	1,100
92.8	Wheeling	21-Jun-12		72	44
92.8	Wheeling	26-Jun-12		16	4
			Geometric Mean	178	86
86.8	Wheeling	02-Jul-12		52	16
86.8	Wheeling	10-Jul-12		4	16
86.8	Wheeling	17-Jul-12		12	12
86.8	Wheeling	24-Jul-12		56	4
86.8	Wheeling	31-Jul-12		30	16
			Geometric Mean	21	11
92.8	Wheeling	02-Jul-12		300	28
92.8	Wheeling	10-Jul-12		320	266
92.8	Wheeling	17-Jul-12		280	44
92.8	Wheeling	24-Jul-12		130	48
92.8	Wheeling	31-Jul-12		1,000	250
			Geometric Mean	323	83
86.8	Wheeling	07-Aug-12		330	32
86.8	Wheeling	14-Aug-12		4	10
86.8	Wheeling	21-Aug-12		72	4
86.8	Wheeling	23-Aug-12		40	4
86.8	Wheeling	28-Aug-12		84	4
			Geometric Mean	50	7
92.8	Wheeling	07-Aug-12		300	40
92.8	Wheeling	14-Aug-12		168	44
92.8	Wheeling	21-Aug-12		240	8
92.8	Wheeling	23-Aug-12		800	600
92.8	Wheeling	28-Aug-12		11,400	4,900
			Geometric Mean	643	133

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
86.8	Wheeling	04-Sep-12		16	4
86.8	Wheeling	11-Sep-12		12	10
86.8	Wheeling	18-Sep-12		32	71
86.8	Wheeling	20-Sep-12		16	8
86.8	Wheeling	25-Sep-12		8	4
			Geometric Mean	15	10
92.8	Wheeling	04-Sep-12		108	36
92.8	Wheeling	11-Sep-12		54	34
92.8	Wheeling	18-Sep-12		1,800	300
92.8	Wheeling	20-Sep-12		1,700	164
92.8	Wheeling	25-Sep-12		200	32
			Geometric Mean	324	72
86.8	Wheeling	02-Oct-12		36	12
86.8	Wheeling	09-Oct-12		8	8
86.8	Wheeling	16-Oct-12		20	4
86.8	Wheeling	23-Oct-12		16	16
86.8	Wheeling	30-Oct-12		490	340
			Geometric Mean	34	18
92.8	Wheeling	02-Oct-12		197	56
92.8	Wheeling	09-Oct-12		390	148
92.8	Wheeling	16-Oct-12		12	20
92.8	Wheeling	23-Oct-12		40	16
92.8	Wheeling	30-Oct-12		540	320
			Geometric Mean	115	61
305.1	Huntington	01-May-12		56	36
305.1	Huntington	08-May-12		217	206
305.1	Huntington	15-May-12		24	20
305.1	Huntington	22-May-12		91	74
305.1	Huntington	29-May-12		8	8
			Geometric Mean	46	39
314.8	Huntington	01-May-12		226	106
314.8	Huntington	08-May-12		1,800	918
314.8	Huntington	15-May-12		370	209
314.8	Huntington	22-May-12		131	111
314.8	Huntington	29-May-12		114	20
			Geometric Mean	295	135
305.1	Huntington	05-Jun-12		12	4
305.1	Huntington	12-Jun-12		4	4
305.1	Huntington	19-Jun-12		36	4
305.1	Huntington	21-Jun-12		28	8
305.1	Huntington	26-Jun-12		20	37
			Geometric Mean	16	7
314.8	Huntington	05-Jun-12		60	16
314.8	Huntington	12-Jun-12		520	600
314.8	Huntington	19-Jun-12		220	131
314.8	Huntington	21-Jun-12		80	20
314.8	Huntington	26-Jun-12		172	124
			Geometric Mean	157	79
305.1	Huntington	03-Jul-12		4	4
305.1	Huntington	10-Jul-12		20	16
305.1	Huntington	17-Jul-12		4	4
305.1	Huntington	24-Jul-12		32	12
305.1	Huntington	31-Jul-12		51	16
			Geometric Mean	14	9

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
314.8	Huntington	03-Jul-12		1,009	214
314.8	Huntington	10-Jul-12		283	160
314.8	Huntington	17-Jul-12		36	4
314.8	Huntington	24-Jul-12		32	8
314.8	Huntington	31-Jul-12		137	71
			Geometric Mean	135	38
305.1	Huntington	07-Aug-12		8	4
305.1	Huntington	14-Aug-12		4	4
305.1	Huntington	21-Aug-12		4	4
305.1	Huntington	23-Aug-12		20	4
305.1	Huntington	28-Aug-12		4	4
			Geometric Mean	6	4
314.8	Huntington	07-Aug-12		74	28
314.8	Huntington	14-Aug-12		577	477
314.8	Huntington	21-Aug-12		8	4
314.8	Huntington	23-Aug-12		109	24
314.8	Huntington	28-Aug-12		28	4
			Geometric Mean	64	22
305.1	Huntington	04-Sep-12		32	20
305.1	Huntington	11-Sep-12		4	4
305.1	Huntington	18-Sep-12		169	57
305.1	Huntington	20-Sep-12		43	24
305.1	Huntington	25-Sep-12		4	4
			Geometric Mean	21	13
314.8	Huntington	04-Sep-12		430	197
314.8	Huntington	11-Sep-12		12	4
314.8	Huntington	18-Sep-12		520	209
314.8	Huntington	20-Sep-12		94	40
314.8	Huntington	25-Sep-12		16	4
			Geometric Mean	83	30
305.1	Huntington	02-Oct-12		12	4
305.1	Huntington	09-Oct-12		4	4
305.1	Huntington	16-Oct-12		4	4
305.1	Huntington	23-Oct-12		4	4
305.1	Huntington	30-Oct-12		80	20
			Geometric Mean	9	6
314.8	Huntington	02-Oct-12		370	211
314.8	Huntington	09-Oct-12		8	4
314.8	Huntington	16-Oct-12		510	249
314.8	Huntington	23-Oct-12		20	4
314.8	Huntington	30-Oct-12		630	94
			Geometric Mean	114	38

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
462.6	Cincinnati	07-Aug-12		745	636
462.6	Cincinnati	14-Aug-12		12	16
462.6	Cincinnati	21-Aug-12		8	8
462.6	Cincinnati	23-Aug-12		4	4
462.6	Cincinnati	28-Aug-12		180	180
			Geometric Mean	35	36
470	Cincinnati	07-Aug-12		24	12
470	Cincinnati	14-Aug-12		4	28
470	Cincinnati	21-Aug-12		4	4
470	Cincinnati	23-Aug-12		4	4
470	Cincinnati	28-Aug-12		120	71
			Geometric Mean	11	13
477.5	Cincinnati	07-Aug-12		16	28
477.5	Cincinnati	14-Aug-12		16	12
477.5	Cincinnati	21-Aug-12		16	8
477.5	Cincinnati	23-Aug-12		4	8
477.5	Cincinnati	28-Aug-12		80	84
			Geometric Mean	17	18
462.6	Cincinnati	04-Sep-12		166	168
462.6	Cincinnati	11-Sep-12		20	20
462.6	Cincinnati	18-Sep-12		12	4
462.6	Cincinnati	20-Sep-12		16	16
462.6	Cincinnati	25-Sep-12		4	8
			Geometric Mean	19	18
470	Cincinnati	04-Sep-12		3,300	873
470	Cincinnati	11-Sep-12		63	52
470	Cincinnati	18-Sep-12		12	12
470	Cincinnati	20-Sep-12		4	4
470	Cincinnati	25-Sep-12		8	16
			Geometric Mean	38	32
477.5	Cincinnati	04-Sep-12		8,100	4,100
477.5	Cincinnati	11-Sep-12		172	96
477.5	Cincinnati	18-Sep-12		60	20
477.5	Cincinnati	20-Sep-12		24	12
477.5	Cincinnati	25-Sep-12		112	31
			Geometric Mean	186	78
462.6	Cincinnati	02-Oct-12		152	100
462.6	Cincinnati	09-Oct-12		4	4
462.6	Cincinnati	16-Oct-12		8	8
462.6	Cincinnati	23-Oct-12		8	20
462.6	Cincinnati	29-Oct-12		4	4
			Geometric Mean	11	12
470	Cincinnati	02-Oct-12		4,300	3,400
470	Cincinnati	09-Oct-12		36	16
470	Cincinnati	16-Oct-12		360	243
470	Cincinnati	23-Oct-12		4	4
470	Cincinnati	29-Oct-12		24	12
			Geometric Mean	88	58
477.5	Cincinnati	02-Oct-12		13,800	9,800
477.5	Cincinnati	09-Oct-12		12	4
477.5	Cincinnati	16-Oct-12		330	360
477.5	Cincinnati	23-Oct-12		32	8
477.5	Cincinnati	29-Oct-12		157	112
			Geometric Mean	194	105

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
594	Louisville	01-May-12		24	24
594	Louisville	08-May-12		240	330
594	Louisville	15-May-12		230	310
594	Louisville	22-May-12		17	24
594	Louisville	30-May-12		16	3,300
			Geometric Mean	51	181
619.3	Louisville	01-May-12		240	220
619.3	Louisville	08-May-12		340	250
619.3	Louisville	15-May-12		150	130
619.3	Louisville	22-May-12		28	32
619.3	Louisville	30-May-12		20	3,100
			Geometric Mean	93	235
594	Louisville	05-Jun-12		68	24
594	Louisville	12-Jun-12		16	10
594	Louisville	20-Jun-12		310	260
594	Louisville	26-Jun-12		92	4
594	Louisville	28-Jun-12		4	4
			Geometric Mean	42	16
619.3	Louisville	05-Jun-12		84	77
619.3	Louisville	12-Jun-12		1,000	600
619.3	Louisville	20-Jun-12		390	380
619.3	Louisville	26-Jun-12		80	24
619.3	Louisville	28-Jun-12		4	4
			Geometric Mean	101	70
594	Louisville	02-Jul-12		20	20
594	Louisville	10-Jul-12		24	12
594	Louisville	12-Jul-12		48	24
594	Louisville	17-Jul-12		20	20
594	Louisville	19-Jul-12		40	12
			Geometric Mean	28	17
619.3	Louisville	02-Jul-12		1,400	900
619.3	Louisville	10-Jul-12		16	24
619.3	Louisville	12-Jul-12		150	170
619.3	Louisville	17-Jul-12		450	128
619.3	Louisville	19-Jul-12		13,000	1,600
			Geometric Mean	456	237
594	Louisville	07-Aug-12		196	4
594	Louisville	14-Aug-12		4	4
594	Louisville	21-Aug-12		80	30
594	Louisville	23-Aug-12		60	10
594	Louisville	28-Aug-12		32	4
			Geometric Mean	41	7
619.3	Louisville	07-Aug-12		28	16
619.3	Louisville	14-Aug-12		80	20
619.3	Louisville	21-Aug-12		48	20
619.3	Louisville	23-Aug-12		56	28
619.3	Louisville	28-Aug-12		152	120
			Geometric Mean	62	29
594	Louisville	05-Sep-12		12	4
594	Louisville	11-Sep-12		4	4
594	Louisville	19-Sep-12		52	16
594	Louisville	25-Sep-12		4	4
594	Louisville	27-Sep-12		160	104
			Geometric Mean	17	10

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
619.3	Louisville	05-Sep-12		300	80
619.3	Louisville	11-Sep-12		120	84
619.3	Louisville	19-Sep-12		430	250
619.3	Louisville	25-Sep-12		230	177
619.3	Louisville	27-Sep-12		1,100	1,500
			Geometric Mean	330	214
594	Louisville	02-Oct-12		52	24
594	Louisville	09-Oct-12		10	100
594	Louisville	11-Oct-12		4	4
594	Louisville	16-Oct-12		4	8
594	Louisville	18-Oct-12		8	4
			Geometric Mean	9	13
619.3	Louisville	02-Oct-12		540	260
619.3	Louisville	09-Oct-12		9	9
619.3	Louisville	11-Oct-12		20	8
619.3	Louisville	16-Oct-12		12	4
619.3	Louisville	18-Oct-12		71	57
			Geometric Mean	38	21
791.5	Evansville	01-May-12		9	12
791.5	Evansville	08-May-12		60	290
791.5	Evansville	15-May-12		72	74
791.5	Evansville	22-May-12		16	20
791.5	Evansville	29-May-12		36	28
			Geometric Mean	30	43
793.7	Evansville	01-May-12		116	28
793.7	Evansville	08-May-12		170	200
793.7	Evansville	15-May-12		70	30
793.7	Evansville	22-May-12		20	60
793.7	Evansville	29-May-12		1,218	480
			Geometric Mean	127	86
791.5	Evansville	05-Jun-12		8	32
791.5	Evansville	12-Jun-12		100	104
791.5	Evansville	19-Jun-12		18	6
791.5	Evansville	21-Jun-12		8	8
791.5	Evansville	26-Jun-12		10	6
			Geometric Mean	16	16
793.7	Evansville	05-Jun-12		68	64
793.7	Evansville	12-Jun-12		520	645
793.7	Evansville	19-Jun-12		96	64
793.7	Evansville	21-Jun-12		20	12
793.7	Evansville	26-Jun-12		96	32
			Geometric Mean	92	63
791.5	Evansville	02-Jul-12		28	4
791.5	Evansville	10-Jul-12		8	4
791.5	Evansville	17-Jul-12		44	24
791.5	Evansville	24-Jul-12		12	12
791.5	Evansville	31-Jul-12		70	24
			Geometric Mean	24	10
793.7	Evansville	02-Jul-12		32	8
793.7	Evansville	10-Jul-12		80	12
793.7	Evansville	17-Jul-12		2,500	918
793.7	Evansville	24-Jul-12		470	700
793.7	Evansville	31-Jul-12		500	236
			Geometric Mean	273	108

Appendix G. Ohio River Bacteria Data, 2012-2014				
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL
791.5	Evansville	07-Aug-12	16	8
791.5	Evansville	14-Aug-12	8	8
791.5	Evansville	21-Aug-12	4	4
791.5	Evansville	23-Aug-12	4	10
791.5	Evansville	28-Aug-12	16	24
		Geometric Mean	8	9
793.7	Evansville	07-Aug-12	640	1,000
793.7	Evansville	14-Aug-12	900	673
793.7	Evansville	21-Aug-12	320	116
793.7	Evansville	23-Aug-12	128	112
793.7	Evansville	28-Aug-12	964	390
		Geometric Mean	469	321
791.5	Evansville	04-Sep-12	92	72
791.5	Evansville	11-Sep-12	40	43
791.5	Evansville	18-Sep-12	130	44
791.5	Evansville	20-Sep-12	40	16
791.5	Evansville	25-Sep-12	8	4
		Geometric Mean	43	24
793.7	Evansville	04-Sep-12	500	580
793.7	Evansville	11-Sep-12	320	370
793.7	Evansville	18-Sep-12	7,700	6,300
793.7	Evansville	20-Sep-12	104	88
793.7	Evansville	25-Sep-12	136	108
		Geometric Mean	445	419
791.5	Evansville	02-Oct-12	8	20
791.5	Evansville	09-Oct-12	16	4
791.5	Evansville	16-Oct-12	12	8
791.5	Evansville	23-Oct-12	16	12
791.5	Evansville	30-Oct-12	32	50
		Geometric Mean	15	13
793.7	Evansville	02-Oct-12	700	240
793.7	Evansville	09-Oct-12	172	100
793.7	Evansville	16-Oct-12	224	220
793.7	Evansville	23-Oct-12	80	80
793.7	Evansville	30-Oct-12	48	46
		Geometric Mean	160	114
1.4M	Pittsburgh	02-Apr-13	208	36
1.4M	Pittsburgh	09-Apr-13	60	32
1.4M	Pittsburgh	16-Apr-13	370	160
1.4M	Pittsburgh	23-Apr-13	184	72
1.4M	Pittsburgh	30-Apr-13	360	120
		Geometric Mean	198	69
4.3	Pittsburgh	02-Apr-13	430	120
4.3	Pittsburgh	09-Apr-13	54	24
4.3	Pittsburgh	16-Apr-13	290	163
4.3	Pittsburgh	23-Apr-13	160	60
4.3	Pittsburgh	30-Apr-13	1,100	251
		Geometric Mean	260	93
1.4M	Pittsburgh	07-May-13	92	12
1.4M	Pittsburgh	14-May-13	355	131
1.4M	Pittsburgh	21-May-13	217	60
1.4M	Pittsburgh	23-May-13	6,100	1,600
1.4M	Pittsburgh	28-May-13	509	78
		Geometric Mean	466	103

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
4.3	Pittsburgh	07-May-13		108	28
4.3	Pittsburgh	14-May-13		275	144
4.3	Pittsburgh	21-May-13		225	32
4.3	Pittsburgh	23-May-13		7,200	2,700
4.3	Pittsburgh	28-May-13		573	74
			Geometric Mean	488	121
1.4M	Pittsburgh	04-Jun-13		310	53
1.4M	Pittsburgh	11-Jun-13		3,900	455
1.4M	Pittsburgh	18-Jun-13		440	54
1.4M	Pittsburgh	20-Jun-13		236	25
1.4M	Pittsburgh	25-Jun-13		318	50
			Geometric Mean	525	70
4.3	Pittsburgh	04-Jun-13		270	69
4.3	Pittsburgh	11-Jun-13		4,600	609
4.3	Pittsburgh	18-Jun-13		490	152
4.3	Pittsburgh	20-Jun-13		106	291
4.3	Pittsburgh	25-Jun-13		264	37
			Geometric Mean	443	147
1.4M	Pittsburgh	02-Jul-13		5,400	636
1.4M	Pittsburgh	09-Jul-13		9,000	3,500
1.4M	Pittsburgh	16-Jul-13		220	72
4.3	Pittsburgh	02-Jul-13		5,700	1,000
4.3	Pittsburgh	09-Jul-13		7,900	3,100
1.4M	Pittsburgh	17-Sep-13		2,500	418
1.4M	Pittsburgh	19-Sep-13		273	139
1.4M	Pittsburgh	24-Sep-13		1,100	582
4.3	Pittsburgh	17-Sep-13		418	2,700
4.3	Pittsburgh	19-Sep-13		182	100
4.3	Pittsburgh	24-Sep-13		1,900	455
1.4M	Pittsburgh	01-Oct-13		153	89
1.4M	Pittsburgh	08-Oct-13		20,000	3,200
1.4M	Pittsburgh	15-Oct-13		267	60
1.4M	Pittsburgh	22-Oct-13		250	116
1.4M	Pittsburgh	29-Oct-13		84	46
			Geometric Mean	443	156
4.3	Pittsburgh	01-Oct-13		227	54
4.3	Pittsburgh	08-Oct-13		3,700	1,900
4.3	Pittsburgh	15-Oct-13		261	84
4.3	Pittsburgh	22-Oct-13		219	88
4.3	Pittsburgh	29-Oct-13		92	44
			Geometric Mean	338	127
86.8	Wheeling	02-Apr-13		192	24
86.8	Wheeling	09-Apr-13		16	4
86.8	Wheeling	16-Apr-13		310	224
86.8	Wheeling	23-Apr-13		68	12
86.8	Wheeling	30-Apr-13		57	64
			Geometric Mean	82	28
92.8	Wheeling	09-Apr-13		83	36
92.8	Wheeling	02-Apr-13		20	16
92.8	Wheeling	16-Apr-13		130	280
92.8	Wheeling	23-Apr-13		972	430
92.8	Wheeling	30-Apr-13		4,200	300
			Geometric Mean	245	116

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
86.8	Wheeling	07-May-13		12	8
86.8	Wheeling	14-May-13		4	16
86.8	Wheeling	21-May-13		48	56
86.8	Wheeling	23-May-13		40	8
86.8	Wheeling	28-May-13		96	44
			Geometric Mean	25	19
92.8	Wheeling	07-May-13		1,400	2,800
92.8	Wheeling	14-May-13		56	48
92.8	Wheeling	21-May-13		217	16
92.8	Wheeling	23-May-13		580	174
92.8	Wheeling	28-May-13		80	136
			Geometric Mean	240	138
86.8	Wheeling	04-Jun-13		16	8
86.8	Wheeling	11-Jun-13		208	24
86.8	Wheeling	18-Jun-13		192	36
86.8	Wheeling	20-Jun-13		36	12
86.8	Wheeling	25-Jun-13		52	12
			Geometric Mean	65	16
92.8	Wheeling	04-Jun-13		991	460
92.8	Wheeling	11-Jun-13		490	140
92.8	Wheeling	18-Jun-13		700	320
92.8	Wheeling	20-Jun-13		100	234
92.8	Wheeling	25-Jun-13		380	680
			Geometric Mean	419	319
86.8	Wheeling	02-Jul-13		790	152
86.8	Wheeling	09-Jul-13		208	52
86.8	Wheeling	16-Jul-13		912	136
86.8	Wheeling	23-Jul-13		250	56
86.8	Wheeling	30-Jul-13		69	17
			Geometric Mean	304	63
92.8	Wheeling	02-Jul-13		2,400	960
92.8	Wheeling	09-Jul-13		13,500	8,000
92.8	Wheeling	19-Jul-13		1,560	420
92.8	Wheeling	23-Jul-13		1,600	920
92.8	Wheeling	30-Jul-13		730	240
			Geometric Mean	2261	934
86.8	Wheeling	06-Aug-13		8	4
86.8	Wheeling	13-Aug-13		28	40
86.8	Wheeling	20-Aug-13		176	44
86.8	Wheeling	22-Aug-13		20	4
86.8	Wheeling	27-Aug-13		36	24
			Geometric Mean	31	15
92.8	Wheeling	06-Aug-13		1,500	320
92.8	Wheeling	13-Aug-13		116	64
92.8	Wheeling	20-Aug-13		18,000	7,900
92.8	Wheeling	22-Aug-13		1,340	670
92.8	Wheeling	27-Aug-13		142	96
			Geometric Mean	902	401
86.8	Wheeling	03-Sep-13		52	48
86.8	Wheeling	10-Sep-13		144	20
86.8	Wheeling	17-Sep-13		20	17
86.8	Wheeling	19-Sep-13		20	20
86.8	Wheeling	24-Sep-13		303	137
			Geometric Mean	62	34

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
92.8	Wheeling	03-Sep-13		214	96
92.8	Wheeling	10-Sep-13		450	60
92.8	Wheeling	17-Sep-13		20	24
92.8	Wheeling	19-Sep-13		19	17
92.8	Wheeling	24-Sep-13		20,000	206
			Geometric Mean	236	55
86.8	Wheeling	01-Oct-13		4	10
86.8	Wheeling	08-Oct-13		20	32
86.8	Wheeling	15-Oct-13		32	144
86.8	Wheeling	22-Oct-13		104	56
86.8	Wheeling	29-Oct-13		24	4
			Geometric Mean	23	25
92.8	Wheeling	01-Oct-13		20	4
92.8	Wheeling	08-Oct-13		66	40
92.8	Wheeling	15-Oct-13		124	510
92.8	Wheeling	22-Oct-13		63	52
92.8	Wheeling	29-Oct-13		24	16
			Geometric Mean	48	37
305.1	Huntington	02-Apr-13		4	4
305.1	Huntington	09-Apr-13		4	4
305.1	Huntington	16-Apr-13		24	4
305.1	Huntington	23-Apr-13		12	8
305.1	Huntington	30-Apr-13		24	12
			Geometric Mean	10	6
314.8	Huntington	02-Apr-13		84	8
314.8	Huntington	09-Apr-13		32	4
314.8	Huntington	16-Apr-13		57	28
314.8	Huntington	23-Apr-13		80	16
314.8	Huntington	30-Apr-13		36	16
			Geometric Mean	54	12
305.1	Huntington	07-May-13		8	4
305.1	Huntington	14-May-13		44	4
305.1	Huntington	21-May-13		66	4
305.1	Huntington	23-May-13		40	40
305.1	Huntington	28-May-13		44	40
			Geometric Mean	33	10
314.8	Huntington	07-May-13		134	57
314.8	Huntington	14-May-13		86	32
314.8	Huntington	21-May-13		80	24
314.8	Huntington	23-May-13		136	60
314.8	Huntington	28-May-13		96	69
			Geometric Mean	104	45
305.1	Huntington	04-Jun-13		20	32
305.1	Huntington	11-Jun-13		96	36
305.1	Huntington	18-Jun-13		154	80
305.1	Huntington	20-Jun-13		80	40
305.1	Huntington	25-Jun-13		24	32
			Geometric Mean	56	41
314.8	Huntington	04-Jun-13		243	164
314.8	Huntington	11-Jun-13		570	197
314.8	Huntington	18-Jun-13		1,282	646
314.8	Huntington	20-Jun-13		136	84
314.8	Huntington	25-Jun-13		51	51
			Geometric Mean	262	155

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
305.1	Huntington	02-Jul-13		66	49
305.1	Huntington	09-Jul-13		86	83
305.1	Huntington	16-Jul-13		66	20
305.1	Huntington	23-Jul-13		736	270
305.1	Huntington	30-Jul-13		51	28
			Geometric Mean	107	57
314.8	Huntington	02-Jul-13		860	630
314.8	Huntington	09-Jul-13		346	249
314.8	Huntington	16-Jul-13		100	24
314.8	Huntington	23-Jul-13		1,091	364
314.8	Huntington	30-Jul-13		116	57
			Geometric Mean	327	151
305.1	Huntington	06-Aug-13		12	4
305.1	Huntington	13-Aug-13		100	60
305.1	Huntington	20-Aug-13		32	8
305.1	Huntington	22-Aug-13		1,600	349
305.1	Huntington	27-Aug-13		32	16
			Geometric Mean	72	25
314.8	Huntington	06-Aug-13		43	4
314.8	Huntington	13-Aug-13		277	120
314.8	Huntington	20-Aug-13		106	16
314.8	Huntington	22-Aug-13		2,300	800
314.8	Huntington	27-Aug-13		80	16
			Geometric Mean	188	40
305.1	Huntington	03-Sep-13		254	160
305.1	Huntington	10-Sep-13		24	12
305.1	Huntington	17-Sep-13		60	57
305.1	Huntington	19-Sep-13		20	12
305.1	Huntington	24-Sep-13		52	32
			Geometric Mean	52	33
314.8	Huntington	03-Sep-13		48	36
314.8	Huntington	10-Sep-13		12	12
314.8	Huntington	17-Sep-13		28	16
314.8	Huntington	19-Sep-13		49	24
314.8	Huntington	24-Sep-13		60	36
			Geometric Mean	34	23
305.1	Huntington	01-Oct-13		12	4
305.1	Huntington	08-Oct-13		12	20
305.1	Huntington	15-Oct-13		20	16
305.1	Huntington	22-Oct-13		52	20
305.1	Huntington	29-Oct-13		28	8
			Geometric Mean	21	12
314.8	Huntington	01-Oct-13		46	20
314.8	Huntington	08-Oct-13		97	74
314.8	Huntington	15-Oct-13		12	12
314.8	Huntington	22-Oct-13		16	4
314.8	Huntington	29-Oct-13		8	8
			Geometric Mean	23	14
462.6	Cincinnati	02-Apr-13		28	8
462.6	Cincinnati	09-Apr-13		4	8
462.6	Cincinnati	16-Apr-13		28	8
462.6	Cincinnati	23-Apr-13		104	36
462.6	Cincinnati	30-Apr-13		84	132
			Geometric Mean	31	19

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	02-Apr-13		32	16
470	Cincinnati	09-Apr-13		16	4
470	Cincinnati	16-Apr-13		34	12
470	Cincinnati	23-Apr-13		84	48
470	Cincinnati	30-Apr-13		56	60
			Geometric Mean	38	19
477.5	Cincinnati	02-Apr-13		51	12
477.5	Cincinnati	09-Apr-13		24	28
477.5	Cincinnati	16-Apr-13		12	16
477.5	Cincinnati	23-Apr-13		72	40
477.5	Cincinnati	30-Apr-13		88	74
			Geometric Mean	39	28
462.6	Cincinnati	07-May-13		891	700
462.6	Cincinnati	14-May-13		54	68
462.6	Cincinnati	21-May-13		104	54
462.6	Cincinnati	23-May-13		216	66
462.6	Cincinnati	28-May-13		8	12
			Geometric Mean	97	73
470	Cincinnati	07-May-13		1,040	1,010
470	Cincinnati	14-May-13		48	60
470	Cincinnati	21-May-13		92	71
470	Cincinnati	23-May-13		1,800	2,100
470	Cincinnati	28-May-13		20	28
			Geometric Mean	175	191
477.5	Cincinnati	07-May-13		2,400	3,600
477.5	Cincinnati	14-May-13		68	76
477.5	Cincinnati	21-May-13		40	40
477.5	Cincinnati	23-May-13		12,200	8,500
477.5	Cincinnati	28-May-13		8	20
			Geometric Mean	230	284
462.6	Cincinnati	04-Jun-13		24	16
462.6	Cincinnati	11-Jun-13		48	48
462.6	Cincinnati	18-Jun-13		196	156
462.6	Cincinnati	20-Jun-13		36	48
462.6	Cincinnati	25-Jun-13		40	40
			Geometric Mean	50	47
470	Cincinnati	04-Jun-13		28	37
470	Cincinnati	11-Jun-13		166	128
470	Cincinnati	18-Jun-13		120	77
470	Cincinnati	20-Jun-13		116	57
470	Cincinnati	25-Jun-13		177	186
			Geometric Mean	103	83
477.5	Cincinnati	04-Jun-13		32	8
477.5	Cincinnati	11-Jun-13		168	148
477.5	Cincinnati	18-Jun-13		192	112
477.5	Cincinnati	20-Jun-13		156	156
477.5	Cincinnati	25-Jun-13		20	16
			Geometric Mean	80	51
462.6	Cincinnati	02-Jul-13		144	116
462.6	Cincinnati	09-Jul-13		148	124
462.6	Cincinnati	16-Jul-13		196	104
462.6	Cincinnati	23-Jul-13		180	136
462.6	Cincinnati	30-Jul-13		40	20
			Geometric Mean	125	84

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	02-Jul-13		480	469
470	Cincinnati	09-Jul-13		148	96
470	Cincinnati	16-Jul-13		164	164
470	Cincinnati	23-Jul-13		200	144
470	Cincinnati	30-Jul-13		36	20
			Geometric Mean	153	116
477.5	Cincinnati	02-Jul-13		460	718
477.5	Cincinnati	09-Jul-13		380	400
477.5	Cincinnati	16-Jul-13		223	212
477.5	Cincinnati	23-Jul-13		320	340
477.5	Cincinnati	30-Jul-13		37	24
			Geometric Mean	215	218
462.6	Cincinnati	06-Aug-13		24	12
462.6	Cincinnati	13-Aug-13		36	40
462.6	Cincinnati	20-Aug-13		20	12
462.6	Cincinnati	22-Aug-13		74	57
462.6	Cincinnati	27-Aug-13		24	16
			Geometric Mean	31	22
470	Cincinnati	06-Aug-13		16	12
470	Cincinnati	13-Aug-13		120	120
470	Cincinnati	20-Aug-13		12	4
470	Cincinnati	22-Aug-13		4	4
470	Cincinnati	27-Aug-13		4	8
			Geometric Mean	13	11
477.5	Cincinnati	06-Aug-13		30	8
477.5	Cincinnati	13-Aug-13		68	51
477.5	Cincinnati	20-Aug-13		16	24
477.5	Cincinnati	22-Aug-13		152	168
477.5	Cincinnati	27-Aug-13		16	12
			Geometric Mean	38	29
462.6	Cincinnati	03-Sep-13		80	63
462.6	Cincinnati	10-Sep-13		34	20
462.6	Cincinnati	17-Sep-13		4	4
462.6	Cincinnati	19-Sep-13		8	4
462.6	Cincinnati	24-Sep-13		183	12
			Geometric Mean	28	12
470	Cincinnati	03-Sep-13		52	57
470	Cincinnati	10-Sep-13		8	12
470	Cincinnati	17-Sep-13		8	4
470	Cincinnati	19-Sep-13		20	8
470	Cincinnati	24-Sep-13		66	64
			Geometric Mean	21	17
477.5	Cincinnati	03-Sep-13		68	40
477.5	Cincinnati	10-Sep-13		16	16
477.5	Cincinnati	17-Sep-13		12	4
477.5	Cincinnati	19-Sep-13		4	20
477.5	Cincinnati	24-Sep-13		280	70
			Geometric Mean	27	20
462.6	Cincinnati	01-Oct-13		44	4
462.6	Cincinnati	10-Oct-13		80	84
462.6	Cincinnati	15-Oct-13		28	40
462.6	Cincinnati	22-Oct-13		12	4
462.6	Cincinnati	29-Oct-13		4	16
			Geometric Mean	22	15

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	01-Oct-13		12	8
470	Cincinnati	10-Oct-13		640	240
470	Cincinnati	15-Oct-13		68	40
470	Cincinnati	22-Oct-13		46	4
470	Cincinnati	29-Oct-13		12	4
			Geometric Mean	49	17
477.5	Cincinnati	01-Oct-13		16	16
477.5	Cincinnati	10-Oct-13		208	220
477.5	Cincinnati	15-Oct-13		80	63
477.5	Cincinnati	22-Oct-13		51	51
477.5	Cincinnati	29-Oct-13		16	12
			Geometric Mean	46	42
594	Louisville	02-Apr-13		8	8
594	Louisville	09-Apr-13		12	4
594	Louisville	17-Apr-12		44	16
594	Louisville	23-Apr-13		410	283
594	Louisville	30-Apr-13		36	56
			Geometric Mean	36	24
619.3	Louisville	02-Apr-13		16	12
619.3	Louisville	09-Apr-13		8	10
619.3	Louisville	17-Apr-12		71	48
619.3	Louisville	23-Apr-13		200	226
619.3	Louisville	30-Apr-13		40	40
			Geometric Mean	37	35
594	Louisville	08-May-13		590	206
594	Louisville	14-May-13		76	68
594	Louisville	21-May-13		12	12
594	Louisville	28-May-13		16	16
594	Louisville	31-May-13		20	8
			Geometric Mean	44	29
619.3	Louisville	08-May-13		360	420
619.3	Louisville	14-May-13		136	174
619.3	Louisville	21-May-13		51	54
619.3	Louisville	28-May-13		60	48
619.3	Louisville	31-May-13		20	10
			Geometric Mean	79	72
594	Louisville	04-Jun-13		32	32
594	Louisville	11-Jun-13		4	4
594	Louisville	18-Jun-13		720	610
594	Louisville	20-Jun-13		94	77
594	Louisville	25-Jun-13		52	44
			Geometric Mean	54	48
619.3	Louisville	04-Jun-13		32	16
619.3	Louisville	11-Jun-13		120	96
619.3	Louisville	18-Jun-13		172	88
619.3	Louisville	20-Jun-13		57	40
619.3	Louisville	25-Jun-13		60	8
			Geometric Mean	74	34

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
594	Louisville	02-Jul-13		280	96
594	Louisville	09-Jul-13		770	580
594	Louisville	17-Jul-13		92	54
594	Louisville	23-Jul-13		48	40
619.3	Louisville	02-Jul-13		980	680
619.3	Louisville	09-Jul-13		480	280
619.3	Louisville	17-Jul-13		60	46
619.3	Louisville	23-Jul-13		490	410
594	Louisville	06-Aug-13		49	60
594	Louisville	13-Aug-13		116	52
594	Louisville	20-Aug-13		16	4
594	Louisville	22-Aug-13		16	24
594	Louisville	27-Aug-13		12	8
			Geometric Mean	28	19
619.3	Louisville	06-Aug-13		297	71
619.3	Louisville	13-Aug-13		80	60
619.3	Louisville	20-Aug-13		32	28
619.3	Louisville	22-Aug-13		43	32
619.3	Louisville	27-Aug-13		36	96
			Geometric Mean	65	52
594	Louisville	05-Sep-13		16	16
594	Louisville	10-Sep-13		28	20
594	Louisville	17-Sep-13		16	10
594	Louisville	24-Sep-13		56	16
594	Louisville	26-Sep-13		20	20
			Geometric Mean	24	16
619.3	Louisville	05-Sep-13		12	12
619.3	Louisville	10-Sep-13		140	43
619.3	Louisville	17-Sep-13		48	300
619.3	Louisville	24-Sep-13		28	16
619.3	Louisville	26-Sep-13		20	16
			Geometric Mean	34	33
594	Louisville	04-Oct-13		8	4
594	Louisville	08-Oct-13		650	510
594	Louisville	16-Oct-13		36	20
594	Louisville	22-Oct-13		12	10
594	Louisville	29-Oct-13		4	8
			Geometric Mean	25	20
619.3	Louisville	04-Oct-13		600	520
619.3	Louisville	08-Oct-13		790	580
619.3	Louisville	16-Oct-13		224	132
619.3	Louisville	22-Oct-13		864	827
619.3	Louisville	29-Oct-13		4	20
			Geometric Mean	206	231
791.5	Evansville	02-Apr-13		20	45
791.5	Evansville	09-Apr-13		4	4
791.5	Evansville	16-Apr-13		100	88
791.5	Evansville	23-Apr-13		220	156
791.5	Evansville	30-Apr-13		120	68
			Geometric Mean	46	44
793.7	Evansville	02-Apr-13		170	164
793.7	Evansville	09-Apr-13		8	4
793.7	Evansville	16-Apr-13		96	112
793.7	Evansville	23-Apr-13		152	112
793.7	Evansville	30-Apr-13		140	50
			Geometric Mean	77	53

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
791.5	Evansville	07-May-13		340	390
791.5	Evansville	14-May-13		144	190
791.5	Evansville	21-May-13		71	130
791.5	Evansville	23-May-13		28	566
791.5	Evansville	28-May-13		36	24
			Geometric Mean	81	167
793.7	Evansville	07-May-13		590	650
793.7	Evansville	14-May-13		260	240
793.7	Evansville	21-May-13		7,500	8,700
793.7	Evansville	23-May-13		700	900
793.7	Evansville	28-May-13		290	217
			Geometric Mean	748	767
791.5	Evansville	04-Jun-13		46	32
791.5	Evansville	11-Jun-13		60	91
791.5	Evansville	18-Jun-13		164	130
791.5	Evansville	20-Jun-13		90	63
791.5	Evansville	25-Jun-13		1,300	2,000
			Geometric Mean	140	137
793.7	Evansville	04-Jun-13		136	144
793.7	Evansville	11-Jun-13		56	24
793.7	Evansville	18-Jun-13		350	310
793.7	Evansville	20-Jun-13		230	171
793.7	Evansville	25-Jun-13		1,800	4,100
			Geometric Mean	256	237
791.5	Evansville	02-Jul-13		230	144
791.5	Evansville	09-Jul-13		600	500
791.5	Evansville	16-Jul-13		310	180
791.5	Evansville	23-Jul-13		276	218
791.5	Evansville	30-Jul-13		40	100
			Geometric Mean	216	195
793.7	Evansville	02-Jul-13		540	480
793.7	Evansville	09-Jul-13		1,800	230
793.7	Evansville	16-Jul-13		360	210
793.7	Evansville	23-Jul-13		860	480
793.7	Evansville	23-Jul-13		210	140
			Geometric Mean	576	274
791.5	Evansville	06-Aug-13		12	12
791.5	Evansville	13-Aug-13		44	16
791.5	Evansville	20-Aug-13		8	24
791.5	Evansville	22-Aug-13		40	30
791.5	Evansville	27-Aug-13		16	4
			Geometric Mean	19	14
793.7	Evansville	06-Aug-13		96	60
793.7	Evansville	13-Aug-13		430	40
793.7	Evansville	20-Aug-13		80	24
793.7	Evansville	22-Aug-13		92	51
793.7	Evansville	27-Aug-13		70	54
			Geometric Mean	116	44
791.5	Evansville	03-Sep-13		96	68
791.5	Evansville	10-Sep-13		12	4
791.5	Evansville	17-Sep-13		4	16
791.5	Evansville	19-Sep-13		4	8
791.5	Evansville	24-Sep-13		40	24
			Geometric Mean	15	15

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
793.7	Evansville	03-Sep-13		10,000	40
793.7	Evansville	10-Sep-13		110	160
793.7	Evansville	17-Sep-13		69	71
793.7	Evansville	19-Sep-13		400	340
793.7	Evansville	24-Sep-13		70	24
			Geometric Mean	292	82
791.5	Evansville	01-Oct-13		24	4
791.5	Evansville	08-Oct-13		900	400
791.5	Evansville	15-Oct-13		16	20
791.5	Evansville	22-Oct-13		4	30
791.5	Evansville	29-Oct-13		12	4
			Geometric Mean	28	21
793.7	Evansville	01-Oct-13		170	130
793.7	Evansville	08-Oct-13		1,000	1,000
793.7	Evansville	15-Oct-13		88	71
793.7	Evansville	22-Oct-13		116	63
793.7	Evansville	29-Oct-13		56	19
			Geometric Mean	158	102
1.4M	Pittsburgh	02-Apr-14		142	91
1.4M	Pittsburgh	10-Apr-14		131	42
1.4M	Pittsburgh	17-Apr-14		109	80
1.4M	Pittsburgh	22-Apr-14		12	8
1.4M	Pittsburgh	29-Apr-14		2,300	1,100
			Geometric Mean	141	77
4.3	Pittsburgh	02-Apr-14		106	58
4.3	Pittsburgh	10-Apr-14		144	86
4.3	Pittsburgh	17-Apr-14		100	54
4.3	Pittsburgh	22-Apr-14		80	40
4.3	Pittsburgh	29-Apr-14		2,600	800
			Geometric Mean	200	97
1.4M	Pittsburgh	06-May-14		72	40
1.4M	Pittsburgh	13-May-14		6,300	2,300
4.3	Pittsburgh	06-May-14		44	36
4.3	Pittsburgh	13-May-14		3,500	1,400
1.4M	Pittsburgh	17-Jul-14		300	139
1.4M	Pittsburgh	22-Jul-14		328	116
1.4M	Pittsburgh	29-Jul-14		5,100	2,200
4.3	Pittsburgh	17-Jul-14		310	144
4.3	Pittsburgh	22-Jul-14		175	100
4.3	Pittsburgh	29-Jul-14		6,800	1,400
1.4M	Pittsburgh	05-Aug-14		864	320
1.4M	Pittsburgh	14-Aug-14		1,200	310
1.4M	Pittsburgh	19-Aug-14		140	84
1.4M	Pittsburgh	21-Aug-14		5,100	2,500
1.4M	Pittsburgh	26-Aug-14		300	84
			Geometric Mean	740	281
4.3	Pittsburgh	05-Aug-14		1,109	360
4.3	Pittsburgh	14-Aug-14		1,100	440
4.3	Pittsburgh	19-Aug-14		112	61
4.3	Pittsburgh	21-Aug-14		7,800	3,200
4.3	Pittsburgh	26-Aug-14		330	104
			Geometric Mean	811	317

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
1.4M	Pittsburgh	02-Sep-14		2,200	6,600
1.4M	Pittsburgh	09-Sep-14		136	100
1.4M	Pittsburgh	16-Sep-14		128	60
1.4M	Pittsburgh	23-Sep-14		167	40
1.4M	Pittsburgh	30-Sep-14		58	14
			Geometric Mean	206	117
4.3	Pittsburgh	02-Sep-14		1,500	520
4.3	Pittsburgh	09-Sep-14		156	68
4.3	Pittsburgh	16-Sep-14		69	40
4.3	Pittsburgh	23-Sep-14		120	20
4.3	Pittsburgh	30-Sep-14		32	4
			Geometric Mean	144	41
1.4M	Pittsburgh	07-Oct-14		169	50
1.4M	Pittsburgh	14-Oct-14		200	78
1.4M	Pittsburgh	21-Oct-14		360	84
1.4M	Pittsburgh	28-Oct-14		92	40
1.4M	Pittsburgh	30-Oct-14		100	50
			Geometric Mean	162	58
4.3	Pittsburgh	07-Oct-14		236	108
4.3	Pittsburgh	14-Oct-14		125	40
4.3	Pittsburgh	21-Oct-14		140	36
4.3	Pittsburgh	28-Oct-14		88	54
4.3	Pittsburgh	30-Oct-14		72	48
			Geometric Mean	121	53
86.8	Wheeling	01-Apr-14		48	8
86.8	Wheeling	08-Apr-14		580	630
86.8	Wheeling	15-Apr-14		116	78
86.8	Wheeling	22-Apr-14		12	4
86.8	Wheeling	29-Apr-14		46	92
			Geometric Mean	71	43
92.8	Wheeling	01-Apr-14		36	20
92.8	Wheeling	08-Apr-14		600	580
92.8	Wheeling	15-Apr-14		196	112
92.8	Wheeling	22-Apr-14		16	12
92.8	Wheeling	29-Apr-14		330	4,000
			Geometric Mean	117	144
86.8	Wheeling	06-May-14		204	32
86.8	Wheeling	13-May-14		210	170
86.8	Wheeling	20-May-14		718	845
86.8	Wheeling	22-May-14		310	570
86.8	Wheeling	27-May-14		226	270
			Geometric Mean	293	234
92.8	Wheeling	06-May-14		72	74
92.8	Wheeling	13-May-14		254	156
92.8	Wheeling	20-May-14		5,000	4,700
92.8	Wheeling	22-May-14		470	964
92.8	Wheeling	27-May-14		260	380
			Geometric Mean	407	457
86.8	Wheeling	03-Jun-14		3,900	3,200
86.8	Wheeling	10-Jun-14		112	148
86.8	Wheeling	17-Jun-14		350	645
86.8	Wheeling	19-Jun-14		160	210
86.8	Wheeling	24-Jun-14		217	1,400
			Geometric Mean	351	618

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
92.8	Wheeling	03-Jun-14		380	480
92.8	Wheeling	10-Jun-14		230	168
92.8	Wheeling	17-Jun-14		782	900
92.8	Wheeling	19-Jun-14		11,900	11,600
92.8	Wheeling	24-Jun-14		600	2,600
			Geometric Mean	866	1170
86.8	Wheeling	01-Jul-14		200	380
86.8	Wheeling	08-Jul-14		72	52
86.8	Wheeling	15-Jul-14		84	232
86.8	Wheeling	22-Jul-14		88	43
86.8	Wheeling	29-Jul-14		700	927
			Geometric Mean	149	179
92.8	Wheeling	01-Jul-14		360	809
92.8	Wheeling	08-Jul-14		170	66
92.8	Wheeling	15-Jul-14		1,155	1,010
92.8	Wheeling	22-Jul-14		88	48
92.8	Wheeling	29-Jul-14		818	340
			Geometric Mean	348	245
86.8	Wheeling	05-Aug-14		46	46
86.8	Wheeling	12-Aug-14		560	1,120
86.8	Wheeling	19-Aug-14		63	40
86.8	Wheeling	21-Aug-14		8,600	1,945
86.8	Wheeling	26-Aug-14		144	92
			Geometric Mean	289	206
92.8	Wheeling	05-Aug-14		180	132
92.8	Wheeling	12-Aug-14		60,000	60,000
92.8	Wheeling	19-Aug-14		164	66
92.8	Wheeling	21-Aug-14		8,100	3,500
92.8	Wheeling	26-Aug-14		1,180	136
			Geometric Mean	1761	757
86.8	Wheeling	02-Sep-14		152	69
86.8	Wheeling	09-Sep-14		12	12
86.8	Wheeling	16-Sep-14		68	12
86.8	Wheeling	23-Sep-14		24	8
86.8	Wheeling	30-Sep-14		20	12
			Geometric Mean	36	16
92.8	Wheeling	02-Sep-14		8,900	3,800
92.8	Wheeling	09-Sep-14		66	24
92.8	Wheeling	16-Sep-14		660	58
92.8	Wheeling	23-Sep-14		46	36
92.8	Wheeling	30-Sep-14		16	8
			Geometric Mean	195	69
86.8	Wheeling	07-Oct-14		96	52
86.8	Wheeling	14-Oct-14		64	20
86.8	Wheeling	21-Oct-14		180	54
86.8	Wheeling	23-Oct-14		104	50
86.8	Wheeling	28-Oct-14		36	8
			Geometric Mean	84	30
92.8	Wheeling	07-Oct-14		18,800	10,900
92.8	Wheeling	14-Oct-14		176	38
92.8	Wheeling	21-Oct-14		236	68
92.8	Wheeling	23-Oct-14		176	92
92.8	Wheeling	28-Oct-14		250	66
			Geometric Mean	510	176

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
305.1	Huntington	01-Apr-14		191	117
305.1	Huntington	08-Apr-14		80	24
305.1	Huntington	15-Apr-14		20	4
305.1	Huntington	22-Apr-14		4	4
305.1	Huntington	29-Apr-14		289	191
			Geometric Mean	51	24
314.8	Huntington	01-Apr-14		251	94
314.8	Huntington	08-Apr-14		169	48
314.8	Huntington	15-Apr-14		40	8
314.8	Huntington	22-Apr-14		69	4
314.8	Huntington	29-Apr-14		540	430
			Geometric Mean	145	36
305.1	Huntington	06-May-14		31	28
305.1	Huntington	13-May-14		44	8
305.1	Huntington	20-May-14		174	92
305.1	Huntington	22-May-14		92	20
305.1	Huntington	27-May-14		20	16
			Geometric Mean	53	23
314.8	Huntington	06-May-14		120	66
314.8	Huntington	13-May-14		243	191
314.8	Huntington	20-May-14		223	152
314.8	Huntington	22-May-14		144	54
314.8	Huntington	27-May-14		40	20
			Geometric Mean	130	73
305.1	Huntington	03-Jun-14		20	8
305.1	Huntington	10-Jun-14		48	24
305.1	Huntington	17-Jun-14		60	20
305.1	Huntington	19-Jun-14		40	20
305.1	Huntington	24-Jun-14		40	16
			Geometric Mean	39	17
314.8	Huntington	03-Jun-14		57	43
314.8	Huntington	10-Jun-14		120	28
314.8	Huntington	17-Jun-14		63	49
314.8	Huntington	19-Jun-14		152	28
314.8	Huntington	24-Jun-14		63	32
			Geometric Mean	84	35
305.1	Huntington	01-Jul-14		289	164
305.1	Huntington	07-Jul-14		20	4
305.1	Huntington	15-Jul-14		12	4
305.1	Huntington	22-Jul-14		32	12
305.1	Huntington	29-Jul-14		46	20
			Geometric Mean	40	14

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
314.8	Huntington	01-Jul-14		169	80
314.8	Huntington	07-Jul-14		28	12
314.8	Huntington	15-Jul-14		545	357
314.8	Huntington	22-Jul-14		140	94
314.8	Huntington	29-Jul-14		148	24
			Geometric Mean	140	60
305.1	Huntington	05-Aug-14		20	12
305.1	Huntington	12-Aug-14		4	4
305.1	Huntington	19-Aug-14		68	16
305.1	Huntington	21-Aug-14		16	12
305.1	Huntington	26-Aug-14		12	16
			Geometric Mean	16	11
314.8	Huntington	05-Aug-14		109	24
314.8	Huntington	12-Aug-14		1,100	660
314.8	Huntington	19-Aug-14		144	84
314.8	Huntington	21-Aug-14		40	20
314.8	Huntington	26-Aug-14		120	100
			Geometric Mean	153	77
305.1	Huntington	02-Sep-14		177	68
305.1	Huntington	09-Sep-14		28	16
305.1	Huntington	16-Sep-14		4	4
305.1	Huntington	23-Sep-14		8	4
305.1	Huntington	30-Sep-14		4	4
			Geometric Mean	14	9
314.8	Huntington	02-Sep-14		800	177
314.8	Huntington	09-Sep-14		51	32
314.8	Huntington	16-Sep-14		16	4
314.8	Huntington	23-Sep-14		12	4
314.8	Huntington	30-Sep-14		12	4
			Geometric Mean	39	13
305.1	Huntington	07-Oct-14		123	100
305.1	Huntington	14-Oct-14		20,000	20,000
305.1	Huntington	21-Oct-14		169	92
305.1	Huntington	23-Oct-14		44	12
305.1	Huntington	28-Oct-14		4	4
			Geometric Mean	149	98
314.8	Huntington	07-Oct-14		86	32
314.8	Huntington	14-Oct-14		311	231
314.8	Huntington	21-Oct-14		12	8
314.8	Huntington	23-Oct-14		28	20
314.8	Huntington	28-Oct-14		8	4
			Geometric Mean	37	22
462.6	Cincinnati	01-Apr-14		51	32
462.6	Cincinnati	08-Apr-14		251	217
462.6	Cincinnati	15-Apr-14		168	230
462.6	Cincinnati	22-Apr-14		4	4
462.6	Cincinnati	28-Apr-14		145	50
			Geometric Mean	66	50
470	Cincinnati	01-Apr-14		131	66
470	Cincinnati	08-Apr-14		360	420
470	Cincinnati	15-Apr-14		460	317
470	Cincinnati	22-Apr-14		28	34
470	Cincinnati	28-Apr-14		1,400	909
			Geometric Mean	243	194

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
477.5	Cincinnati	01-Apr-14		80	66
477.5	Cincinnati	08-Apr-14		390	89
477.5	Cincinnati	15-Apr-14		220	144
477.5	Cincinnati	22-Apr-14		12	8
477.5	Cincinnati	28-Apr-14		590	520
			Geometric Mean	137	81
462.6	Cincinnati	06-May-14		88	88
462.6	Cincinnati	14-May-14		32	16
462.6	Cincinnati	20-May-14		71	80
462.6	Cincinnati	22-May-14		224	136
462.6	Cincinnati	27-May-14		44	8
			Geometric Mean	72	41
470	Cincinnati	06-May-14		128	108
470	Cincinnati	14-May-14		270	220
470	Cincinnati	20-May-14		164	124
470	Cincinnati	22-May-14		243	152
470	Cincinnati	27-May-14		40	34
			Geometric Mean	141	109
477.5	Cincinnati	06-May-14		104	100
477.5	Cincinnati	14-May-14		70	66
477.5	Cincinnati	20-May-14		192	128
477.5	Cincinnati	22-May-14		160	104
477.5	Cincinnati	27-May-14		70	16
			Geometric Mean	109	68
462.6	Cincinnati	02-Jun-14		24	12
462.6	Cincinnati	10-Jun-14		900	180
462.6	Cincinnati	17-Jun-14		64	48
462.6	Cincinnati	19-Jun-14		12	20
462.6	Cincinnati	24-Jun-14		51	32
			Geometric Mean	61	37
470	Cincinnati	02-Jun-14		204	108
470	Cincinnati	10-Jun-14		180	140
470	Cincinnati	17-Jun-14		28	30
470	Cincinnati	19-Jun-14		8	4
470	Cincinnati	24-Jun-14		54	16
			Geometric Mean	54	31
477.5	Cincinnati	02-Jun-14		70	16
477.5	Cincinnati	10-Jun-14		56	32
477.5	Cincinnati	17-Jun-14		46	12
477.5	Cincinnati	19-Jun-14		4	10
477.5	Cincinnati	24-Jun-14		32	4
			Geometric Mean	30	12
462.6	Cincinnati	01-Jul-14		150	92
462.6	Cincinnati	07-Jul-14		40	24
462.6	Cincinnati	15-Jul-14		48	63
462.6	Cincinnati	22-Jul-14		32	36
462.6	Cincinnati	29-Jul-14		16	4
			Geometric Mean	43	29
470	Cincinnati	01-Jul-14		8,400	6,900
470	Cincinnati	07-Jul-14		818	530
470	Cincinnati	15-Jul-14		100	100
470	Cincinnati	22-Jul-14		4	4
470	Cincinnati	29-Jul-14		32	4
			Geometric Mean	154	90

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
477.5	Cincinnati	01-Jul-14		243	124
477.5	Cincinnati	07-Jul-14		630	68
477.5	Cincinnati	15-Jul-14		330	228
477.5	Cincinnati	22-Jul-14		4	4
477.5	Cincinnati	29-Jul-14		40	28
			Geometric Mean	96	46
462.6	Cincinnati	05-Aug-14		88	64
462.6	Cincinnati	12-Aug-14		28	68
462.6	Cincinnati	19-Aug-14		32	56
462.6	Cincinnati	21-Aug-14		130	104
462.6	Cincinnati	26-Aug-14		32	4
			Geometric Mean	50	40
470	Cincinnati	05-Aug-14		4	4
470	Cincinnati	12-Aug-14		184	88
470	Cincinnati	19-Aug-14		12	24
470	Cincinnati	21-Aug-14		168	80
470	Cincinnati	26-Aug-14		56	12
			Geometric Mean	38	24
477.5	Cincinnati	05-Aug-14		4	4
477.5	Cincinnati	12-Aug-14		670	470
477.5	Cincinnati	19-Aug-14		37	24
477.5	Cincinnati	21-Aug-14		148	116
477.5	Cincinnati	26-Aug-14		63	4
			Geometric Mean	62	29
462.6	Cincinnati	02-Sep-14		1,600	900
462.6	Cincinnati	09-Sep-14		74	54
462.6	Cincinnati	16-Sep-14		510	132
462.6	Cincinnati	23-Sep-14		20	24
462.6	Cincinnati	30-Sep-14		16	4
			Geometric Mean	114	57
470	Cincinnati	02-Sep-14		3,700	1,900
470	Cincinnati	09-Sep-14		4	4
470	Cincinnati	16-Sep-14		36	28
470	Cincinnati	23-Sep-14		12	12
470	Cincinnati	30-Sep-14		4	4
			Geometric Mean	30	25
477.5	Cincinnati	02-Sep-14		550	500
477.5	Cincinnati	09-Sep-14		60	32
477.5	Cincinnati	16-Sep-14		217	152
477.5	Cincinnati	23-Sep-14		12	8
477.5	Cincinnati	30-Sep-14		63	48
			Geometric Mean	88	62
462.6	Cincinnati	07-Oct-14		83	84
462.6	Cincinnati	14-Oct-14		204	200
462.6	Cincinnati	21-Oct-14		37	4
462.6	Cincinnati	23-Oct-14		16	8
462.6	Cincinnati	28-Oct-14		8	12
			Geometric Mean	38	23
470	Cincinnati	07-Oct-14		48	44
470	Cincinnati	14-Oct-14		128	8
470	Cincinnati	21-Oct-14		28	20
470	Cincinnati	23-Oct-14		12	4
470	Cincinnati	28-Oct-14		4	4
			Geometric Mean	24	10

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
477.5	Cincinnati	07-Oct-14		2,800	1,600
477.5	Cincinnati	14-Oct-14		74	32
477.5	Cincinnati	21-Oct-14		48	20
477.5	Cincinnati	23-Oct-14		12	4
477.5	Cincinnati	28-Oct-14		4	4
			Geometric Mean	54	28
594	Louisville	03-Apr-14		84	57
594	Louisville	08-Apr-14		820	140
594	Louisville	15-Apr-14		140	84
594	Louisville	22-Apr-14		16	8
594	Louisville	30-Apr-14		460	410
			Geometric Mean	148	74
619.3	Louisville	03-Apr-14		168	124
619.3	Louisville	08-Apr-14		600	590
619.3	Louisville	15-Apr-14		280	210
619.3	Louisville	22-Apr-14		24	34
619.3	Louisville	30-Apr-14		480	108
			Geometric Mean	201	141
594	Louisville	06-May-14		580	350
594	Louisville	13-May-14		148	84
594	Louisville	20-May-14		530	257
594	Louisville	27-May-14		450	580
594	Louisville	29-May-14		132	51
			Geometric Mean	306	186
619.3	Louisville	06-May-14		540	490
619.3	Louisville	13-May-14		43	37
619.3	Louisville	20-May-14		232	200
619.3	Louisville	27-May-14		150	140
619.3	Louisville	29-May-14		246	92
			Geometric Mean	182	136
594	Louisville	05-Jun-14		40	4
594	Louisville	10-Jun-14		51	4
594	Louisville	17-Jun-14		80	60
594	Louisville	19-Jun-14		56	48
594	Louisville	24-Jun-14		69	34
			Geometric Mean	58	17
619.3	Louisville	05-Jun-14		24	28
619.3	Louisville	10-Jun-14		32	16
619.3	Louisville	17-Jun-14		183	124
619.3	Louisville	19-Jun-14		40	28
619.3	Louisville	24-Jun-14		60	44
			Geometric Mean	51	37
594	Louisville	01-Jul-14		240	150
594	Louisville	08-Jul-14		200	180
594	Louisville	17-Jul-14		28	16
594	Louisville	22-Jul-14		20	12
594	Louisville	24-Jul-14		50	20
			Geometric Mean	67	40
619.3	Louisville	01-Jul-14		44	16
619.3	Louisville	08-Jul-14		330	12
619.3	Louisville	17-Jul-14		66	20
619.3	Louisville	22-Jul-14		57	46
619.3	Louisville	24-Jul-14		28	28
			Geometric Mean	69	22

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
594	Louisville	12-Aug-14		260	128
594	Louisville	14-Aug-14		20	20
594	Louisville	19-Aug-14		12	16
594	Louisville	22-Aug-14		8	12
594	Louisville	26-Aug-14		64	49
			Geometric Mean	32	30
619.3	Louisville	12-Aug-14		16,000	1,400
619.3	Louisville	14-Aug-14		28	20
619.3	Louisville	19-Aug-14		72	68
619.3	Louisville	22-Aug-14		84	68
619.3	Louisville	26-Aug-14		540	900
			Geometric Mean	271	163
594	Louisville	02-Sep-14		32	8
594	Louisville	16-Sep-14		40	16
594	Louisville	19-Sep-14		4	8
594	Louisville	23-Sep-14		16	32
594	Louisville	30-Sep-14		10	4
			Geometric Mean	15	11
619.3	Louisville	02-Sep-14		810	280
619.3	Louisville	16-Sep-14		63	51
619.3	Louisville	19-Sep-14		40	60
619.3	Louisville	23-Sep-14		60	77
619.3	Louisville	30-Sep-14		10	30
			Geometric Mean	66	72
594	Louisville	08-Oct-14		16	8
594	Louisville	14-Oct-14		410	500
594	Louisville	21-Oct-14		12	16
594	Louisville	28-Oct-14		4	4
594	Louisville	30-Oct-14		4	4
			Geometric Mean	17	16
619.3	Louisville	08-Oct-14		230	260
619.3	Louisville	14-Oct-14		1,100	1,400
619.3	Louisville	21-Oct-14		12	20
619.3	Louisville	28-Oct-14		69	80
619.3	Louisville	30-Oct-14		157	163
			Geometric Mean	127	157
791.5	Evansville	01-Apr-14		430	188
791.5	Evansville	08-Apr-14		400	250
791.5	Evansville	15-Apr-14		390	300
791.5	Evansville	22-Apr-14		208	80
791.5	Evansville	29-Apr-14		600	1,100
			Geometric Mean	384	262
793.7	Evansville	01-Apr-14		240	200
793.7	Evansville	08-Apr-14		560	490
793.7	Evansville	15-Apr-14		700	600
793.7	Evansville	22-Apr-14		30	28
793.7	Evansville	29-Apr-14		1,200	2,100
			Geometric Mean	321	322
791.5	Evansville	06-May-14		470	130
791.5	Evansville	13-May-14		660	490
791.5	Evansville	20-May-14		100	180
791.5	Evansville	22-May-14		200	100
791.5	Evansville	27-May-14		220	84
			Geometric Mean	267	157

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
793.7	Evansville	06-May-14		236	90
793.7	Evansville	13-May-14		670	530
793.7	Evansville	20-May-14		370	120
793.7	Evansville	22-May-14		230	80
793.7	Evansville	27-May-14		90	120
			Geometric Mean	261	141
791.5	Evansville	03-Jun-14		1,000	1,300
791.5	Evansville	10-Jun-14		40	24
791.5	Evansville	17-Jun-14		48	32
791.5	Evansville	19-Jun-14		8	20
791.5	Evansville	24-Jun-14		45	40
			Geometric Mean	59	60
793.7	Evansville	03-Jun-14		800	600
793.7	Evansville	10-Jun-14		110	220
793.7	Evansville	17-Jun-14		270	150
793.7	Evansville	19-Jun-14		140	90
793.7	Evansville	24-Jun-14		550	330
			Geometric Mean	283	226
791.5	Evansville	01-Jul-14		54	20
791.5	Evansville	08-Jul-14		4	4
791.5	Evansville	15-Jul-14		20	12
791.5	Evansville	22-Jul-14		8	12
791.5	Evansville	29-Jul-14		36	28
			Geometric Mean	17	13
793.7	Evansville	01-Jul-14		70	28
793.7	Evansville	08-Jul-14		200	140
793.7	Evansville	15-Jul-14		290	330
793.7	Evansville	22-Jul-14		24	24
793.7	Evansville	29-Jul-14		90	80
			Geometric Mean	97	76
791.5	Evansville	05-Aug-14		68	40
791.5	Evansville	12-Aug-14		12	8
791.5	Evansville	19-Aug-14		50	40
791.5	Evansville	21-Aug-14		16	20
791.5	Evansville	26-Aug-14		50	30
			Geometric Mean	32	24
793.7	Evansville	05-Aug-14		32	28
793.7	Evansville	12-Aug-14		100	100
793.7	Evansville	19-Aug-14		170	140
793.7	Evansville	21-Aug-14		92	56
793.7	Evansville	26-Aug-14		30	20
			Geometric Mean	68	54
791.5	Evansville	02-Sep-14		83	69
791.5	Evansville	09-Sep-14		12	12
791.5	Evansville	16-Sep-14		4	4
791.5	Evansville	23-Sep-14		10	8
791.5	Evansville	30-Sep-14		4	4
			Geometric Mean	11	10
793.7	Evansville	02-Sep-14		50	150
793.7	Evansville	09-Sep-14		10	8
793.7	Evansville	16-Sep-14		30	16
793.7	Evansville	23-Sep-14		1,400	1,300
793.7	Evansville	30-Sep-14		24	28
			Geometric Mean	55	59

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
791.5	Evansville	07-Oct-14		16	16
791.5	Evansville	14-Oct-14		500	480
791.5	Evansville	21-Oct-14		80	16
791.5	Evansville	23-Oct-14		30	40
791.5	Evansville	28-Oct-14		4	4
			Geometric Mean	38	29
793.7	Evansville	07-Oct-14		12	16
793.7	Evansville	14-Oct-14		3,000	300
793.7	Evansville	21-Oct-14		64	24
793.7	Evansville	23-Oct-14		40	12
793.7	Evansville	28-Oct-14		10	20
			Geometric Mean	62	31
1.4M	Pittsburgh	07-Apr-15		112	100
1.4M	Pittsburgh	16-Apr-15		75	88
1.4M	Pittsburgh	21-Apr-15		827	410
1.4M	Pittsburgh	28-Apr-15		54	32
1.4M	Pittsburgh	30-Apr-15		42	26
			Geometric Mean	109	78
4.3	Pittsburgh	07-Apr-15		97	81
4.3	Pittsburgh	16-Apr-15		260	172
4.3	Pittsburgh	21-Apr-15		530	280
4.3	Pittsburgh	28-Apr-15		51	32
4.3	Pittsburgh	30-Apr-15		46	36
			Geometric Mean	126	85
1.4M	Pittsburgh	05-May-15		72	60
1.4M	Pittsburgh	12-May-15		3,400	590
1.4M	Pittsburgh	19-May-15		9,300	2,400
1.4M	Pittsburgh	21-May-15		400	144
1.4M	Pittsburgh	26-May-15		208	36
			Geometric Mean	717	213
4.3	Pittsburgh	05-May-15		86	52
4.3	Pittsburgh	12-May-15		2,700	690
4.3	Pittsburgh	19-May-15		6,200	2,200
4.3	Pittsburgh	21-May-15		809	178
4.3	Pittsburgh	26-May-15		176	68
			Geometric Mean	729	249
1.4M	Pittsburgh	04-Jun-15		247	100
1.4M	Pittsburgh	09-Jun-15		8,300	3,500
1.4M	Pittsburgh	23-Jun-15		600	390
1.4M	Pittsburgh	25-Jun-15		2,000	240
1.4M	Pittsburgh	30-Jun-15		5,400	1,000
			Geometric Mean	1,678	505
4.3	Pittsburgh	04-Jun-15		211	66
4.3	Pittsburgh	09-Jun-15		6,200	2,700
4.3	Pittsburgh	15-Jun-15		1,200	410
4.3	Pittsburgh	23-Jun-15		3,100	260
4.3	Pittsburgh	30-Jun-15		6,700	2,800
			Geometric Mean	2,008	556
1.4M	Pittsburgh	07-Jul-15		2,600	1,100
1.4M	Pittsburgh	14-Jul-15		1,600	520
1.4M	Pittsburgh	21-Jul-15		620	148
1.4M	Pittsburgh	23-Jul-15		280	96
1.4M	Pittsburgh	31-Jul-15		233	23
			Geometric Mean	700	180

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
4.3	Pittsburgh	07-Jul-15		4,900	1,400
4.3	Pittsburgh	14-Jul-15		1,500	520
4.3	Pittsburgh	21-Jul-15		555	156
4.3	Pittsburgh	23-Jul-15		200	57
4.3	Pittsburgh	28-Jul-15		244	32
			Geometric Mean	724	183
1.4M	Pittsburgh	04-Aug-15		5,000	3,300
1.4M	Pittsburgh	11-Aug-15		97	43
1.4M	Pittsburgh	18-Aug-15		280	140
1.4M	Pittsburgh	20-Aug-15		620	222
1.4M	Pittsburgh	25-Aug-15		94	20
			Geometric Mean	380	154
4.3	Pittsburgh	04-Aug-15		5,500	3,600
4.3	Pittsburgh	11-Aug-15		242	75
4.3	Pittsburgh	18-Aug-15		223	104
4.3	Pittsburgh	20-Aug-15		410	152
4.3	Pittsburgh	25-Aug-15		60	16
			Geometric Mean	374	147
1.4M	Pittsburgh	01-Sep-15		80	24
1.4M	Pittsburgh	08-Sep-15		490	96
1.4M	Pittsburgh	15-Sep-15		370	136
1.4M	Pittsburgh	22-Sep-15		350	67
1.4M	Pittsburgh	29-Sep-15		2,400	1,500
			Geometric Mean	414	126
4.3	Pittsburgh	01-Sep-15		96	16
4.3	Pittsburgh	08-Sep-15		280	88
4.3	Pittsburgh	15-Sep-15		330	96
4.3	Pittsburgh	22-Sep-15		300	78
4.3	Pittsburgh	29-Sep-15		1,800	1,000
			Geometric Mean	344	101
1.4M	Pittsburgh	06-Oct-15		400	140
1.4M	Pittsburgh	13-Oct-15		280	80
1.4M	Pittsburgh	20-Oct-15		168	60
1.4M	Pittsburgh	22-Oct-15		180	32
1.4M	Pittsburgh	29-Oct-15		160	100
			Geometric Mean	222	74
4.3	Pittsburgh	06-Oct-15		380	120
4.3	Pittsburgh	13-Oct-15		272	67
4.3	Pittsburgh	20-Oct-15		120	60
4.3	Pittsburgh	22-Oct-15		124	20
4.3	Pittsburgh	29-Oct-15		144	108
			Geometric Mean	186	64
86.8	Wheeling	10-Apr-15		5,600	940
86.8	Wheeling	14-Apr-15		1,300	680
86.8	Wheeling	21-Apr-15		229	124
86.8	Wheeling	23-Apr-15		280	120
86.8	Wheeling	28-Apr-15		84	12
			Geometric Mean	523	163
92.8	Wheeling	10-Apr-15		7,500	1,900
92.8	Wheeling	14-Apr-15		1,336	750
92.8	Wheeling	21-Apr-15		232	57
92.8	Wheeling	23-Apr-15		274	100
92.8	Wheeling	28-Apr-15		60	32
			Geometric Mean	521	192

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
86.8	Wheeling	05-May-15		16	4
86.8	Wheeling	12-May-15		56	4
86.8	Wheeling	19-May-15		237	180
86.8	Wheeling	21-May-15		60	36
86.8	Wheeling	26-May-15		16	4
			Geometric Mean	46	13
92.8	Wheeling	05-May-15		112	36
92.8	Wheeling	12-May-15		140	100
92.8	Wheeling	19-May-15		223	104
92.8	Wheeling	21-May-15		208	24
92.8	Wheeling	26-May-15		24	4
			Geometric Mean	112	32
86.8	Wheeling	02-Jun-15		200	63
86.8	Wheeling	09-Jun-15		24	16
86.8	Wheeling	16-Jun-15		8,200	850
86.8	Wheeling	23-Jun-15		1,000	440
86.8	Wheeling	30-Jun-15		3,200	1,200
			Geometric Mean	661	214
92.8	Wheeling	02-Jun-15		520	400
92.8	Wheeling	09-Jun-15		2,500	618
92.8	Wheeling	16-Jun-15		20,000	1,160
92.8	Wheeling	23-Jun-15		918	430
92.8	Wheeling	30-Jun-15		2,200	1,300
			Geometric Mean	2,208	693
86.8	Wheeling	07-Jul-15		194	124
86.8	Wheeling	14-Jul-15		220	96
86.8	Wheeling	21-Jul-15		92	20
86.8	Wheeling	23-Jul-15		4	28
86.8	Wheeling	28-Jul-15		16	12
			Geometric Mean	48	38
92.8	Wheeling	07-Jul-15		1,100	645
92.8	Wheeling	14-Jul-15		20,000	74
92.8	Wheeling	21-Jul-15		168	44
92.8	Wheeling	23-Jul-15		212	40
92.8	Wheeling	28-Jul-15		77	8
			Geometric Mean	570	58
86.8	Wheeling	04-Aug-15		180	160
86.8	Wheeling	11-Aug-15		24	4
86.8	Wheeling	18-Aug-15		709	243
86.8	Wheeling	20-Aug-15		84	28
86.8	Wheeling	25-Aug-15		12	4
			Geometric Mean	79	28
92.8	Wheeling	04-Aug-15		16	12
92.8	Wheeling	11-Aug-15		84	16
92.8	Wheeling	18-Aug-15		7,300	2,600
92.8	Wheeling	20-Aug-15		250	124
92.8	Wheeling	25-Aug-15		132	16
			Geometric Mean	200	63
86.8	Wheeling	01-Sep-15		16	12
86.8	Wheeling	08-Sep-15		4	4
86.8	Wheeling	15-Sep-15		16	4
86.8	Wheeling	22-Sep-15		4	4
86.8	Wheeling	29-Sep-15		4	4
			Geometric Mean	7	5

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
92.8	Wheeling	01-Sep-15		156	68
92.8	Wheeling	08-Sep-15		36	4
92.8	Wheeling	15-Sep-15		20	28
92.8	Wheeling	22-Sep-15		36	8
92.8	Wheeling	29-Sep-15		40	57
			Geometric Mean	44	20
86.8	Wheeling	06-Oct-15		4	8
86.8	Wheeling	13-Oct-15		6,000	5,900
86.8	Wheeling	20-Oct-15		4	10
86.8	Wheeling	22-Oct-15		4	4
86.8	Wheeling	27-Oct-15		8	4
			Geometric Mean	20	24
92.8	Wheeling	06-Oct-15		63	44
92.8	Wheeling	13-Oct-15		10	16
92.8	Wheeling	20-Oct-15		8	10
92.8	Wheeling	22-Oct-15		8	10
92.8	Wheeling	27-Oct-15		16	8
			Geometric Mean	15	14
305.1	Huntington	07-Apr-15		186	132
305.1	Huntington	14-Apr-15		80	74
305.1	Huntington	21-Apr-15		71	56
305.1	Huntington	23-Apr-15		66	28
305.1	Huntington	28-Apr-15		80	54
			Geometric Mean	89	61
314.8	Huntington	07-Apr-15		280	203
314.8	Huntington	14-Apr-15		230	234
314.8	Huntington	21-Apr-15		229	180
314.8	Huntington	23-Apr-15		92	74
314.8	Huntington	28-Apr-15		88	71
			Geometric Mean	164	135
305.1	Huntington	05-May-15		8	4
305.1	Huntington	12-May-15		226	144
305.1	Huntington	19-May-15		28	16
305.1	Huntington	21-May-15		54	28
305.1	Huntington	26-May-15		28	12
			Geometric Mean	38	20
314.8	Huntington	05-May-15		44	32
314.8	Huntington	12-May-15		580	460
314.8	Huntington	19-May-15		108	48
314.8	Huntington	21-May-15		63	40
314.8	Huntington	26-May-15		66	32
			Geometric Mean	103	62
305.1	Huntington	02-Jun-15		16	8
305.1	Huntington	09-Jun-15		32	28
305.1	Huntington	16-Jun-15		254	160
305.1	Huntington	23-Jun-15		223	160
305.1	Huntington	30-Jun-15		80	60
			Geometric Mean	75	51
314.8	Huntington	02-Jun-15		88	54
314.8	Huntington	09-Jun-15		609	510
314.8	Huntington	16-Jun-15		128	112
314.8	Huntington	23-Jun-15		140	104
314.8	Huntington	30-Jun-15		320	120
			Geometric Mean	198	131

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
305.1	Huntington	07-Jul-15		104	80
305.1	Huntington	14-Jul-15		490	240
305.1	Huntington	21-Jul-15		927	450
305.1	Huntington	23-Jul-15		1,418	1,245
305.1	Huntington	28-Jul-15		24	4
			Geometric Mean	276	134
314.8	Huntington	07-Jul-15		400	239
314.8	Huntington	14-Jul-15		2,300	909
314.8	Huntington	21-Jul-15		4,800	2,373
314.8	Huntington	23-Jul-15		257	108
314.8	Huntington	28-Jul-15		200	169
			Geometric Mean	743	393
305.1	Huntington	04-Aug-15		4	4
305.1	Huntington	11-Aug-15		89	52
305.1	Huntington	18-Aug-15		20	8
305.1	Huntington	20-Aug-15		8	4
305.1	Huntington	25-Aug-15		8	4
			Geometric Mean	14	8
314.8	Huntington	04-Aug-15		8	4
314.8	Huntington	11-Aug-15		48	40
314.8	Huntington	18-Aug-15		4	4
314.8	Huntington	20-Aug-15		12	12
314.8	Huntington	25-Aug-15		16	4
			Geometric Mean	12	8
305.1	Huntington	01-Sep-15		4	4
305.1	Huntington	08-Sep-15		4	4
305.1	Huntington	15-Sep-15		8	8
305.1	Huntington	22-Sep-15		8	4
305.1	Huntington	29-Sep-15		12	4
			Geometric Mean	7	5
314.8	Huntington	01-Sep-15		48	4
314.8	Huntington	08-Sep-15		4	4
314.8	Huntington	15-Sep-15		51	16
314.8	Huntington	22-Sep-15		20	4
314.8	Huntington	29-Sep-15		40	12
			Geometric Mean	24	7
305.1	Huntington	06-Oct-15		8	4
305.1	Huntington	13-Oct-15		4	4
305.1	Huntington	20-Oct-15		4	4
305.1	Huntington	22-Oct-15		4	4
305.1	Huntington	27-Oct-15		16	4
			Geometric Mean	6	4
314.8	Huntington	06-Oct-15		49	28
314.8	Huntington	13-Oct-15		28	8
314.8	Huntington	20-Oct-15		4	12
314.8	Huntington	22-Oct-15		8	4
314.8	Huntington	27-Oct-15		20	12
			Geometric Mean	15	11
462.6	Cincinnati	07-Apr-15		450	360
462.6	Cincinnati	14-Apr-15		234	240
462.6	Cincinnati	21-Apr-15		560	400
462.6	Cincinnati	23-Apr-15		84	96
462.6	Cincinnati	28-Apr-15		200	164
			Geometric Mean	251	222

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	07-Apr-15		600	500
470	Cincinnati	14-Apr-15		240	251
470	Cincinnati	21-Apr-15		600	530
470	Cincinnati	23-Apr-15		124	77
470	Cincinnati	28-Apr-15		180	156
			Geometric Mean	286	240
477.5	Cincinnati	07-Apr-15		1,500	510
477.5	Cincinnati	14-Apr-15		1,000	330
477.5	Cincinnati	21-Apr-15		310	370
477.5	Cincinnati	23-Apr-15		152	108
477.5	Cincinnati	28-Apr-15		136	128
			Geometric Mean	395	244
462.6	Cincinnati	05-May-15		16	8
462.6	Cincinnati	12-May-15		56	40
462.6	Cincinnati	19-May-15		24	24
462.6	Cincinnati	21-May-15		16	32
462.6	Cincinnati	26-May-15		4	4
			Geometric Mean	17	16
470	Cincinnati	05-May-15		12	16
470	Cincinnati	12-May-15		32	20
470	Cincinnati	19-May-15		16	16
470	Cincinnati	21-May-15		8	16
470	Cincinnati	26-May-15		4	4
			Geometric Mean	11	13
477.5	Cincinnati	05-May-15		20	8
477.5	Cincinnati	12-May-15		500	297
477.5	Cincinnati	19-May-15		28	8
477.5	Cincinnati	21-May-15		12	4
477.5	Cincinnati	26-May-15		20	8
			Geometric Mean	37	14
462.6	Cincinnati	02-Jun-15		104	63
462.6	Cincinnati	09-Jun-15		60	80
462.6	Cincinnati	16-Jun-15		430	337
462.6	Cincinnati	23-Jun-15		152	104
462.6	Cincinnati	30-Jun-15		154	152
			Geometric Mean	144	122
470	Cincinnati	02-Jun-15		24	12
470	Cincinnati	09-Jun-15		540	220
470	Cincinnati	16-Jun-15		570	330
470	Cincinnati	23-Jun-15		220	88
470	Cincinnati	30-Jun-15		700	380
			Geometric Mean	258	124
477.5	Cincinnati	02-Jun-15		72	36
477.5	Cincinnati	09-Jun-15		13,600	6,500
477.5	Cincinnati	16-Jun-15		5,200	4,400
477.5	Cincinnati	23-Jun-15		116	63
477.5	Cincinnati	30-Jun-15		230	226
			Geometric Mean	671	430
462.6	Cincinnati	07-Jul-15		130	120
462.6	Cincinnati	16-Jul-15		690	440
462.6	Cincinnati	21-Jul-15		540	550
462.6	Cincinnati	23-Jul-15		176	140
462.6	Cincinnati	28-Jul-15		144	112
			Geometric Mean	262	215

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	07-Jul-15		130	80
470	Cincinnati	16-Jul-15		580	460
470	Cincinnati	21-Jul-15		2,200	1,020
470	Cincinnati	23-Jul-15		320	220
470	Cincinnati	28-Jul-15		88	96
			Geometric Mean	342	240
477.5	Cincinnati	07-Jul-15		100	84
477.5	Cincinnati	16-Jul-15		664	380
477.5	Cincinnati	21-Jul-15		3,200	1,100
477.5	Cincinnati	23-Jul-15		168	206
477.5	Cincinnati	28-Jul-15		132	84
			Geometric Mean	342	227
462.6	Cincinnati	04-Aug-15		96	60
462.6	Cincinnati	11-Aug-15		64	40
462.6	Cincinnati	18-Aug-15		520	350
462.6	Cincinnati	20-Aug-15		490	470
462.6	Cincinnati	25-Aug-15		20	20
			Geometric Mean	126	95
470	Cincinnati	04-Aug-15		166	124
470	Cincinnati	11-Aug-15		88	84
470	Cincinnati	18-Aug-15		20	4
470	Cincinnati	20-Aug-15		560	300
470	Cincinnati	25-Aug-15		16	8
			Geometric Mean	76	40
477.5	Cincinnati	04-Aug-15		3,600	780
477.5	Cincinnati	11-Aug-15		5,000	3,100
477.5	Cincinnati	18-Aug-15		60	60
477.5	Cincinnati	20-Aug-15		745	390
477.5	Cincinnati	25-Aug-15		16	8
			Geometric Mean	419	214
462.6	Cincinnati	01-Sep-15		36	48
462.6	Cincinnati	08-Sep-15		46	46
462.6	Cincinnati	15-Sep-15		4	4
462.6	Cincinnati	22-Sep-15		4	4
462.6	Cincinnati	29-Sep-15		108	120
			Geometric Mean	20	21
470	Cincinnati	01-Sep-15		96	66
470	Cincinnati	08-Sep-15		71	36
470	Cincinnati	15-Sep-15		20	4
470	Cincinnati	22-Sep-15		4	4
470	Cincinnati	29-Sep-15		4	4
			Geometric Mean	19	11
477.5	Cincinnati	01-Sep-15		4	4
477.5	Cincinnati	08-Sep-15		60	36
477.5	Cincinnati	15-Sep-15		36	4
477.5	Cincinnati	22-Sep-15		4	4
477.5	Cincinnati	29-Sep-15		28	8
			Geometric Mean	16	7
462.6	Cincinnati	06-Oct-15		44	32
462.6	Cincinnati	12-Oct-15		8	4
462.6	Cincinnati	20-Oct-15		16	8
462.6	Cincinnati	22-Oct-15		4	4
462.6	Cincinnati	27-Oct-15		8	16
			Geometric Mean	11	9

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
470	Cincinnati	06-Oct-15		8	4
470	Cincinnati	12-Oct-15		8	8
470	Cincinnati	20-Oct-15		4	8
470	Cincinnati	22-Oct-15		4	10
470	Cincinnati	27-Oct-15		20	16
			Geometric Mean	7	8
477.5	Cincinnati	06-Oct-15		16	8
477.5	Cincinnati	12-Oct-15		10	4
477.5	Cincinnati	20-Oct-15		12	8
477.5	Cincinnati	22-Oct-15		20	8
477.5	Cincinnati	27-Oct-15		16	28
			Geometric Mean	14	9
594	Louisville	08-Apr-15		900	1,100
594	Louisville	16-Apr-15		194	145
594	Louisville	21-Apr-15		1,255	1,100
594	Louisville	28-Apr-15		92	100
594	Louisville	30-Apr-15		71	100
			Geometric Mean	270	281
619.3	Louisville	08-Apr-15		600	1,200
619.3	Louisville	16-Apr-15		196	189
619.3	Louisville	21-Apr-15		210	223
619.3	Louisville	28-Apr-15		210	190
619.3	Louisville	30-Apr-15		100	120
			Geometric Mean	220	258
594	Louisville	05-May-15		12	20
594	Louisville	12-May-15		20	8
594	Louisville	19-May-15		28	12
594	Louisville	21-May-15		8	4
594	Louisville	26-May-15		24	20
			Geometric Mean	17	11
619.3	Louisville	05-May-15		48	32
619.3	Louisville	12-May-15		220	236
619.3	Louisville	19-May-15		48	16
619.3	Louisville	21-May-15		20	12
619.3	Louisville	26-May-15		52	40
			Geometric Mean	56	36
594	Louisville	02-Jun-15		4	4
594	Louisville	09-Jun-15		24	8
594	Louisville	16-Jun-15		8	8
594	Louisville	18-Jun-15		164	176
594	Louisville	30-Jun-15		271	134
			Geometric Mean	32	23
619.3	Louisville	02-Jun-15		60	92
619.3	Louisville	09-Jun-15		36	40
619.3	Louisville	16-Jun-15		100	60
619.3	Louisville	18-Jun-15		100	92
619.3	Louisville	30-Jun-15		360	208
			Geometric Mean	95	84
594	Louisville	07-Jul-15		340	80
594	Louisville	14-Jul-15		3,600	2,400
594	Louisville	21-Jul-15		900	240
594	Louisville	23-Jul-15		320	97
594	Louisville	28-Jul-15		71	37
			Geometric Mean	478	175

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
619.3	Louisville	07-Jul-15		320	100
619.3	Louisville	14-Jul-15		2,900	1,100
619.3	Louisville	23-Jul-15		340	260
619.3	Louisville	28-Jul-15		120	54
594	Louisville	05-Aug-15		219	16
594	Louisville	11-Aug-15		20	4
594	Louisville	18-Aug-15		8	24
594	Louisville	20-Aug-15		156	96
594	Louisville	25-Aug-15		4	4
			Geometric Mean	29	14
619.3	Louisville	05-Aug-15		20,000	20,000
619.3	Louisville	11-Aug-15		8	4
619.3	Louisville	18-Aug-15		60	40
619.3	Louisville	20-Aug-15		20,000	20,000
619.3	Louisville	25-Aug-15		12	8
			Geometric Mean	297	220
594	Louisville	01-Sep-15		77	92
594	Louisville	08-Sep-15		32	4
594	Louisville	15-Sep-15		4	4
594	Louisville	22-Sep-15		100	84
594	Louisville	29-Sep-15		100	51
			Geometric Mean	40	23
619.3	Louisville	01-Sep-15		48	4
619.3	Louisville	08-Sep-15		32	100
619.3	Louisville	15-Sep-15		172	16
619.3	Louisville	22-Sep-15		4	4
619.3	Louisville	29-Sep-15		49	60
			Geometric Mean	35	17
594	Louisville	06-Oct-15		180	180
594	Louisville	13-Oct-15		640	510
594	Louisville	21-Oct-15		694	3,100
594	Louisville	27-Oct-15		80	60
594	Louisville	29-Oct-15		156	180
			Geometric Mean	251	314
619.3	Louisville	06-Oct-15		36	52
619.3	Louisville	13-Oct-15		189	163
619.3	Louisville	21-Oct-15		12	10
619.3	Louisville	27-Oct-15		8	4
619.3	Louisville	29-Oct-15		2,400	1,300
			Geometric Mean	69	54
791.5	Evansville	07-Apr-15		500	500
791.5	Evansville	14-Apr-15		120	96
791.5	Evansville	21-Apr-15		130	110
791.5	Evansville	23-Apr-15		80	108
791.5	Evansville	28-Apr-15		43	40
			Geometric Mean	122	118
793.7	Evansville	07-Apr-15		2,000	2,000
793.7	Evansville	14-Apr-15		550	480
793.7	Evansville	21-Apr-14		380	260
793.7	Evansville	23-Apr-15		250	160
793.7	Evansville	28-Apr-15		57	63
			Geometric Mean	359	302

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
791.5	Evansville	05-May-15		20	24
791.5	Evansville	12-May-15		100	48
791.5	Evansville	19-May-15		84	92
791.5	Evansville	21-May-15		20	16
791.5	Evansville	26-May-15		76	30
			Geometric Mean	48	35
793.7	Evansville	05-May-15		12	28
793.7	Evansville	12-May-15		1,400	627
793.7	Evansville	19-May-15		1,200	1,200
793.7	Evansville	21-May-15		136	132
793.7	Evansville	26-May-15		192	136
			Geometric Mean	221	207
791.5	Evansville	02-Jun-15		40	8
791.5	Evansville	09-Jun-15		24	8
791.5	Evansville	16-Jun-15		4	10
791.5	Evansville	23-Jun-15		100	700
791.5	Evansville	30-Jun-15		180	127
			Geometric Mean	37	36
793.7	Evansville	02-Jun-15		32	36
793.7	Evansville	09-Jun-15		36	40
793.7	Evansville	16-Jun-15		80	108
793.7	Evansville	23-Jun-15		300	260
793.7	Evansville	30-Jun-15		200	232
			Geometric Mean	89	99
791.5	Evansville	07-Jul-15		270	190
791.5	Evansville	14-Jul-15		200	200
791.5	Evansville	21-Jul-15		500	220
791.5	Evansville	23-Jul-15		112	104
791.5	Evansville	28-Jul-15		112	80
			Geometric Mean	202	147
793.7	Evansville	07-Jul-15		1,600	1,800
793.7	Evansville	14-Jul-15		100	160
793.7	Evansville	21-Jul-15		200	420
793.7	Evansville	23-Jul-15		204	180
793.7	Evansville	28-Jul-15		130	200
			Geometric Mean	243	337
791.5	Evansville	04-Aug-15		8	20
791.5	Evansville	11-Aug-15		52	12
791.5	Evansville	18-Aug-15		4	4
791.5	Evansville	20-Aug-15		80	57
791.5	Evansville	25-Aug-15		400	12
			Geometric Mean	35	15
793.7	Evansville	04-Aug-15		8	16
793.7	Evansville	11-Aug-15		60	40
793.7	Evansville	18-Aug-15		10	8
793.7	Evansville	20-Aug-15		1,300	1,400
793.7	Evansville	25-Aug-15		96	88
			Geometric Mean	57	58
791.5	Evansville	01-Sep-15		28	24
791.5	Evansville	08-Sep-15		4	4
791.5	Evansville	15-Sep-15		20	16
791.5	Evansville	22-Sep-15		4	4
791.5	Evansville	29-Sep-15		350	645
			Geometric Mean	20	21

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
793.7	Evansville	01-Sep-15		10	36
793.7	Evansville	08-Sep-15		4	4
793.7	Evansville	15-Sep-15		90	84
793.7	Evansville	22-Sep-15		100	84
793.7	Evansville	29-Sep-15		9,700	10,000
			Geometric Mean	81	100
791.5	Evansville	06-Oct-15		8	4
791.5	Evansville	13-Oct-15		16	20
791.5	Evansville	20-Oct-15		4	4
791.5	Evansville	22-Oct-15		8	4
791.5	Evansville	27-Oct-15		8	4
			Geometric Mean	8	6
793.7	Evansville	06-Oct-15		63	57
793.7	Evansville	13-Oct-15		1,330	1,180
793.7	Evansville	20-Oct-15		71	54
793.7	Evansville	22-Oct-15		20	12
793.7	Evansville	27-Oct-15		50	43
			Geometric Mean	90	72
1.4M	Pittsburgh	12-Apr-16		2,300	1,500
1.4M	Pittsburgh	19-Apr-16		17	17
1.4M	Pittsburgh	21-Apr-16		20	12
1.4M	Pittsburgh	26-Apr-16		44	22
1.4M	Pittsburgh	28-Apr-16		91	47
			Geometric Mean	80	50
4.3	Pittsburgh	12-Apr-16		1,800	900
4.3	Pittsburgh	19-Apr-16		33	25
4.3	Pittsburgh	21-Apr-16		8	8
4.3	Pittsburgh	26-Apr-16		23	17
4.3	Pittsburgh	28-Apr-16		80	40
			Geometric Mean	61	42
1.4M	Pittsburgh	3-May-16		317	178
1.4M	Pittsburgh	10-May-16		156	56
1.4M	Pittsburgh	17-May-16		150	50
1.4M	Pittsburgh	24-May-16		550	190
1.4M	Pittsburgh	31-May-16		181	96
			Geometric Mean	236	98
4.3	Pittsburgh	3-May-16		325	139
4.3	Pittsburgh	10-May-16		211	100
4.3	Pittsburgh	17-May-16		150	47
4.3	Pittsburgh	24-May-16		673	300
4.3	Pittsburgh	31-May-16		360	116
			Geometric Mean	302	118
1.4M	Pittsburgh	7-Jun-16		4,800	2,000
1.4M	Pittsburgh	14-Jun-16		46	11
1.4M	Pittsburgh	21-Jun-16		270	92
1.4M	Pittsburgh	23-Jun-16		2,800	1,000
1.4M	Pittsburgh	28-Jun-16		140	51
			Geometric Mean	471	161
4.3	Pittsburgh	7-Jun-16		3,300	1,600
4.3	Pittsburgh	14-Jun-16		77	14
4.3	Pittsburgh	21-Jun-16		260	96
4.3	Pittsburgh	23-Jun-16		2,100	1,000
4.3	Pittsburgh	28-Jun-16		112	40
			Geometric Mean	435	154

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
1.4M	Pittsburgh	5-Jul-16		116	64
1.4M	Pittsburgh	19-Jul-16		2,100	520
1.4M	Pittsburgh	21-Jul-16		112	24
1.4M	Pittsburgh	26-Jul-16		1,700	290
1.4M	Pittsburgh	28-Jul-16		140	40
			Geometric Mean	365	98
4.3	Pittsburgh	5-Jul-16		1,900	520
4.3	Pittsburgh	19-Jul-16		510	160
4.3	Pittsburgh	21-Jul-16		92	16
4.3	Pittsburgh	26-Jul-16		2,300	350
4.3	Pittsburgh	28-Jul-16		233	44
			Geometric Mean	544	115
1.4M	Pittsburgh	2-Aug-16		900	217
1.4M	Pittsburgh	9-Aug-16		83	28
1.4M	Pittsburgh	16-Aug-16		4,700	1,300
1.4M	Pittsburgh	23-Aug-16		253	52
1.4M	Pittsburgh	30-Aug-16		3,200	582
			Geometric Mean	778	189
4.3	Pittsburgh	2-Aug-16		1,200	564
4.3	Pittsburgh	9-Aug-16		84	28
4.3	Pittsburgh	16-Aug-16		4,300	2,000
4.3	Pittsburgh	23-Aug-16		144	56
4.3	Pittsburgh	30-Aug-16		2,400	618
			Geometric Mean	684	256
1.4M	Pittsburgh	6-Sep-16		160	40
1.4M	Pittsburgh	13-Sep-16		340	72
1.4M	Pittsburgh	20-Sep-16		800	272
1.4M	Pittsburgh	22-Sep-16		168	44
1.4M	Pittsburgh	27-Sep-16		160	40
			Geometric Mean	259	67
4.3	Pittsburgh	6-Sep-16		104	32
4.3	Pittsburgh	13-Sep-16		220	63
4.3	Pittsburgh	20-Sep-16		991	317
4.3	Pittsburgh	22-Sep-16		156	66
4.3	Pittsburgh	27-Sep-16		104	32
			Geometric Mean	206	67
1.4M	Pittsburgh	4-Oct-16		900	340
1.4M	Pittsburgh	11-Oct-16		336	106
1.4M	Pittsburgh	18-Oct-16		2,000	782
1.4M	Pittsburgh	20-Oct-16		420	120
1.4M	Pittsburgh	25-Oct-16		390	181
			Geometric Mean	630	228
4.3	Pittsburgh	4-Oct-16		1,500	530
4.3	Pittsburgh	11-Oct-16		573	208
4.3	Pittsburgh	18-Oct-16		800	360
4.3	Pittsburgh	20-Oct-16		570	160
4.3	Pittsburgh	25-Oct-16		510	242
			Geometric Mean	725	274
86.8	Wheeling	6-Apr-16		4	4
86.8	Wheeling	12-Apr-16		80	84
86.8	Wheeling	19-Apr-16		44	24
86.8	Wheeling	21-Apr-16		12	4
86.8	Wheeling	26-Apr-16		4	4
			Geometric Mean	15	11

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
92.8	Wheeling	6-Apr-16		8	12
92.8	Wheeling	12-Apr-16		196	137
92.8	Wheeling	19-Apr-16		88	43
92.8	Wheeling	21-Apr-16		4	4
92.8	Wheeling	26-Apr-16		590	410
			Geometric Mean	50	41
86.8	Wheeling	3-May-16		116	60
86.8	Wheeling	12-May-16		24	20
86.8	Wheeling	17-May-16		12	4
86.8	Wheeling	24-May-16		108	136
86.8	Wheeling	31-May-16		12	10
			Geometric Mean	34	23
92.8	Wheeling	3-May-16		124	128
92.8	Wheeling	12-May-16		20	20
92.8	Wheeling	17-May-16		57	28
92.8	Wheeling	24-May-16		243	189
92.8	Wheeling	31-May-16		40	50
			Geometric Mean	67	58
86.8	Wheeling	7-Jun-16		116	89
86.8	Wheeling	14-Jun-16		4	4
86.8	Wheeling	21-Jun-16		12	4
86.8	Wheeling	23-Jun-16		20	20
86.8	Wheeling	28-Jun-16		30	16
			Geometric Mean	20	14
92.8	Wheeling	7-Jun-16		573	520
92.8	Wheeling	14-Jun-16		24	28
92.8	Wheeling	21-Jun-16		40	38
92.8	Wheeling	23-Jun-16		200	2,200
92.8	Wheeling	28-Jun-16		184	80
			Geometric Mean	115	158
86.8	Wheeling	5-Jul-16		4	12
86.8	Wheeling	12-Jul-16		4	4
86.8	Wheeling	19-Jul-16		4	4
86.8	Wheeling	21-Jul-16		4	10
86.8	Wheeling	26-Jul-16		12	8
			Geometric Mean	5	7
92.8	Wheeling	5-Jul-16		100	66
92.8	Wheeling	12-Jul-16		38	36
92.8	Wheeling	19-Jul-16		32	12
92.8	Wheeling	21-Jul-16		24	16
92.8	Wheeling	26-Jul-16		80	40
			Geometric Mean	47	28
86.8	Wheeling	2-Aug-16		24	48
86.8	Wheeling	9-Aug-16		8	8
86.8	Wheeling	16-Aug-16		84	44
86.8	Wheeling	23-Aug-16		20	12
86.8	Wheeling	30-Aug-16		8	4
			Geometric Mean	19	15
92.8	Wheeling	2-Aug-16		238	132
92.8	Wheeling	9-Aug-16		4	4
92.8	Wheeling	16-Aug-16		350	229
92.8	Wheeling	23-Aug-16		43	43
92.8	Wheeling	30-Aug-16		217	64
			Geometric Mean	79	51

Appendix G. Ohio River Bacteria Data, 2012-2014				
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL
86.8	Wheeling	6-Sep-16	4	16
86.8	Wheeling	13-Sep-16	10	10
86.8	Wheeling	20-Sep-16	4	10
86.8	Wheeling	22-Sep-16	20	4
86.8	Wheeling	27-Sep-16	4	8
		Geometric Mean	7	9
92.8	Wheeling	6-Sep-16	49	12
92.8	Wheeling	13-Sep-16	46	16
92.8	Wheeling	20-Sep-16	46	28
92.8	Wheeling	22-Sep-16	12	8
92.8	Wheeling	27-Sep-16	48	12
		Geometric Mean	36	14
86.8	Wheeling	4-Oct-16	8	12
86.8	Wheeling	12-Oct-16	4	4
86.8	Wheeling	18-Oct-16	4	10
86.8	Wheeling	20-Oct-16	8	24
86.8	Wheeling	25-Oct-16	163	116
		Geometric Mean	11	17
92.8	Wheeling	4-Oct-16	55	38
92.8	Wheeling	12-Oct-16	24	4
92.8	Wheeling	18-Oct-16	80	16
92.8	Wheeling	20-Oct-16	32	28
92.8	Wheeling	25-Oct-16	360	258
		Geometric Mean	66	28
305.1	Huntington	5-Apr-16	8	4
305.1	Huntington	12-Apr-16	8	8
305.1	Huntington	19-Apr-16	32	8
305.1	Huntington	21-Apr-16	4	4
305.1	Huntington	26-Apr-16	12	8
		Geometric Mean	10	6
314.8	Huntington	5-Apr-16	51	8
314.8	Huntington	12-Apr-16	536	491
314.8	Huntington	19-Apr-16	104	57
314.8	Huntington	21-Apr-16	12	12
314.8	Huntington	26-Apr-16	54	28
		Geometric Mean	71	38
305.1	Huntington	3-May-16	297	257
305.1	Huntington	10-May-16	60	63
305.1	Huntington	17-May-16	20	8
305.1	Huntington	24-May-16	116	88
305.1	Huntington	31-May-16	56	20
		Geometric Mean	75	47
314.8	Huntington	3-May-16	1,046	700
314.8	Huntington	10-May-16	94	83
314.8	Huntington	17-May-16	89	74
314.8	Huntington	24-May-16	340	300
314.8	Huntington	31-May-16	48	61
		Geometric Mean	170	151
305.1	Huntington	7-Jun-16	120	140
305.1	Huntington	14-Jun-16	16	8
305.1	Huntington	21-Jun-16	24	12
305.1	Huntington	23-Jun-16	691	591
305.1	Huntington	28-Jun-16	691	600
		Geometric Mean	117	86

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
314.8	Huntington	7-Jun-16		310	140
314.8	Huntington	14-Jun-16		54	49
314.8	Huntington	21-Jun-16		28	20
314.8	Huntington	23-Jun-16		470	400
314.8	Huntington	28-Jun-16		530	240
			Geometric Mean	163	106
305.1	Huntington	5-Jul-16		280	128
305.1	Huntington	12-Jul-16		57	8
305.1	Huntington	14-Jul-16		243	132
305.1	Huntington	26-Jul-16		80	46
305.1	Huntington	28-Jul-16		128	84
			Geometric Mean	132	55
314.8	Huntington	5-Jul-16		1,200	873
314.8	Huntington	12-Jul-16		43	24
314.8	Huntington	14-Jul-16		164	96
314.8	Huntington	26-Jul-16		330	166
314.8	Huntington	28-Jul-16		390	223
			Geometric Mean	256	149
305.1	Huntington	2-Aug-16		24	16
305.1	Huntington	9-Aug-16		8	8
305.1	Huntington	16-Aug-16		20	16
305.1	Huntington	23-Aug-16		69	12
305.1	Huntington	30-Aug-16		77	28
			Geometric Mean	29	15
314.8	Huntington	2-Aug-16		36	24
314.8	Huntington	9-Aug-16		4	4
314.8	Huntington	16-Aug-16		124	132
314.8	Huntington	23-Aug-16		63	4
314.8	Huntington	30-Aug-16		8	4
			Geometric Mean	25	12
305.1	Huntington	6-Sep-16		20	4
305.1	Huntington	13-Sep-16		4	4
305.1	Huntington	20-Sep-16		63	36
305.1	Huntington	22-Sep-16		48	48
305.1	Huntington	27-Sep-16		4	4
			Geometric Mean	16	10
314.8	Huntington	6-Sep-16		4	4
314.8	Huntington	13-Sep-16		8	4
314.8	Huntington	20-Sep-16		8	8
314.8	Huntington	22-Sep-16		4	4
314.8	Huntington	27-Sep-16		8	8
			Geometric Mean	6	5
305.1	Huntington	4-Oct-16		8	8
305.1	Huntington	11-Oct-16		12	4
305.1	Huntington	18-Oct-16		12	20
305.1	Huntington	20-Oct-16		4	4
305.1	Huntington	25-Oct-16		16	20
			Geometric Mean	9	9
314.8	Huntington	4-Oct-16		20	8
314.8	Huntington	11-Oct-16		8	8
314.8	Huntington	18-Oct-16		4	4
314.8	Huntington	20-Oct-16		4	4
314.8	Huntington	25-Oct-16		36	20
			Geometric Mean	10	7

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
462.6	Cincinnati	5-Apr-16		16	4
462.6	Cincinnati	12-Apr-16		450	500
462.6	Cincinnati	19-Apr-16		20	50
462.6	Cincinnati	21-Apr-16		8	4
462.6	Cincinnati	25-Apr-16		12	12
			Geometric Mean	27	22
470	Cincinnati	5-Apr-16		12	8
470	Cincinnati	12-Apr-16		550	490
470	Cincinnati	19-Apr-16		28	8
470	Cincinnati	21-Apr-16		4	4
470	Cincinnati	25-Apr-16		28	28
			Geometric Mean	29	20
477.5	Cincinnati	5-Apr-16		12	12
477.5	Cincinnati	12-Apr-16		982	3,000
477.5	Cincinnati	19-Apr-16		40	12
477.5	Cincinnati	21-Apr-16		4	4
477.5	Cincinnati	25-Apr-16		4	20
			Geometric Mean	24	32
462.6	Cincinnati	3-May-16		116	88
462.6	Cincinnati	10-May-16		63	44
462.6	Cincinnati	17-May-16		60	76
462.6	Cincinnati	24-May-16		92	84
462.6	Cincinnati	31-May-16		20	16
			Geometric Mean	60	52
470	Cincinnati	3-May-16		168	214
470	Cincinnati	10-May-16		84	80
470	Cincinnati	17-May-16		54	68
470	Cincinnati	24-May-16		108	68
470	Cincinnati	31-May-16		28	12
			Geometric Mean	75	62
477.5	Cincinnati	3-May-16		260	170
477.5	Cincinnati	10-May-16		64	28
477.5	Cincinnati	17-May-16		77	104
477.5	Cincinnati	24-May-16		100	108
477.5	Cincinnati	31-May-16		12	4
			Geometric Mean	69	46
462.6	Cincinnati	7-Jun-16		132	116
462.6	Cincinnati	14-Jun-16		16	24
462.6	Cincinnati	21-Jun-16		20	8
462.6	Cincinnati	23-Jun-16		2,200	2,000
462.6	Cincinnati	28-Jun-16		540	220
			Geometric Mean	138	100
470	Cincinnati	7-Jun-16		140	140
470	Cincinnati	14-Jun-16		100	20
470	Cincinnati	21-Jun-16		16	8
470	Cincinnati	23-Jun-16		226	176
470	Cincinnati	28-Jun-16		360	260
			Geometric Mean	113	63
477.5	Cincinnati	7-Jun-16		254	120
477.5	Cincinnati	14-Jun-16		16	4
477.5	Cincinnati	21-Jun-16		4	4
477.5	Cincinnati	23-Jun-16		4,700	3,900
477.5	Cincinnati	28-Jun-16		216	240
			Geometric Mean	111	71

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
462.6	Cincinnati	5-Jul-16		490	370
462.6	Cincinnati	12-Jul-16		40	24
462.6	Cincinnati	19-Jul-16		16	12
462.6	Cincinnati	21-Jul-16		80	44
462.6	Cincinnati	26-Jul-16		32	40
			Geometric Mean	60	45
470	Cincinnati	5-Jul-16		6,700	7,100
470	Cincinnati	12-Jul-16		16	8
470	Cincinnati	19-Jul-16		51	24
470	Cincinnati	21-Jul-16		51	44
470	Cincinnati	26-Jul-16		8	16
			Geometric Mean	74	63
477.5	Cincinnati	5-Jul-16		223	209
477.5	Cincinnati	12-Jul-16		16	12
477.5	Cincinnati	19-Jul-16		380	330
477.5	Cincinnati	21-Jul-16		20	20
477.5	Cincinnati	26-Jul-16		8	12
			Geometric Mean	46	46
462.6	Cincinnati	2-Aug-16		88	80
462.6	Cincinnati	9-Aug-16		40	20
462.6	Cincinnati	16-Aug-16		590	320
462.6	Cincinnati	23-Aug-16		96	64
462.6	Cincinnati	30-Aug-16		250	234
			Geometric Mean	138	95
470	Cincinnati	2-Aug-16		340	370
470	Cincinnati	9-Aug-16		56	28
470	Cincinnati	16-Aug-16		2,800	2,100
470	Cincinnati	23-Aug-16		72	24
470	Cincinnati	30-Aug-16		1,000	490
			Geometric Mean	329	191
477.5	Cincinnati	2-Aug-16		54	70
477.5	Cincinnati	9-Aug-16		20	24
477.5	Cincinnati	16-Aug-16		5,300	2,700
477.5	Cincinnati	23-Aug-16		128	52
477.5	Cincinnati	30-Aug-16		1,400	930
			Geometric Mean	252	185
470	Cincinnati	6-Sep-16		56	32
470	Cincinnati	13-Sep-16		116	31
470	Cincinnati	20-Sep-16		32	24
470	Cincinnati	22-Sep-16		8	16
470	Cincinnati	27-Sep-16		48	54
			Geometric Mean	38	29
462.6	Cincinnati	6-Sep-16		12	16
462.6	Cincinnati	13-Sep-16		4	8
462.6	Cincinnati	20-Sep-16		20	16
462.6	Cincinnati	22-Sep-16		20	8
462.6	Cincinnati	27-Sep-16		16	4
			Geometric Mean	13	9
477.5	Cincinnati	6-Sep-16		28	20
477.5	Cincinnati	13-Sep-16		176	200
477.5	Cincinnati	20-Sep-16		92	60
477.5	Cincinnati	22-Sep-16		20	24
477.5	Cincinnati	27-Sep-16		745	640
			Geometric Mean	92	82

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
462.6	Cincinnati	3-Oct-16		28	4
462.6	Cincinnati	11-Oct-16		12	4
462.6	Cincinnati	18-Oct-16		12	8
462.6	Cincinnati	20-Oct-16		580	650
462.6	Cincinnati	25-Oct-16		64	70
			Geometric Mean	43	23
470	Cincinnati	3-Oct-16		64	4
470	Cincinnati	11-Oct-16		8	8
470	Cincinnati	18-Oct-16		4	4
470	Cincinnati	20-Oct-16		13,400	8,700
470	Cincinnati	25-Oct-16		88	80
			Geometric Mean	75	39
477.5	Cincinnati	3-Oct-16		44	24
477.5	Cincinnati	11-Oct-16		16	16
477.5	Cincinnati	18-Oct-16		40	16
477.5	Cincinnati	20-Oct-16		2,100	2,300
477.5	Cincinnati	25-Oct-16		80	56
			Geometric Mean	86	60
594	Louisville	5-Apr-16		38	64
594	Louisville	12-Apr-16		120	100
594	Louisville	19-Apr-16		25	4
594	Louisville	21-Apr-16		8	4
594	Louisville	26-Apr-16		4	8
			Geometric Mean	21	15
619.3	Louisville	5-Apr-16		40	51
619.3	Louisville	12-Apr-16		104	246
619.3	Louisville	19-Apr-16		8	16
619.3	Louisville	21-Apr-16		12	10
619.3	Louisville	26-Apr-16		8	8
			Geometric Mean	20	28
594	Louisville	3-May-16		210	270
594	Louisville	10-May-16		136	100
594	Louisville	17-May-16		194	191
594	Louisville	24-May-16		214	214
594	Louisville	31-May-16		148	86
			Geometric Mean	177	157
619.3	Louisville	3-May-16		390	210
619.3	Louisville	10-May-16		124	84
619.3	Louisville	17-May-16		220	214
619.3	Louisville	24-May-16		220	180
619.3	Louisville	31-May-16		100	86
			Geometric Mean	188	142
594	Louisville	7-Jun-16		44	24
594	Louisville	14-Jun-16		57	43
594	Louisville	21-Jun-16		4	16
594	Louisville	22-Jun-16		43	44
594	Louisville	28-Jun-16		400	340
			Geometric Mean	44	48
619.3	Louisville	7-Jun-16		24	20
619.3	Louisville	14-Jun-16		48	4
619.3	Louisville	21-Jun-16		60	44
619.3	Louisville	22-Jun-16		200	92
619.3	Louisville	28-Jun-16		1,900	2,000
			Geometric Mean	121	58

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
594	Louisville	6-Jul-16		112	108
594	Louisville	13-Jul-16		280	143
594	Louisville	19-Jul-16		420	300
594	Louisville	26-Jul-16		40	12
619.3	Louisville	6-Jul-16		864	370
619.3	Louisville	13-Jul-16		200	120
619.3	Louisville	19-Jul-16		20	28
619.3	Louisville	26-Jul-16		32	24
594	Louisville	2-Aug-16		80	40
594	Louisville	9-Aug-16		74	24
594	Louisville	16-Aug-16		184	8
594	Louisville	23-Aug-16		74	20
594	Louisville	30-Aug-16		390	540
			Geometric Mean	126	38
619.3	Louisville	2-Aug-16		196	54
619.3	Louisville	9-Aug-16		48	56
619.3	Louisville	16-Aug-16		11,400	6,400
619.3	Louisville	23-Aug-16		400	210
619.3	Louisville	30-Aug-16		86	40
			Geometric Mean	326	175
594	Louisville	6-Sep-16		24	16
594	Louisville	13-Sep-16		60	32
594	Louisville	20-Sep-16		189	4
594	Louisville	22-Sep-16		46	16
594	Louisville	27-Sep-16		12	12
			Geometric Mean	43	13
619.3	Louisville	6-Sep-16		60	24
619.3	Louisville	13-Sep-16		24	16
619.3	Louisville	20-Sep-16		88	66
619.3	Louisville	22-Sep-16		40	20
619.3	Louisville	27-Sep-16		97	20
			Geometric Mean	55	25
594	Louisville	4-Oct-16		16	16
594	Louisville	11-Oct-16		4	10
594	Louisville	18-Oct-16		4	4
594	Louisville	19-Oct-16		4	4
594	Louisville	25-Oct-16		66	44
			Geometric Mean	9	10
619.3	Louisville	4-Oct-16		56	16
619.3	Louisville	11-Oct-16		12	16
619.3	Louisville	18-Oct-16		132	144
619.3	Louisville	19-Oct-16		240	440
619.3	Louisville	25-Oct-16		160	110
			Geometric Mean	81	71
791.5	Evansville	5-Apr-16		1,100	116
791.5	Evansville	12-Apr-16		150	132
791.5	Evansville	19-Apr-16		4	28
791.5	Evansville	21-Apr-16		16	4
791.5	Evansville	26-Apr-16		24	36
			Geometric Mean	48	36
793.7	Evansville	5-Apr-16		450	90
793.7	Evansville	12-Apr-16		3,000	3,600
793.7	Evansville	19-Apr-16		16	40
793.7	Evansville	21-Apr-16		40	16
793.7	Evansville	26-Apr-16		63	80
			Geometric Mean	140	111

Appendix G. Ohio River Bacteria Data, 2012-2014					
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL		E. COLI. #/100mL
791.5	Evansville	3-May-16		210	120
791.5	Evansville	10-May-16		84	116
791.5	Evansville	17-May-16		172	240
791.5	Evansville	24-May-16		120	140
791.5	Evansville	31-May-16		43	51
			Geometric Mean	109	119
793.7	Evansville	3-May-16		190	212
793.7	Evansville	10-May-16		440	1,100
793.7	Evansville	17-May-16		300	210
793.7	Evansville	24-May-16		150	150
793.7	Evansville	31-May-16		108	148
			Geometric Mean	210	255
791.5	Evansville	7-Jun-16		128	154
791.5	Evansville	14-Jun-16		80	116
791.5	Evansville	21-Jun-16		4	24
791.5	Evansville	23-Jun-16		51	57
791.5	Evansville	28-Jun-16		230	300
			Geometric Mean	54	94
793.7	Evansville	7-Jun-16		157	164
793.7	Evansville	14-Jun-16		130	191
793.7	Evansville	21-Jun-16		12	34
793.7	Evansville	23-Jun-16		2,300	2,300
793.7	Evansville	28-Jun-16		360	300
			Geometric Mean	183	236
791.5	Evansville	5-Jul-16		663	763
791.5	Evansville	12-Jul-16		130	32
791.5	Evansville	19-Jul-16		50	1,100
791.5	Evansville	21-Jul-16		250	1,000
791.5	Evansville	26-Jul-16		900	2,000
			Geometric Mean	250	557
793.7	Evansville	5-Jul-16		690	400
793.7	Evansville	12-Jul-16		120	48
793.7	Evansville	19-Jul-16		700	1,400
793.7	Evansville	21-Jul-16		720	1,100
793.7	Evansville	26-Jul-16		2,000	1,500
			Geometric Mean	609	536
791.5	Evansville	2-Aug-16		40	30
791.5	Evansville	9-Aug-16		100	90
791.5	Evansville	16-Aug-16		500	220
791.5	Evansville	23-Aug-16		40	92
791.5	Evansville	30-Aug-16		12	20
			Geometric Mean	63	64
793.7	Evansville	2-Aug-16		120	112
793.7	Evansville	9-Aug-16		130	124
793.7	Evansville	16-Aug-16		700	600
793.7	Evansville	23-Aug-16		100	70
793.7	Evansville	30-Aug-16		140	100
			Geometric Mean	173	142
791.5	Evansville	6-Sep-16		3,000	4,900
791.5	Evansville	13-Sep-16		20	50
791.5	Evansville	20-Sep-16		40	46
791.5	Evansville	22-Sep-16		20	4
791.5	Evansville	27-Sep-16		16	20
			Geometric Mean	60	62

Appendix G. Ohio River Bacteria Data, 2012-2014				
MILEPOINT	STATION	DATE	FECAL COLIFORM #/100mL	E. COLI. #/100mL
793.7	Evansville	6-Sep-16	74	112
793.7	Evansville	13-Sep-16	80	40
793.7	Evansville	20-Sep-16	250	330
793.7	Evansville	22-Sep-16	28	40
793.7	Evansville	27-Sep-16	66	120
		Geometric Mean	77	93
791.5	Evansville	4-Oct-16	8	32
791.5	Evansville	11-Oct-16	24	4
791.5	Evansville	18-Oct-16	4	4
791.5	Evansville	20-Oct-16	8	4
791.5	Evansville	25-Oct-16	10	4
		Geometric Mean	9	6
793.7	Evansville	4-Oct-16	31	24
793.7	Evansville	11-Oct-16	16	16
793.7	Evansville	18-Oct-16	8	8
793.7	Evansville	20-Oct-16	8	4
793.7	Evansville	25-Oct-16	20	8
		Geometric Mean	14	10

APPENDIX H

Methyl Mercury Fish Tissue Contaminants

Data

2012-2016

Appendix H. Methyl mercury fish tissue contaminants data.

Sample						MeHg	Consumption-Weighted	
River	Pool	Year	Species	Trophic Level	Avg Length (cm)	Rresult	# Fish in sample	Pool Avg MeHg in Fish Tissue
Mile						(mg/kg)		(mg/kg)
0.9	Emsworth	2012	walleye	4	46.7	0.107	3	0.106
1.8	Emsworth	2012	silver redhorse	3	50.8	0.0827	3	
2.5	Emsworth	2015	channel catfish	3	43.3	0.0625	3	
2.5	Emsworth	2015	freshwater drum	3	55.3	0.248	3	
2.5	Emsworth	2013	channel catfish	4	49.67	0.0776	3	
2.5	Emsworth	2015	channel catfish	4	43.3	0.0625	3	
5.2	Emsworth	2012	smallmouth buffalo	3	50	0.0786	3	
8.6	Dashields	2013	freshwater drum	3	42.12	0.184	3	0.179
10.3	Dashields	2013	smallmouth buffalo	3	45.8	0.167	3	
10.3	Dashields	2013	sauger	4	35.3	0.181	3	
10.3	Dashields	2013	walleye	4	47.5	0.187	3	
24	Montgomery	2015	channel catfish	3	43.3	0.0641	3	0.091
25.5	Montgomery	2013	freshwater drum	3	34.12	0.0922	3	
25.5	Montgomery	2013	smallmouth buffalo	3	50.8	0.167	3	
26	Montgomery	2014	channel catfish	4	46	0.046	2	
26	Montgomery	2015	channel catfish	4	48	0.0417	1	
26	Montgomery	2015	sauger	4	33.5	0.112	2	
29	Montgomery	2015	common carp	3	51	0.0792	3	
43	New Cumberland	2013	smallmouth buffalo	3	50.3	0.141	3	0.082
55.2	Pike Island	2012	bluegill	3	13.9	0.0249	3	0.067
65.5	Pike Island	2013	smallmouth bass	4	37.5	0.125	3	
84.9	Hannibal	2013	smallmouth buffalo	3	49.17	0.0838	3	0.142
86.7	Hannibal	2013	smallmouth bass	4	41.3	0.152	3	
91.3	Hannibal	2012	common carp	3	60	0.204	3	
91.3	Hannibal	2012	smallmouth buffalo	3	45.17	0.0711	3	
95	Hannibal	2013	common carp	3	59.8	0.115	3	
100	Hannibal	2014	channel catfish	4	46.7	0.262	3	
100	Hannibal	2015	channel catfish	4	41.3	0.0665	3	
122.2	Hannibal	2013	sauger	4	43.3	0.252	3	
127	Willow Island	2012	bluegill	3	16.9	0.027	3	0.132
127	Willow Island	2013	bluegill	3	16	0.03	3	
127	Willow Island	2012	common carp	3	66	0.111	3	
127	Willow Island	2013	common carp	3	55.3	0.145	3	
127	Willow Island	2012	freshwater drum	3	51	0.113	3	
127	Willow Island	2013	freshwater drum	3	53.5	0.163	2	
127	Willow Island	2012	quillback	3	34.5	0.0532	3	
127	Willow Island	2013	quillback	3	39.67	0.0524	3	
127	Willow Island	2012	smallmouth buffalo	3	54.2	0.116	3	
127	Willow Island	2013	smallmouth buffalo	3	51.3	0.201	3	
127	Willow Island	2012	walleye	4	56.8	0.214	3	
127	Willow Island	2013	walleye	4	52	0.12	1	
127	Willow Island	2016	walleye	4	27	0.179	1	
128	Willow Island	2016	black crappie	3	23	0.0816	1	
133	Willow Island	2016	flathead catfish	4	46	0.308	1	
137.8	Willow Island	2012	bluegill	3	19.53	0.0772	3	
140	Willow Island	2016	channel catfish	3	40.8	0.0664	3	
140	Willow Island	2016	smallmouth buffalo	3	49.3	0.238	3	
140	Willow Island	2016	flathead catfish	4	44.5	0.212	1	
140	Willow Island	2016	smallmouth bass	4	30.2	0.155	3	
140.9	Willow Island	2016	walleye	4	27.5	0.114	1	
147	Willow Island	2012	silver redhorse	3	45.5	0.0626	3	
169	Belleville	2012	silver redhorse	3	48	0.0856	3	0.149
169	Belleville	2012	smallmouth buffalo	3	46.5	0.111	3	
171.7	Belleville	2012	quillback	3	36.5	0.103	3	
200	Belleville	2014	bluegill	3	17.25	0.0763	4	
200	Belleville	2014	common carp	3	61.7	0.103	3	
200	Belleville	2014	spotted sucker	3	36.7	0.0336	3	
200	Belleville	2014	largemouth bass	4	38	0.294	3	
200	Belleville	2014	white bass	4	28	0.183	2	

Appendix H. Methyl mercury fish tissue contaminants data.

Sample						MeHg		Consumption-Weighted
	Pool	Year	Species	Trophic Level	Avg Length (cm)	Rresult	# Fish in sample	Pool Avg MeHg in Fish Tissue
	River Mile					(mg/kg)		(mg/kg)
204.8	Racine	2015	freshwater drum	3	49	0.252	3	0.156
204.8	Racine	2015	smallmouth buffalo	3	49.3	0.122	3	
210.1	Racine	2015	black crappie	3	21.5	0.0409	2	
211.5	Racine	2015	black crappie	3	30	0.112	1	
211.5	Racine	2015	smallmouth bass	4	39	0.163	2	
216.7	Racine	2012	smallmouth buffalo	3	54.5	0.258	3	0.156
220.6	Racine	2012	bluegill	3	14.27	0.0925	3	
220.6	Racine	2012	common carp	3	64	0.0872	3	
220.6	Racine	2012	silver redhorse	3	41.6	0.0541	3	
220.6	Racine	2012	spotted bass	4	35.5	0.301	3	
221	Racine	2015	sauger	4	36	0.232	1	
231.8	Racine	2015	sauger	4	35	0.163	2	
236	Racine	2015	smallmouth bass	4	29	0.0794	1	
266	RC Byrd	2013	freshwater drum	3	39.67	0.188	3	0.179
270	RC Byrd	2012	smallmouth buffalo	3	50.53	0.242	3	
276	RC Byrd	2012	common carp	3	64.3	0.125	3	
276	RC Byrd	2012	channel catfish	4	52.67	0.221	3	
278	RC Byrd	2013	largemouth bass	4	37	0.131	3	
278	RC Byrd	2013	sauger	4	43.5	0.163	3	
281	Greenup	2016	freshwater drum	3	52	0.148	3	0.172
281	Greenup	2016	smallmouth buffalo	3	38.5	0.136	3	
281	Greenup	2016	channel catfish	4	57.5	0.24	3	
281	Greenup	2016	hybrid striper	4	57	0.436	3	
283	Greenup	2015	channel catfish	3	44.3	0.227	3	
283	Greenup	2015	freshwater drum	3	42.2	0.137	3	
283	Greenup	2015	smallmouth buffalo	3	42.3	0.123	3	
283	Greenup	2015	channel catfish	4	44.3	0.227	3	
283	Greenup	2015	hybrid striper	4	33	0.115	1	
287.5	Greenup	2012	common carp	3	60	0.105	3	
287.5	Greenup	2012	smallmouth buffalo	3	52	0.215	3	
287.5	Greenup	2012	white crappie	3	28	0.0964	3	
326	Greenup	2013	bluegill	3	17.6	0.0556	4	
326	Greenup	2013	hybrid striper	4	51.67	0.294	3	
326	Greenup	2013	largemouth bass	4	37.67	0.148	3	
340	Greenup	2016	largemouth bass	4	34	0.172	2	
340	Greenup	2016	sauger	4	36.5	0.29	3	
356	Meldahl	2016	channel catfish	3	41.7	0.119	3	0.151
356	Meldahl	2014	sauger	4	31.3	0.175	3	
356.7	Meldahl	2012	common carp	3	73.2	0.106	3	
356.7	Meldahl	2012	flathead catfish	4	59.67	0.268	3	
374	Meldahl	2012	silver redhorse	3	43.3	0.0783	2	
439.5	Markland	2015	sauger	4	32.3	0.199	3	0.220
440	Markland	2015	channel catfish	3	43.3	0.13	3	
440	Markland	2014	channel catfish	4	50.7	0.156	3	
440	Markland	2016	channel catfish	4	49	0.303	1	
440	Markland	2014	sauger	4	29.7	0.179	3	
440	Markland	2016	sauger	4	31.75	0.328	4	
455	Markland	2016	hybrid striper	4	58.5	0.699	1	
455	Markland	2016	saugeye	4	48.5	0.364	1	
463.5	Markland	2012	common carp	3	71	0.11	3	
463.5	Markland	2012	smallmouth buffalo	3	54.5	0.279	3	
463.5	Markland	2012	flathead catfish	4	67.83	0.339	3	
486	Markland	2014	white bass	4	36.25	0.491	2	
490	Markland	2014	freshwater drum	3	43.8	0.145	3	
494.9	Markland	2015	black crappie	3	21.5	0.0754	2	
499.9	Markland	2015	white crappie	3	26.3	0.0743	3	
511	Markland	2014	sauger	4	33	0.155	3	
513	Markland	2014	bluegill	3	15.75	0.104	5	
516.9	Markland	2015	freshwater drum	3	36.5	0.172	1	
516.9	Markland	2015	largemouth bass	4	32.8	0.0752	3	

Appendix H. Methyl mercury fish tissue contaminants data.

Sample						MeHg		Consumption-Weighted	
River Mile	Pool	Year	Species	Trophic Level	Avg Length (cm)	Rresult	# Fish in sample	Pool Avg MeHg in Fish Tissue	
						(mg/kg)		(mg/kg)	
570	McAlpine	2014	smallmouth buffalo	3	20.5	0.14	3		
575	McAlpine	2016	channel catfish	3	40.7	0.178	3		
576	McAlpine	2014	freshwater drum	3	48.3	0.275	3		
578	McAlpine	2014	channel catfish	4	55.3	0.276	3		
578	McAlpine	2014	sauger	4	30.25	0.203	2		
579.7	McAlpine	2015	channel catfish	3	34.7	0.0587	3		
580	McAlpine	2014	channel catfish	4	47	0.159	1	0.177	
606	McAlpine	2014	white bass	4	24.75	0.0924	2		
629.9	Cannelton	2012	freshwater drum	3	47.5	0.167	3	0.230	
629.9	Cannelton	2012	smallmouth buffalo	3	47.5	0.0883	2		
730.6	Newburgh	2012	spotted bass	4	31.3	0.16	3	0.147	
740	Newburgh	2012	common carp	3	70	0.203	3		
752	Newburgh	2014	channel catfish	4	54	0.0683	1		
755	Newburgh	2016	sauger	4	27.8	0.166	4		
757.6	Newburgh	2012	black buffalo	3	56.2	0.103	3		
757.6	Newburgh	2012	smallmouth buffalo	3	45	0.168	3		
773	Newburgh	2012	white crappie	3	29.3	0.0775	2		
777	J.T. Myers	2015	bigmouth buffalo	3	59.7	0.256	3	0.175	
777	J.T. Myers	2015	bigmouth buffalo	3	45.3	0.121	3		
777	J.T. Myers	2016	bigmouth buffalo	3	55.7	0.374	3		
777	J.T. Myers	2015	channel catfish	3	42	0.112	2		
777	J.T. Myers	2016	channel catfish	3	41	0.0629	3		
777	J.T. Myers	2015	smallmouth buffalo	3	49	0.163	1		
777	J.T. Myers	2015	smallmouth buffalo	3	36	0.0908	2		
777	J.T. Myers	2016	smallmouth buffalo	3	40.7	0.131	3		
777	J.T. Myers	2015	hybrid striper	4	48.3	0.179	3		
777	J.T. Myers	2015	hybrid striper	4	32.7	0.156	3		
777	J.T. Myers	2016	largemouth bass	4	40.5	0.199	1		
777	J.T. Myers	2016	largemouth bass	4	53	0.612	1		
777	J.T. Myers	2016	sauger	4	40	0.242	2		
777	J.T. Myers	2015	white bass	4	36	0.212	2		
778.1	J.T. Myers	2012	bluegill	3	18.83	0.0609	3		
778.1	J.T. Myers	2012	freshwater drum	3	40.3	0.249	3		
778.1	J.T. Myers	2012	quillback	3	35.2	0.0779	3		
778.1	J.T. Myers	2012	smallmouth buffalo	3	41.3	0.177	3		
778.1	J.T. Myers	2012	flathead catfish	4	68.67	0.3	3		
789.8	J.T. Myers	2015	white bass	4	35	0.13	1		
790.4	J.T. Myers	2015	channel catfish	4	53	0.0889	3		
799.2	J.T. Myers	2015	spotted bass	4	29.3	0.209	3		
808	J.T. Myers	2015	smallmouth buffalo	3	50.5	0.222	1		
813.9	J.T. Myers	2015	common carp	3	59	0.193	1		
813.9	J.T. Myers	2015	freshwater drum	3	56	0.35	1		
813.9	J.T. Myers	2015	smallmouth buffalo	3	45	0.0765	2		
831.9	J.T. Myers	2015	white bass	4	34	0.148	1		
832.8	J.T. Myers	2015	common carp	3	58.5	0.104	2		
846.1	Smithland	2012	blue catfish	3	54.3	0.181	3	0.276	
846.1	Smithland	2012	flathead catfish	4	73.3	0.305	3		
848	Smithland	2012	bluegill	3	17.12	0.131	3		
870	Smithland	2012	black buffalo	3	61	0.354	3		
883	Smithland	2013	white bass	4	36.3	0.519	3		
888	Smithland	2016	sauger	4	35.5	0.378	1		
889	Smithland	2013	bluegill	3	16.38	0.0959	4		
889	Smithland	2013	channel catfish	4	48.3	0.126	3		
889.5	Smithland	2012	smallmouth buffalo	3	39.67	0.128	3		
889.5	Smithland	2012	white crappie	3	24.3	0.194	3		
890	Smithland	2016	channel catfish	4	51.7	0.188	3		
891.9	Smithland	2015	channel catfish	4	48.3	0.133	3		
892	Smithland	2013	freshwater drum	3	58	0.425	3		
892	Smithland	2014	largemouth bass	4	39.75	0.34	2		

Appendix H. Methyl mercury fish tissue contaminants data.								
Sample						MeHg	Consumption-Weighted	
River Mile	Pool	Year	Species	Trophic Level	Avg Length (cm)	Rresult	# Fish in sample	Pool Avg MeHg in Fish Tissue
						(mg/kg)		(mg/kg)
932	Olmsted	2014	channel catfish	3	41.7	0.0559	3	0.176
932	Olmsted	2014	white bass	4	34.2	0.28	3	
933.5	Olmsted	2012	black crappie	3	20.5	0.0494	3	
933.5	Olmsted	2012	flathead catfish	4	61.7	0.348	3	
934	Olmsted	2014	channel catfish	4	54.7	0.055	3	
947	Olmsted	2014	black buffalo	3	43	0.274	3	
955	Olmsted	2014	smallmouth buffalo	3	42.7	0.179	3	
974	Open Water	2014	channel catfish	3	30.75	0.071	2	0.143
974	Open Water	2016	channel catfish	3	38	0.06	2	
974	Open Water	2014	common carp	3	64.5	0.139	1	
974	Open Water	2014	common carp	3	55.5	0.144	2	
974	Open Water	2014	freshwater drum	3	32.5	0.103	3	0.143
974	Open Water	2014	freshwater drum	3	43.5	0.486	1	

APPENDIX I

Total Dissolved Solids Data

Appendix I. ORSANCO Total Dissolved Solids Results Summary

			TDS Result, mg/L		
River	Mile	Ohio River	Min	Median	Max
Allegheny	8.2	0	62	161.5	236
Monongahela	4.5	0	113	218.0	362
Ohio	11.7	11.7	124	205.0	280
Beaver	6	25	163	276.0	386
Ohio	65.3	65.3	104	206.0	307
Ohio	86.8	86.8	106	217.0	328
Ohio	137.2	137.2	110	222.0	359
Muskingum	29	172	148	362.0	584
Ohio	190.5	190.5	106	227.0	364
Ohio	260	260	160	222.0	368
Ohio	306	306	126	188.5	301
Big Sandy	23.6	317.1	155	362.0	579
Ohio	462.8	462.8	150	195.0	335
Ohio	600	600	166	215.0	332
Ohio	791.5	791.5	160	223.0	341
Ohio	978	978	142	203.0	339

APPENDIX J

2015 Microcystin results for the Ohio River

Appendix J. 2015 Microcystin Results

Date	ORM	River	Location Description	Microcystin by ELISA*	Total Microcystins by LC/MS**	Units
9/1/2015	54.4	Ohio	New Cumberland L&D	<0.30	-	ug/L
9/9/2015	54.4	Ohio	New Cumberland L&D	<0.30	-	ug/L
9/16/2015	54.4	Ohio	New Cumberland L&D	<0.30	-	ug/L
9/30/2015	54.4	Ohio	New Cumberland L&D	<0.30	-	ug/L
8/26/2015	55.0	Ohio	RDB	1.5	-	ug/L
8/26/2015	65.0	Ohio	LDB-D	<0.30	-	ug/L
8/21/2015	65.2	Ohio	From River near Steubenville Intake	<0.30	-	ug/L
8/21/2015	65.3	Ohio	Steubenville Water Intake	<0.30	-	ug/L
9/9/2015	65.3	Ohio	Steubenville Water Intake	<0.30	-	ug/L
8/21/2015	70.8	Ohio	Follansbee	<0.30	-	ug/L
8/26/2015	74.7	Buffalo Creek	Buffalo Creek RM 0.1 (WV)	<0.30	-	ug/L
8/26/2015	74.7	Buffalo Creek	Buffalo Creek RM 1.0 (WV)	0.97	-	ug/L
9/16/2015	74.7	Buffalo Creek	Buffalo Creek	<0.30	-	ug/L
8/26/2015	81.4	Short	Short Creek (OH)	2.5	-	ug/L
9/9/2015	81.4	Short	Short Creek (OH)	<0.30	-	ug/L
9/16/2015	81.4	Short	Short Creek (OH)	<0.30	-	ug/L
8/26/2015	84.0	Ohio	LDB	0.41	-	ug/L
8/21/2015	84.1	Ohio	On Ohio River near mouth of Short Creek	0.558	-	ug/L
9/1/2015	84.2	Ohio	Pike Island	2.3	-	ug/L
9/9/2015	84.2	Ohio	Pike Island	<0.30	-	ug/L
9/16/2015	84.2	Ohio	Pike Island	3.8	-	ug/L
9/30/2015	84.2	Ohio	Pike Island	<0.30	-	ug/L
10/7/2015	84.2	Ohio	Pike Island	<0.30	-	ug/L
8/27/2015	84.5	Ohio	LDB	4.8	-	ug/L
8/21/2015	86.8	Ohio	OR 86.9	<0.30	-	ug/L
8/27/2015	86.8	Ohio	LDB	<0.3	-	ug/L
8/27/2015	86.8	Ohio	LDB-D	3.1	-	ug/L
8/28/2015	86.8	Ohio	Wheeling water intake	<0.30	-	ug/L
9/9/2015	86.8	Ohio	Wheeling water intake	<0.30	-	ug/L
9/9/2015	89.8	Ohio	Wheeling Island Back Channel	0.98	-	ug/L
9/16/2015	90.2	Ohio	Ohio River @ Wheeling Island	1.4	-	ug/L
8/21/2015	93.8	Ohio	Bellaire WTP	<.30	-	ug/L
9/9/2015	113.8	Fish Creek	Fish Creek (WV) Mouth	0.45	-	ug/L
9/16/2015	113.8	Fish Creek	Fish Creek (WV) near Woodland Bridge	150	-	ug/L
9/16/2015	113.8	Fish Creek	Fish Creek (WV) Mouth	<0.30	-	ug/L
10/7/2015	113.8	Fish Creek	Fish Creek (WV) near Woodland Bridge	<0.30	-	ug/L
8/27/2015	115.0	Ohio	RDB	630	-	ug/L
8/27/2015	115.0	Ohio	LDB	59	-	ug/L
9/9/2015	115.0	Ohio	ORM 115-RDB	42	-	ug/L
9/9/2015	115.0	Ohio	ORM 115-LDB	2.4	-	ug/L
9/16/2015	115.0	Ohio	LDB	0.3	-	ug/L
9/16/2015	115.0	Ohio	RDB	11	-	ug/L
10/7/2015	115.0	Ohio	RDB	<0.30	-	ug/L
9/1/2015	126.4	Ohio	Hannibal	3	-	ug/L
9/9/2015	126.4	Ohio	Hannibal	<0.30	-	ug/L
9/16/2015	126.4	Ohio	Hannibal	<0.30	-	ug/L
9/30/2015	128.4	Ohio	Hannibal	<0.30	-	ug/L
8/28/2015	137.2	Ohio	Sistersville water intake	1.8	-	ug/L
9/9/2015	137.2	Ohio	Sistersville water intake	1.2	-	ug/L
9/2/2015	161.7	Ohio	Willow Island	3.1	-	ug/L

Appendix J. 2015 Microcystin Results

Date	ORM	River	Location Description	Microcystin by ELISA*	Total Microcystins by LC/MS**	Units
9/2/2015	203.9	Ohio	Belleville	4.2	-	ug/L
10/14/2015	230.6	Ohio	RAC1	0.763	<0.50	ug/L
10/14/2015	237.3	Ohio	RAC2	<0.15	<0.5	ug/L
9/9/2015	238.1	Ohio	38° 55' 18" - 81° 54' 16"	-	0.45	ug/L
9/9/2015	263.1	Ohio	38° 52' 29" - 82° 08' 17"	-	11	ug/L
9/2/2015	265.0	Ohio	Point Pleasant	250	-	ug/L
10/1/2015	265.3	Ohio	Ohio River at Point Pleasant	<0.30	-	ug/L
9/9/2015	265.6	Kanawha	38° 49' 46" - 82° 07' 38", Kanawha RM 0.7	-	<0.25	ug/L
9/9/2015	266.7	Ohio	38° 49' 29" - 82° 09' 17"	-	51	ug/L
9/9/2015	277.9	Ohio	38° 41' 58" - 82° 11' 02"	-	34	ug/L
8/31/2015	279.2	Ohio	RC Byrd	0.96	-	ug/L
9/2/2015	279.2	Ohio	RC Byrd	5.1	-	ug/L
9/17/2015	282	Ohio	O282.0 BAF	0.232	<0.50	ug/L
9/1/2015	304.0	Ohio	Huntington- River Intake	0.92	-	ug/L
9/9/2015	305.2	Guyandotte	38° 25' 52" - 82° 23' 29", Guyandotte RM 0.1	-	20	ug/L
9/9/2015	308.1	Ohio	38° 25' 29" - 82° 26' 25", LDB Huntington	-	8.6	ug/L
10/21/2015	322.7	Ohio	Ohio Ohio River at Ashland	<0.15	<0.50	ug/L
10/21/2015	336.4	Little Sandy	Little sandy Greenup boat ramp	1.38	2.12	ug/L
10/21/2015	336.4	Little Sandy	Little sandy Little sandy DW intake	0.21	<0.50	ug/L
10/29/2015	336.4	Little Sandy	Little sandy Greenup boat ramp	<0.15	<0.50	ug/L
10/29/2015	336.4	Little Sandy	Little sandy Little Sandy DW intake	<0.15	<0.50	ug/L
9/9/2015	340.7	Ohio	38° 38' 33" - 82° 51' 37"	-	3.6	ug/L
9/2/2015	341.0	Ohio	Greenup	1.8	-	ug/L
9/9/2015	341.5	Ohio	Greenup tailwater	-	2.8	ug/L
9/21/2015	341.8	Ohio	O341.8 RDB	6.11	4.38	ug/L
10/29/2015	342.7	Ohio	Ohio Ohio River at Ashland	<0.15	<0.50	ug/L
10/21/2015	354.7	Ohio	Ohio South shore bank	<0.15	<0.50	ug/L
10/29/2015	354.7	Ohio	Ohio South Shore bank	<0.15	<0.50	ug/L
9/9/2015	356	Ohio	Portsmouth ramp		3.6	ug/L
9/21/2015	356.1	Ohio	O356.1 RDB	9.47	6.65	ug/L
9/9/2015	356.7	Ohio	On Ohio DS Scioto	-	590	ug/L
9/21/2015	356.7	Ohio	O356.7 RDB	4.07	3.21	ug/L
10/21/2015	368.1	Kiniconic	Kiniconic creek Ohio River at Garrison	0.193	<0.50	ug/L
10/29/2015	368.1	Kiniconic	Kiniconic Creek Garrison ramp	<0.15	<0.50	ug/L
10/21/2015	378.3	Salt Lick Creek	Salt lick creek Vanceburg ramp	2.5	2.19	ug/L
10/29/2015	378.3	Salt Lick Creek	Salt lick creek, Vanceburg Ramp Vanceburg boat ramp	<0.15	<0.50	ug/L
9/21/2015	405.5	Ohio	O405.5 RDB	255	177	ug/L
10/21/2015	405.5	Ohio	Ohio DP&L	<0.15	<0.50	ug/L
10/29/2015	405.5	Ohio	Ohio DP&L	<0.15	<0.50	ug/L
9/9/2015	407	Ohio	Maysville intake	-	6.6	ug/L
9/21/2015	408.4	Ohio	O408.4 LDB	2.25	0.917	ug/L
9/3/2015	414	Ohio	ORSANCO - 0414-HAB-RDB	>5.00	120	ug/L
10/21/2015	414	Ohio	Ohio	0.167	<0.50	ug/L
10/29/2015	414	Ohio	Ohio	<0.15	<0.50	ug/L
9/3/2015	424	Ohio	ORSANCO - 0424-HAB-RDB	0.157	<0.50	ug/L
9/3/2015	434	Ohio	ORSANCO - 0434-HAB-RDB	44.9	28.3	ug/L
9/21/2015	434	Ohio	O434.0 RDB	0.552	<0.50	ug/L

Appendix J. 2015 Microcystin Results

Date	ORM	River	Location Description	Microcystin by ELISA*	Total Microcystins by LC/MS**	Units
9/9/2015	434.2	Ohio	Chilo ramp	-	1.4	ug/L
10/21/2015	434.2	Ohio	Ohio Chilo park/ramp	<0.15	<0.50	ug/L
10/29/2015	434.2	Ohio	Ohio Chilo ramp	0.891	0.677	ug/L
11/2/2015	434.2	Ohio	Ohio	-	-	ug/L
9/2/2015	436.2	Ohio	Meldahl	0.37	-	ug/L
9/3/2015	460.2	Ohio	ORSANCO - OR 460.2	<0.15	<0.50	ug/L
9/15/2015	462.6	Ohio	ORM 462.6	9.78	8.84	ug/L
10/6/2015	462.6	Ohio	O462.6-R	0.675	1.01	ug/L
9/25/2015	463	Ohio	O463.0 LDB	0.326	<0.50	ug/L
9/8/2015	468.8	Ohio	OR 468.8	-	1900	ug/L
9/3/2015	469.8	Ohio	ORSANCO - OR 469.8	<0.15	<0.50	ug/L
9/8/2015	470	Ohio	OR 470	-	12	ug/L
9/8/2015	470	Ohio	ORSANCO - 0470-HAB-RDB	78.8	53.6	ug/L
9/15/2015	470	Ohio	ORM 470	1.82	0.822	ug/L
9/22/2015	470	Ohio	O470.0 RDB	15.7	14.2	ug/L
9/25/2015	470	Ohio	O470.0 RDB	0.659	<0.50	ug/L
10/6/2015	470	Ohio	Ohio River RDB 470.0	<0.15	<0.50	ug/L
9/3/2015	470.3	Ohio	ORSANCO - OR 470.3 LDB	<0.15	<0.50	ug/L
9/15/2015	477.5	Ohio	ORM 477.5	9.24	7.64	ug/L
10/6/2015	477.5	Ohio	ORM 477.5 Mid	0.194	<0.50	ug/L
9/8/2015	493.5	Ohio	ORSANCO - 0493.5-HAB-RDB	<0.15	<0.50	ug/L
9/8/2015	515	Ohio	ORSANCO - 0515-HAB-RDB	402	273	ug/L
10/20/2015	515	Ohio	Ohio Near day mark 514.9	<0.15	<0.50	ug/L
10/27/2015	515	Ohio	ORM 515	<0.15	<0.50	ug/L
9/8/2015	531	Ohio	ORSANCO - 0531-HAB-LDB	23.2	17.6	ug/L
10/20/2015	531	Ohio	Ohio Near bull nose of markland L&D	<0.15	<0.50	ug/L
10/27/2015	531	Ohio	Ohio Near bullnose of L&D	<0.15	<0.50	ug/L
9/1/2015	531.5	Ohio	Markland	0.79	-	ug/L
9/9/2015	533	Ohio	ORSANCO - 0533-HAB-LDB	<0.150	-	ug/L
9/9/2015	558	Ohio	ORSANCO - 0558-HAB-RDB	0.93	-	ug/L
9/9/2015	558	Ohio	ORSANCO - 0558-HAB-RDB DUP	2.70	-	ug/L
9/9/2015	580	Ohio	ORSANCO - 0580-HAB-LDB	0.17	-	ug/L
9/9/2015	603	Ohio	ORSANCO - 0603-HAB-LDB	<0.150	-	ug/L
9/9/2015	605	Ohio	ORSANCO - 0605-HAB-MID	<0.150	-	ug/L
9/1/2015	606.8	Ohio	McAlpine	<0.30	-	ug/L
9/23/2015	607.5	Ohio	MID, downstream of McAlpine	0.84	<0.5	ug/L
9/23/2015	619.3	Ohio	Ohio River 619.3	0.465	<0.5	ug/L
9/23/2015	629.9	Salt River	Salt River Trib @ 0.2 SRM LDB, from boat at the ramp	0.757	<0.5	ug/L
9/23/2015	630	Ohio	Ohio River at 630 MID	0.35	<0.5	ug/L
9/23/2015	646	Ohio	Ohio River at 646 LDB	8.36	5.9	ug/L
9/23/2015	663	Ohio	Ohio River at 663 RDB	7.44	5.34	ug/L
9/23/2015	720.5	Ohio	Ohio River at 720.5 RDB	<0.15	-	ug/L
9/29/2015	720.7	Ohio	Cannelton L&D	0.948	<0.50	ug/L
9/23/2015	727.2	Ohio	Ohio River at 727.2 RDB	<0.15	<0.5	ug/L
9/29/2015	742.1	Ohio	Gandview Ramp	0.156	<0.50	ug/L
9/29/2015	776.1	Ohio	Newburgh L&D	0.298	<0.50	ug/L
10/8/2015	776.1	Ohio	Newburgh L&D	59.1	36.4	ug/L
10/14/2015	776.1	Ohio	Ohio @ Newburgh	0.186	<0.50	ug/L
9/15/2015	782	Ohio	ORM 782.0 BAF sampling Site	<0.15	<0.50	ug/L
10/8/2015	791.2	Ohio	791.5 RDB	0.21	<0.50	ug/L

Appendix J. 2015 Microcystin Results

Date	ORM	River	Location Description	Microcystin by ELISA*	Total Microcystins by LC/MS**	Units
10/14/2015	791.2	Ohio	Ohio LST Dock	0.175	<0.50	ug/L
9/29/2015	803.9	Ohio	Henderson Ramp	0.298	<0.50	ug/L
10/7/2015	803.9	Ohio	803.9 LDB	0.23	<0.5	ug/L
10/14/2015	803.9	Ohio	Ohio Henderson ramp	0.186	<0.50	ug/L
10/7/2015	846	Ohio	JT Myers L&D	<0.15	<0.50	ug/L
10/7/2015	918.5	Ohio	Smithland L&D	<0.15	<0.5	ug/L