

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
<b>M10</b>	Mercury	0.3	0.023	0.81	19	19	100	6/7/2001	9/16/2009
	Escherichia coli	0	0	1.00	22	22	100	1/9/2008	11/19/2009
	Total Coliform	-39.5	-89	0.07	22	22	100	1/9/2008	11/19/2009
	Dissolved Phosphorus	0	0	0.97	40	22	55	2/9/2001	9/16/2009
	Orthophosphate as P	0	0	0.11	63	13	20.6	2/9/2001	9/16/2009
	Total Phosphorus	0	0	0.92	63	61	96.8	2/9/2001	9/16/2009
	Ammonia Nitrogen as N	0	0	0.22	75	24	32	2/9/2001	9/16/2009
	Nitrate + Nitrite as N	0.2	0.00025	0.92	133	133	100	2/9/2001	9/16/2009
	Nitrogen, Kjeldahl	-0.70	-0.00093	0.66	56	55	98.2	2/9/2001	9/16/2009
	Total Nitrogen	-2.5	-0.0067	0.69	93	93	100	10/12/2005	9/17/2009
	Chlorophyll a	0	0	0.37	22	5	22.7	1/9/2008	11/19/2009
	Alkalinity	0	0	0.90	20	20	100	8/1/2003	11/3/2008
	Dissolved oxygen	-0.3	-0.031	0.57	65	65	100	2/9/2001	9/16/2009
	Hardness	0	0	0.68	90	90	100	10/12/2005	9/16/2009
	pH	0	0	0.87	132	132	100	2/9/2001	9/17/2009
	Specific conductance	-1.3	-0.29	0.13	135	135	100	2/9/2001	9/17/2009
	TDS	-8.5	-2	0.50	20	19	95	1/9/2008	9/16/2009
	Temperature	0	0	0.90	145	145	100	2/9/2001	9/17/2009
	TOC	-1.5	-0.05	1.00	22	22	100	1/9/2008	11/19/2009
	Turbidity	0	0	0.97	26	20	76.9	5/10/2001	9/16/2009
<b>795</b>	Cadmium	0	0	0.24	23	0	0	5/28/2002	7/14/2009
	Copper	0	0	0.59	23	3	13	5/28/2002	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	0	0	0.26	23	1	4.3	5/28/2002	7/14/2009
	Zinc	0	0	0.20	23	1	4.3	5/28/2002	7/14/2009
	Escherichia coli	6.2	1	0.21	11	9	81.8	1/17/2006	7/14/2009
	Total Coliform	0.8	2	1.00	11	11	100	1/17/2006	7/14/2009
	Orthophosphate as P	NA	NA	Not enough detected data	14	0	0	3/14/2006	7/14/2009
	Total Phosphorus	0	0	0.69	52	7	13.5	12/18/2001	7/14/2009
	Ammonia Nitrogen as N	0	0	1.00	51	9	17.6	12/18/2001	7/14/2009
	Nitrate + Nitrite as N	-0.75	-0.0011	0.70	52	52	100	12/18/2001	7/14/2009
	Total Nitrogen	-8.6	-0.02	0.47	14	14	100	3/14/2006	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	3	3	100	4/14/2009	7/14/2009
	Alkalinity	0	0	0.94	59	58	98.3	11/27/2001	7/14/2009
	Dissolved oxygen	-0.5	-0.05	0.52	50	50	100	11/27/2001	10/13/2009
	Hardness	0	0	0.76	59	59	100	11/27/2001	7/14/2009
	pH	0.8	0.06	0.04	58	58	100	11/27/2001	11/10/2009
	Specific conductance	-2.5	-0.6	0.50	49	49	100	11/27/2001	11/10/2009
	TDS	0	0	0.31	38	38	100	11/27/2001	2/13/2007
	Temperature	3.9	0.20	0.18	58	58	100	11/27/2001	11/10/2009
TOC	0.9	0.03	0.92	15	15	100	7/19/2005	7/14/2009	
TSS	0	0	0.14	40	6	15	12/18/2001	1/17/2006	

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794	Cadmium	0	0	0.75	22	0	0	8/20/2003	7/14/2009
	Copper	0	0	0.85	22	2	9.1	8/20/2003	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	0	0	0.95	22	2	9.1	8/20/2003	7/14/2009
	Zinc	0	0	0.66	22	2	9.1	8/20/2003	7/14/2009
	Escherichia coli	1.17	0.17	0.45	40	37	92.5	11/27/2001	7/14/2009
	Total Coliform	0	0	1.00	46	46	100	11/27/2001	7/14/2009
	Orthophosphate as P	0	0	0.89	18	0	0	7/20/2004	7/14/2009
	Total Phosphorus	0	0	0.90	57	22	38.6	12/18/2001	7/14/2009
	Ammonia Nitrogen as N	0	0	0.57	58	10	17.2	12/18/2001	7/14/2009
	Nitrate + Nitrite as N	-2.0	-0.0038	0.29	58	58	100	12/18/2001	7/14/2009
	Total Nitrogen	-4.4	-0.013	0.27	19	19	100	7/20/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	3	3	100	4/14/2009	7/14/2009
	Alkalinity	0	0	0.65	62	60	96.8	11/27/2001	7/14/2009
	Dissolved oxygen	-1.1	-0.1	0.30	56	56	100	11/27/2001	10/13/2009
	Hardness	0	0	0.97	61	61	100	11/27/2001	7/14/2009
	pH	0.8	0.063	0.17	61	61	100	11/27/2001	11/10/2009
	Specific conductance	-2.3	-0.7	0.44	52	52	100	11/27/2001	11/10/2009
	TDS	-3.0	-0.46	0.41	41	41	100	11/27/2001	2/13/2007
	Temperature	0	0	0.61	60	60	100	11/27/2001	11/10/2009
TOC	2.3	0.06	0.15	19	19	100	7/20/2004	7/14/2009	
TSS	0	0	0.12	43	9	20.9	12/18/2001	1/17/2006	
M20	Copper	4.9	0.059	0.00	117	105	89.7	8/29/2000	9/16/2009
	Mercury	-5.4	-0.15	0.28	35	35	100	10/17/2005	9/16/2009
	Selenium	-125.6	-0.15	0.027	22	11	50	3/7/2005	12/4/2006
	Escherichia coli	0	0	0.37	128	128	100	8/29/2000	11/18/2009
	Total Coliform	4.2	20	0.02	126	126	100	9/12/2000	11/18/2009
	Dissolved Phosphorus	0	0	0.49	137	117	85.4	8/29/2000	9/16/2009
	Orthophosphate as P	0.0	0	2.3E-01	137	56	40.9	8/29/2000	9/16/2009
	Total Phosphorus	3.9	0.00057	0.006	137	134	97.8	8/29/2000	9/16/2009
	Ammonia Nitrogen as N	5.7	0.00042	0.00	137	41	29.9	8/29/2000	9/16/2009
	Nitrate + Nitrite as N	1.2	0.0018	0.64	137	136	99.3	8/29/2000	9/16/2009
	Nitrogen, Kjeldahl	0.8	0.0013	0.52	137	132	96.4	8/29/2000	9/16/2009
	Total Nitrogen	-5.9	-0.017	0.04	54	54	100	10/17/2005	9/16/2009
	Chlorophyll a	18.7	0.21	1.00	24	19	79.2	1/9/2008	11/18/2009
	Alkalinity	0	0	0.53	117	116	99.1	8/29/2000	9/16/2009
	Dissolved oxygen	0	0	0.91	135	135	100	8/29/2000	9/16/2009
	Hardness	0	0	0.70	68	68	100	8/29/2000	9/16/2009
	pH	0	0	0.49	138	138	100	8/29/2000	9/16/2009
	Specific conductance	0	0	0.93	138	138	100	8/29/2000	9/16/2009
	TDS	1.2	0.38	0.45	114	112	98.2	2/12/2001	9/16/2009
	Temperature	-0.5	-0.03	0.72	138	138	100	8/29/2000	9/16/2009
TOC	0	0	0.77	122	122	100	8/29/2000	11/18/2009	
Turbidity	0.0	0	0.14	116	76	65.5	10/4/2000	9/16/2009	

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C10	Cadmium	0	0	0.49	30	2	6.7	1/9/2006	8/12/2009
	Copper	5.6	0.056	0.00	112	95	84.8	8/29/2000	9/15/2009
	Mercury	-4.1	-0.072	0.91	11	11	100	12/13/2005	7/15/2009
	Selenium	0	0	0.71	20	19	95	3/7/2005	6/10/2009
	Zinc	0	0	1.00	31	26	83.9	12/13/2005	8/12/2009
	Escherichia coli	0	0	0.29	115	115	100	8/29/2000	11/18/2009
	Total Coliform	1.0	2	0.002	114	114	100	8/29/2000	11/18/2009
	Dissolved Phosphorus	0.0	0	0.188	98	68	69.4	8/7/2000	1/8/2008
	Orthophosphate as P	-4.1	-0.00011	9.9E-04	116	42	36.2	8/7/2000	9/15/2009
	Total Phosphorus	4.2	0.00050	0.0001	116	114	98.3	8/7/2000	9/15/2009
	Ammonia Nitrogen as N	-3.2	-0.00017	0.00950	116	50	43.1	8/7/2000	9/15/2009
	Nitrate + Nitrite as N	6.1	0.0020	0.02	115	90	78.3	8/7/2000	9/15/2009
	Nitrogen, Kjeldahl	0	0	0.93	116	115	99.1	8/7/2000	9/15/2009
	Total Nitrogen	0	0	1.00	42	42	100	12/13/2005	8/12/2009
	Chlorophyll a	-3.5	-0.19	0.87	33	33	100	5/23/2005	11/18/2009
	Alkalinity	2.3	0.5	0.02	109	109	100	8/29/2000	9/15/2009
	Dissolved oxygen	0	0	0.81	114	114	100	8/7/2000	9/15/2009
	Hardness	13.6	2.5	0.45	18	18	100	8/29/2000	3/19/2002
	pH	-0.4	-0.029	0.02	115	115	100	8/7/2000	9/15/2009
	Specific conductance	3.4	1.8	0.002	115	115	100	8/7/2000	9/15/2009
	TDS	1.3	0.5	0.46	103	103	100	2/13/2001	9/15/2009
	Temperature	-4.6	-0.37	0.01	115	115	100	8/7/2000	9/15/2009
	TOC	3.0	0.11	4.4E-07	111	111	100	8/29/2000	11/18/2009
TSS	NA	NA	Not enough detected data	30	0	0	1/9/2006	8/12/2009	
Turbidity	0.0	0	0.38	108	56	51.9	10/4/2000	9/15/2009	
M30	Copper	5.9	0.08	0.00	121	111	91.7	8/29/2000	9/16/2009
	Mercury	3.6	0.11	0.79	10	10	100	5/22/2006	7/13/2009
	Selenium	-64.3	-0.075	1.00	5	3	60	6/6/2005	11/13/2006
	Escherichia coli	0	0	0.74	129	129	100	8/29/2000	11/19/2009
	Total Coliform	3.0	16.5	0.07	128	128	100	8/29/2000	11/19/2009
	Dissolved Phosphorus	-1.9	-0.0008	0.18	136	136	100	8/29/2000	9/16/2009
	Orthophosphate as P	-1.0	-0.00033	0.28	136	118	86.8	8/29/2000	9/16/2009
	Total Phosphorus	-1.7	-0.001	0.22	136	136	100	8/29/2000	9/16/2009
	Ammonia Nitrogen as N	-6.1	-0.0085	0.01	137	104	75.9	8/29/2000	9/16/2009
	Nitrate + Nitrite as N	-0.1	-0.00021	0.93	137	137	100	8/29/2000	9/16/2009
	Nitrogen, Kjeldahl	-5.1	-0.017	0.01	137	137	100	8/29/2000	9/16/2009
	Total Nitrogen	-8.4	-0.04	0.01	59	59	100	10/17/2005	9/16/2009
	Chlorophyll a	-11.4	-0.24	1.00	25	23	92	1/9/2008	11/19/2009
	Alkalinity	1.0	0.14	0.43	119	118	99.2	8/29/2000	9/16/2009
	Dissolved oxygen	0	0	0.93	134	134	100	8/29/2000	9/16/2009
	Hardness	0	0	0.64	68	68	100	8/29/2000	9/16/2009
	pH	0	0	0.74	137	137	100	8/29/2000	9/16/2009
	Specific conductance	0	0	0.95	137	137	100	8/29/2000	9/16/2009
	TDS	-0.7	-0.25	0.82	115	114	99.1	2/12/2001	9/16/2009
	Temperature	-0.6	-0.04	0.88	137	137	100	8/29/2000	9/16/2009
	TOC	-0.1	-0.0017	0.69	124	124	100	8/29/2000	11/19/2009
	Turbidity	1.9	0.046	0.06	116	87	75	10/4/2000	9/16/2009

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C20	Cadmium	0	0	0.67	29	4	13.8	1/10/2006	8/12/2009
	Copper	6.3	0.067	0.00	114	98	86	8/30/2000	9/15/2009
	Mercury	0.9	0.017	0.93	13	13	100	1/3/2005	6/10/2009
	Selenium	0	0	0.78	21	18	85.7	3/8/2005	6/10/2009
	Zinc	3.4	0.083	0.74	29	24	82.8	1/10/2006	8/12/2009
	Escherichia coli	0	0	0.30	107	107	100	8/30/2000	12/10/2008
	Total Coliform	4.0	13.2	0.0003	107	107	100	8/30/2000	12/10/2008
	Dissolved Phosphorus	4.90	0.00025	0.00	99	91	91.9	8/30/2000	1/8/2008
	Orthophosphate as P	-2.0	-6.68E-05	7.3E-03	117	51	43.6	8/30/2000	9/15/2009
	Total Phosphorus	4.4	0.00075	0.0002	117	115	98.3	8/30/2000	9/15/2009
	Ammonia Nitrogen as N	-3.5	-0.0005	0.22	117	94	80.3	8/30/2000	9/15/2009
	Nitrate + Nitrite as N	5.3	0.0034	0.01	117	114	97.4	8/30/2000	9/15/2009
	Nitrogen, Kjeldahl	0	0	0.86	117	115	98.3	8/30/2000	9/15/2009
	Total Nitrogen	-3.6	-0.01	0.25	44	44	100	12/12/2005	9/15/2009
	Chlorophyll a	-2.9	-0.15	0.63	33	33	100	5/24/2005	11/18/2009
	Alkalinity	1.6	0.31	0.22	112	112	100	8/30/2000	9/15/2009
	Dissolved oxygen	-0.5	-0.046	0.44	114	114	100	8/30/2000	9/15/2009
	Hardness	8.4	1.5	0.72	18	18	100	8/30/2000	3/18/2002
	pH	-0.4	-0.033	0.03	117	117	100	8/30/2000	9/15/2009
	Specific conductance	2.7	1.36	0.14	117	117	100	8/30/2000	9/15/2009
	TDS	0.8	0.29	0.43	105	105	100	2/12/2001	9/15/2009
	Temperature	-4.1	-0.34	0.11	117	117	100	8/30/2000	9/15/2009
	TOC	2.7	0.1	0.0001	113	113	100	8/30/2000	11/18/2009
TSS	0	0	1.00	29	1	3.4	1/10/2006	8/12/2009	
Turbidity	5.4	0.1	0.010	112	80	71.4	9/12/2000	9/15/2009	
M40	Copper	6.3	0.075	0.00	119	107	89.9	8/29/2000	9/15/2009
	Mercury	0	0	1.00	9	9	100	5/22/2006	7/13/2009
	Selenium	-54.2	-0.065	1.00	5	3	60	6/6/2005	11/13/2006
	Zinc	NA	NA	Not enough detected data	1	1	100	12/12/2005	12/12/2005
	Escherichia coli	0	0	0.05	128	128	100	8/29/2000	11/18/2009
	Total Coliform	4.2	12.9	0.001	127	127	100	8/29/2000	11/18/2009
	Dissolved Phosphorus	0	0	0.37	131	118	90.1	8/29/2000	9/15/2009
	Orthophosphate as P	0.0	0	1.1E-01	131	56	42.7	8/29/2000	9/15/2009
	Total Phosphorus	1.3	0.00025	0.30	131	131	100	8/29/2000	9/15/2009
	Ammonia Nitrogen as N	2.1	0.00039	0.15	131	101	77.1	8/29/2000	9/15/2009
	Nitrate + Nitrite as N	6.4	0.0046	0.005	131	128	97.7	8/29/2000	9/15/2009
	Nitrogen, Kjeldahl	0	0	0.70	131	131	100	8/29/2000	9/15/2009
	Total Nitrogen	-3.9	-0.012	0.14	53	53	100	10/17/2005	9/15/2009
	Chlorophyll a	-0.7	-0.03	1.00	22	22	100	1/9/2008	11/18/2009
	Alkalinity	1.0	0.2	0.38	121	121	100	8/29/2000	9/15/2009
	Dissolved oxygen	0.7	0.062	0.29	127	127	100	8/29/2000	9/15/2009
	Hardness	0.4	0.083	0.58	68	68	100	8/29/2000	9/15/2009
	pH	0	0	0.39	131	131	100	8/29/2000	9/15/2009
	Specific conductance	0	0	0.91	131	131	100	8/29/2000	9/15/2009
	TDS	0	0	0.80	115	114	99.1	2/12/2001	9/15/2009
	Temperature	-1.5	-0.13	0.52	131	131	100	8/29/2000	9/15/2009
	TOC	1.6	0.057	0.01	120	120	100	8/29/2000	11/18/2009
	Turbidity	4.2	0.085	0.017	116	90	77.6	10/4/2000	9/15/2009

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<b>M50</b>	Copper	6.8	0.083	0.00	119	106	89.1	8/30/2000	9/15/2009
	Mercury	0	0	Non-conforming data <sup>1</sup>	4	4	100	5/23/2006	9/10/2007
	Selenium	-62.2	-0.075	0.68	5	3	60	6/7/2005	11/15/2006
	Escherichia coli	0	0	0.09	127	127	100	8/30/2000	11/19/2009
	Total Coliform	7.5	35.3	0.001	126	126	100	8/30/2000	11/19/2009
	Dissolved Phosphorus	-1.7	-0.00093	0.45	133	133	100	8/30/2000	9/15/2009
	Orthophosphate as P	-2.1	-0.001	0.38	133	131	98.5	8/30/2000	9/15/2009
	Total Phosphorus	-1.6	-0.0012	0.27	133	133	100	8/30/2000	9/15/2009
	Ammonia Nitrogen as N	0.7	0.00042	0.58	134	115	85.8	8/30/2000	9/15/2009
	Nitrate + Nitrite as N	4.2	0.012	0.04	134	134	100	8/30/2000	9/15/2009
	Nitrogen, Kjeldahl	0	0	0.91	134	134	100	8/30/2000	9/15/2009
	Total Nitrogen	-7.1	-0.04	0.08	56	56	100	10/18/2005	9/15/2009
	Chlorophyll a	-2.9	-0.15	0.55	25	24	96	1/9/2008	11/19/2009
	Alkalinity	1.6	0.33	0.33	122	121	99.2	8/30/2000	9/15/2009
	Dissolved oxygen	0.6	0.057	0.20	132	132	100	8/30/2000	9/15/2009
	Hardness	0	0	0.57	69	69	100	8/30/2000	9/15/2009
	pH	-0.4	-0.035	0.13	134	134	100	8/30/2000	9/15/2009
	Specific conductance	1.0	0.6	0.45	134	134	100	8/30/2000	9/15/2009
	TDS	0	0	0.97	114	114	100	2/12/2001	9/15/2009
	Temperature	-4.0	-0.35	0.20	134	134	100	8/30/2000	9/15/2009
TOC	2.0	0.078	0.02	124	124	100	8/30/2000	11/19/2009	
Turbidity	2.4	0.05	0.13	116	94	81	9/13/2000	9/15/2009	
<b>M60</b>	Copper	8.0	0.1	0.00	122	102	83.6	8/30/2000	9/17/2009
	Mercury	-4.5	-0.08	0.73	21	21	100	2/7/2006	7/14/2009
	Selenium	-61.9	-0.075	0.68	5	4	80	6/7/2005	11/15/2006
	Escherichia coli	0	0	0.79	128	128	100	8/30/2000	11/16/2009
	Total Coliform	6.5	42.7	0.001	127	127	100	8/30/2000	11/16/2009
	Dissolved Phosphorus	1.5	0.00067	0.62	125	124	99.2	8/30/2000	9/17/2009
	Orthophosphate as P	1.8	0.00067	0.58	125	124	99.2	8/30/2000	9/17/2009
	Total Phosphorus	0.9	0.00063	0.66	125	125	100	8/30/2000	9/17/2009
	Ammonia Nitrogen as N	1.8	0.0005	0.03	124	76	61.3	8/30/2000	9/17/2009
	Nitrate + Nitrite as N	1.3	0.0038	0.77	124	122	98.4	8/30/2000	9/17/2009
	Nitrogen, Kjeldahl	0	0	0.84	124	124	100	8/30/2000	9/17/2009
	Total Nitrogen	-10.2	-0.057	0.10	48	48	100	10/18/2005	9/17/2009
	Chlorophyll a	3.2	0.15	1.00	22	22	100	1/10/2008	11/16/2009
	Alkalinity	1.2	0.27	0.35	122	122	100	8/30/2000	9/17/2009
	Dissolved oxygen	0	0	0.91	123	123	100	8/30/2000	9/17/2009
	Hardness	0	0	0.75	69	69	100	8/30/2000	9/17/2009
	pH	0	0	0.63	125	125	100	8/30/2000	9/17/2009
	Specific conductance	2.0	1.29	0.20	125	125	100	8/30/2000	9/17/2009
	TDS	0	0	0.87	115	115	100	1/10/2001	9/17/2009
	Temperature	-1.8	-0.15	0.13	125	125	100	8/30/2000	9/17/2009
TOC	2.2	0.086	0.004	120	120	100	8/30/2000	11/16/2009	
Turbidity	0.7	0.015	0.17	117	80	68.4	8/30/2000	9/17/2009	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
<b>T10</b>	Copper	4.7	0.060	0.00	122	107	87.7	8/31/2000	9/16/2009
	Mercury	-13.7	-0.38	0.17	15	15	100	4/12/2006	7/14/2009
	Selenium	-70.6	-0.080	0.68	5	4	80	6/7/2005	11/15/2006
	Escherichia coli	0	0	0.45	127	127	100	8/31/2000	11/16/2009
	Total Coliform	2.6	15	0.08	125	125	100	9/13/2000	11/16/2009
	Dissolved Phosphorus	0	0	0.70	128	116	90.6	8/31/2000	9/16/2009
	Orthophosphate as P	0.0	0	6.4E-01	128	57	44.5	8/31/2000	9/16/2009
	Total Phosphorus	0.0	0	0.72	128	126	98.4	8/31/2000	9/16/2009
	Ammonia Nitrogen as N	5.7	0.00037	0.000	128	47	36.7	8/31/2000	9/16/2009
	Nitrate + Nitrite as N	3.0	0.0028	0.11	128	119	93	8/31/2000	9/16/2009
	Nitrogen, Kjeldahl	0.0	0	0.81	128	123	96.1	8/31/2000	9/16/2009
	Total Nitrogen	-8.4	-0.022	0.17	39	39	100	10/18/2005	9/16/2009
	Chlorophyll a	48.4	0.53	0.34	22	15	68.2	1/9/2008	11/16/2009
	Alkalinity	0	0	0.77	122	122	100	8/31/2000	9/16/2009
	Dissolved oxygen	0.6	0.0612	0.29	127	127	100	8/31/2000	9/16/2009
	Hardness	0	0	0.93	69	69	100	8/31/2000	9/16/2009
	pH	0	0	0.28	128	128	100	8/31/2000	9/16/2009
	Specific conductance	-0.4	-0.17	0.75	128	128	100	8/31/2000	9/16/2009
	TDS	-1.5	-0.54	0.36	114	114	100	1/10/2001	9/16/2009
	Temperature	-2.6	-0.21	0.10	127	127	100	8/31/2000	9/16/2009
TOC	0.7	0.022	0.42	112	112	100	8/31/2000	11/16/2009	
Turbidity	1.0	0.019	0.029	117	74	63.2	8/31/2000	9/16/2009	
<b>M70</b>	Copper	6.0	0.073	0.00	120	106	88.3	8/31/2000	9/17/2009
	Mercury	-3.5	-0.065	0.63	23	23	100	5/24/2006	9/17/2009
	Selenium	0	0	Non-conforming data <sup>1</sup>	4	3	75	6/8/2005	11/14/2006
	Escherichia coli	0	0	0.02	127	127	100	8/31/2000	11/16/2009
	Total Coliform	4.8	35	0.003	126	126	100	9/13/2000	11/16/2009
	Dissolved Phosphorus	-1.0	-0.00032	0.45	137	137	100	8/31/2000	9/17/2009
	Orthophosphate as P	-1.2	-0.00029	0.56	137	136	99.3	8/31/2000	9/17/2009
	Total Phosphorus	-0.4	-0.00021	0.75	137	137	100	8/31/2000	9/17/2009
	Ammonia Nitrogen as N	2.6	0.00050	0.003	137	98	71.5	8/31/2000	9/17/2009
	Nitrate + Nitrite as N	0.5	0.0013	0.84	137	130	94.9	8/31/2000	9/17/2009
	Nitrogen, Kjeldahl	0	0	0.93	137	137	100	8/31/2000	9/17/2009
	Total Nitrogen	-11.6	-0.06	0.04	54	54	100	10/18/2005	9/17/2009
	Chlorophyll a	-13.1	-0.42	0.75	25	25	100	1/10/2008	11/16/2009
	Alkalinity	1.6	0.33	0.12	122	122	100	8/31/2000	9/17/2009
	Dissolved oxygen	0.3	0.035	0.62	134	134	100	8/31/2000	9/17/2009
	Hardness	0	0	0.74	70	70	100	8/31/2000	9/17/2009
	pH	0	0	0.72	137	137	100	8/31/2000	9/17/2009
	Specific conductance	0	0	1.00	137	137	100	8/31/2000	9/17/2009
	TDS	-1.1	-0.5	0.50	115	115	100	2/13/2001	9/17/2009
	Temperature	-0.9	-0.08	0.68	137	137	100	8/31/2000	9/17/2009
TOC	1.5	0.06	0.01	124	123	99.2	8/31/2000	11/16/2009	
Turbidity	2.8	0.063	0.10	118	89	75.4	8/31/2000	9/17/2009	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
C30	Cadmium	0	0	0.64	8	1	12.5	7/14/2005	6/9/2009
	Copper	8.7	0.34	0.0000	133	123	92.5	8/28/2000	9/14/2009
	Mercury	0	0	Non-conforming data <sup>1</sup>	6	5	83.3	7/14/2005	7/14/2009
	Selenium	0	0	1.00	13	5	38.5	6/9/2005	6/9/2009
	Zinc	0	0	0.82	8	1	12.5	7/14/2005	6/9/2009
	Escherichia coli	0	0	0.08	107	107	100	8/28/2000	12/9/2008
	Total Coliform	2.5	7.75	0.03	107	107	100	8/28/2000	12/9/2008
	Dissolved Phosphorus	0	0	0.08	115	108	93.9	8/28/2000	9/14/2009
	Orthophosphate as P	-2.2	-7.14E-05	3.3E-04	139	54	38.8	8/28/2000	9/14/2009
	Total Phosphorus	1.4	0.00025	0.38	140	138	98.6	8/28/2000	9/14/2009
	Ammonia Nitrogen as N	6.0	0.00075	0.00	138	93	67.4	8/28/2000	9/14/2009
	Nitrate + Nitrite as N	4.0	0.0022	0.02	137	129	94.2	8/28/2000	9/14/2009
	Nitrogen, Kjeldahl	0.8	0.002	0.39	140	140	100	8/28/2000	9/14/2009
	Total Nitrogen	1.8	0.005	0.48	39	39	100	10/20/2005	9/14/2009
	Chlorophyll a	28.4	1.33	0.23	31	31	100	1/7/2008	11/17/2009
	Alkalinity	0.9	0.18	0.44	133	132	99.2	8/28/2000	9/14/2009
	Dissolved oxygen	0.4	0.035	0.77	134	134	100	8/28/2000	9/14/2009
	Hardness	0	0	0.68	61	61	100	8/28/2000	9/14/2009
	pH	-0.3	-0.02	0.13	140	140	100	8/28/2000	9/14/2009
	Specific conductance	1.9	1	0.24	140	140	100	8/28/2000	9/14/2009
	TDS	1.4	0.5	0.24	124	123	99.2	2/14/2001	9/14/2009
	Temperature	0	0	0.98	140	140	100	8/28/2000	9/14/2009
	TOC	2.0	0.075	0.002	132	132	100	8/28/2000	11/17/2009
TSS	0	0	0.91	30	10	33.3	5/5/2005	8/17/2009	
Turbidity	0	0	0.95	110	90	81.8	10/24/2000	9/14/2009	
C40	Cadmium	0	0	0.77	10	1	10	7/12/2005	6/9/2009
	Copper	6.7	0.22	0.00	139	128	92.1	8/28/2000	8/17/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	7/12/2005	7/12/2005
	Selenium	0	0	1.00	15	6	40	6/9/2005	6/9/2009
	Zinc	0	0	0.89	10	3	30	7/12/2005	6/9/2009
	Escherichia coli	0	0	0.15	112	112	100	8/28/2000	12/9/2008
	Total Coliform	8.9	29.25	0.0001	112	112	100	8/28/2000	12/9/2008
	Dissolved Phosphorus	4.5	0.00033	0.01	121	113	93.4	8/28/2000	8/10/2009
	Orthophosphate as P	0.0	0	0.555	147	83	56.5	8/28/2000	8/17/2009
	Total Phosphorus	4.9	0.001	0.01	148	145	98	8/28/2000	8/17/2009
	Ammonia Nitrogen as N	3.2	0.00043	0.04	142	92	64.8	8/28/2000	8/17/2009
	Nitrate + Nitrite as N	8.6	0.0064	0.0001	142	131	92.3	8/28/2000	8/17/2009
	Nitrogen, Kjeldahl	1.4	0.0033	0.36	149	148	99.3	8/28/2000	8/17/2009
	Total Nitrogen	-5.1	-0.015	0.18	39	39	100	10/20/2005	7/13/2009
	Chlorophyll a	21.3	0.89	0.55	26	26	100	1/7/2008	11/16/2009
	Alkalinity	0	0	0.90	139	139	100	8/28/2000	8/17/2009
	Dissolved oxygen	0.5	0.05	0.79	146	146	100	8/28/2000	8/17/2009
	Hardness	-1.7	-0.33	0.21	64	64	100	8/28/2000	8/10/2009
	pH	0	0	0.45	148	148	100	8/28/2000	8/17/2009
	Specific conductance	2.6	1.4	0.04	149	149	100	8/28/2000	8/17/2009
	TDS	1.8	0.71	0.18	129	129	100	2/14/2001	8/10/2009
	Temperature	-2.3	-0.24	0.31	147	147	100	8/28/2000	8/17/2009
	TOC	1.8	0.071	0.003	138	138	100	8/28/2000	11/16/2009
TSS	0	0	1.00	28	16	57.1	5/3/2005	8/17/2009	
Turbidity	0.68	0.015	0.29	114	89	78.1	10/24/2000	8/17/2009	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
C50	Cadmium	0	0	0.88	8	0	0	7/14/2005	9/1/2009
	Copper	-1.8	-0.078	0.25	325	293	90.2	1/3/2000	9/1/2009
	Mercury	0	0	0.56	16	6	37.5	1/3/2000	7/14/2009
	Selenium	0	0	0.84	16	8	50	5/11/2004	9/1/2009
	Zinc	0	0	0.78	22	12	54.5	5/18/2000	9/1/2009
	Escherichia coli	0	0	0.47	300	300	100	1/3/2000	1/6/2009
	Total Coliform	2.5	37.5	0.001	302	302	100	1/3/2000	1/6/2009
	Dissolved Phosphorus	1.82	0.00014	0.25	118	109	92.4	8/28/2000	8/12/2009
	Orthophosphate as P	-6.89	-0.00022	0.00	343	160	46.6	1/3/2000	9/29/2009
	Total Phosphorus	-2.4	-0.00050	0.02	341	336	98.5	1/3/2000	9/29/2009
	Ammonia Nitrogen as N	0	0	0.32	343	246	71.7	1/3/2000	9/29/2009
	Nitrate + Nitrite as N	0	0	0.50	342	180	52.6	1/3/2000	9/29/2009
	Nitrogen, Kjeldahl	0.8	0.0020	0.17	193	190	98.4	1/3/2000	9/29/2009
	Total Nitrogen	-1.4	0.00	0.60	37	37	100	10/20/2005	7/14/2009
	Chlorophyll a	-2.6	-0.15	0.26	218	215	98.6	1/3/2000	11/19/2009
	Alkalinity	0.8	0.16	0.31	334	334	100	1/3/2000	9/1/2009
	Dissolved oxygen	0.4	0.04	0.65	151	151	100	6/28/2000	9/29/2009
	Hardness	2.0	0.40	0.20	67	67	100	8/28/2000	8/12/2009
	pH	0.3	0.02	0.05	344	344	100	1/3/2000	9/29/2009
	Specific conductance	0.7	0.40	0.45	297	297	100	1/3/2000	9/29/2009
	TDS	2.2	1	0.06	185	185	100	1/18/2000	8/12/2009
	Temperature	2.6	0.25	0.15	339	339	100	1/3/2000	9/29/2009
	TOC	0.6	0.019	0.21	339	338	99.7	1/3/2000	11/19/2009
TSS	0	0	0.88	38	15	39.5	5/18/2000	9/1/2009	
Turbidity	2.7	0.056	0.03	309	281	90.9	1/3/2000	9/29/2009	
M80	Copper	8.0	0.2	0.00	107	102	95.3	4/17/2001	1/7/2009
	Mercury	-20.3	-0.42	0.59	7	7	100	5/24/2006	11/4/2008
	Selenium	-61.0	-0.085	0.68	5	4	80	6/8/2005	11/14/2006
	Escherichia coli	0	0	1.00	112	112	100	3/13/2001	1/8/2009
	Total Coliform	4.8	30	0.05	112	112	100	3/13/2001	1/8/2009
	Dissolved Phosphorus	1.2	0.00025	0.51	112	111	99.1	3/13/2001	1/7/2009
	Orthophosphate as P	2.22	0.00033	0.23	113	98	86.7	3/13/2001	1/7/2009
	Total Phosphorus	-1.4	-0.00056	0.72	113	113	100	3/13/2001	1/7/2009
	Ammonia Nitrogen as N	2.6	0.00050	0.02	113	87	77	3/13/2001	1/7/2009
	Nitrate + Nitrite as N	3.2	0.0068	0.12	113	110	97.3	3/13/2001	1/7/2009
	Nitrogen, Kjeldahl	0.6	0.0017	0.51	113	113	100	3/13/2001	1/7/2009
	Total Nitrogen	-12.0	-0.0567	0.01	42	42	100	10/19/2005	1/7/2009
	Chlorophyll a	25.5	0.79	1.00	13	13	100	1/10/2008	1/7/2009
	Alkalinity	0	0	0.88	107	107	100	4/17/2001	1/7/2009
	Dissolved oxygen	0.2	0.017	0.80	111	111	100	3/13/2001	1/7/2009
	Hardness	-1.0	-0.2	0.56	54	54	100	4/17/2001	1/7/2009
	pH	0.3	0.025	0.21	113	113	100	3/13/2001	1/7/2009
	Specific conductance	0.7	0.4	0.59	113	113	100	3/13/2001	1/7/2009
	TDS	0	0	0.85	106	106	100	4/17/2001	1/7/2009
	Temperature	-4.4	-0.4	0.10	113	113	100	3/13/2001	1/7/2009
	TOC	1.9	0.074	0.04	104	104	100	4/17/2001	1/7/2009
	Turbidity	-0.32	-0.0083	0.33	103	74	71.8	4/17/2001	1/7/2009



Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
<b>M90</b>	Copper	2.7	0.12	0.01	122	112	91.8	8/31/2000	9/15/2009
	Mercury	0	0	0.72	24	24	100	10/19/2005	7/14/2009
	Selenium	-5.7	-0.0050	0.19	55	44	80	3/9/2005	9/15/2009
	Escherichia coli	0	0	0.29	127	127	100	8/31/2000	11/16/2009
	Total Coliform	5.4	30	0.02	127	127	100	8/31/2000	11/16/2009
	Dissolved Phosphorus	0	0	0.84	130	130	100	8/31/2000	9/15/2009
	Orthophosphate as P	0	0	0.77	130	119	91.5	8/31/2000	9/15/2009
	Total Phosphorus	-0.6	-0.00026	0.64	130	130	100	8/31/2000	9/15/2009
	Ammonia Nitrogen as N	2.4	0.00050	0.10	131	102	77.9	8/31/2000	9/15/2009
	Nitrate + Nitrite as N	0.3	0.00058	0.95	131	126	96.2	8/31/2000	9/15/2009
	Nitrogen, Kjeldahl	-0.4	-0.0010	0.46	131	131	100	8/31/2000	9/15/2009
	Total Nitrogen	-10.3	-0.0475	0.03	50	50	100	10/19/2005	9/15/2009
	Chlorophyll a	-49.2	-1.34	0.07	22	22	100	1/10/2008	11/16/2009
	Alkalinity	1.2	0.25	0.32	122	122	100	8/31/2000	9/15/2009
	Dissolved oxygen	0.2	0.02	0.77	129	129	100	8/31/2000	9/15/2009
	Hardness	0	0	0.59	68	68	100	8/31/2000	9/15/2009
	pH	0	0	0.95	131	131	100	8/31/2000	9/15/2009
	Specific conductance	-0.8	-0.5	0.66	131	131	100	8/31/2000	9/15/2009
	TDS	1.2	0.5	0.57	114	114	100	2/13/2001	9/15/2009
	Temperature	0.1	0.0083	0.98	131	131	100	8/31/2000	9/15/2009
TOC	1.9	0.076	0.01	116	116	100	8/31/2000	11/16/2009	
Turbidity	2.1	0.05	0.14	118	89	75.4	8/31/2000	9/15/2009	
<b>VM50</b>	Cadmium	NA	NA	Not enough detected data	13	0	0	3/14/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	13	0	0	3/14/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	NA	NA	Not enough detected data	13	0	0	3/14/2006	7/14/2009
	Zinc	0	0	1.00	13	1	7.7	3/14/2006	7/14/2009
	Escherichia coli	0	0	0.97	49	49	100	8/29/2001	7/14/2009
	Total Coliform	-0.2	-2.33	0.97	54	54	100	8/29/2001	7/14/2009
	Orthophosphate as P	0	0	0.94	18	11	61.1	4/13/2004	7/14/2009
	Total Phosphorus	0.2	0.00022	1.00	19	18	94.7	4/13/2004	7/14/2009
	Ammonia Nitrogen as N	NA	NA	Not enough detected data	18	0	0	4/13/2004	7/14/2009
	Nitrate + Nitrite as N	1.1	0.0010	0.95	19	19	100	4/13/2004	7/14/2009
	Total Nitrogen	-1.5	-0.0050	0.44	19	18	94.7	4/13/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	3	3	100	4/14/2009	7/14/2009
	Alkalinity	17.9	3.6	0.28	11	11	100	7/24/2007	7/14/2009
	Dissolved oxygen	NA	NA	Non-conforming data <sup>1</sup>	5	5	100	7/14/2009	11/10/2009
	Hardness	23.0	4.4	0.19	11	11	100	7/24/2007	7/14/2009
	pH	-0.1	-0.0067	0.61	52	52	100	10/10/2001	7/14/2009
	Specific conductance	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	7/14/2009	11/10/2009
	Temperature	1.2	0.1	0.44	55	55	100	10/10/2001	11/10/2009
	TOC	-0.1	-0.0033	1.00	19	19	100	4/13/2004	7/14/2009

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
T20	Cadmium	NA	NA	Not enough detected data	5	0	0	3/14/2006	10/22/2007
	Copper	-2.7	-0.05	0.41	25	15	60	3/14/2006	9/14/2009
	Mercury	0	0	Non-conforming data <sup>1</sup>	6	5	83.3	3/14/2006	7/15/2009
	Selenium	0.0	0	1.00	5	2	40	3/14/2006	10/22/2007
	Zinc	-35.3	-1.65	0.68	5	2	40	3/14/2006	10/22/2007
	Escherichia coli	0.5	1.37	0.71	47	47	100	11/18/2003	11/17/2009
	Total Coliform	1.3	22.75	0.79	47	47	100	11/18/2003	11/17/2009
	Dissolved Phosphorus	-9.1	-0.001	0.45	21	20	95.2	1/7/2008	9/14/2009
	Orthophosphate as P	1.2	0.00012	0.31	30	24	80	4/13/2004	9/14/2009
	Total Phosphorus	-6.3	-0.0017	0.36	31	30	96.8	7/20/2004	9/14/2009
	Ammonia Nitrogen as N	-3.5	-0.00067	0.13	31	14	45.2	4/13/2004	9/14/2009
	Nitrate + Nitrite as N	2.3	0.0042	0.81	32	31	96.9	4/13/2004	9/14/2009
	Nitrogen, Kjeldahl	13.2	0.03	0.29	21	21	100	1/7/2008	9/14/2009
	Total Nitrogen	2.1	0.0087	0.62	32	32	100	4/13/2004	9/14/2009
	Chlorophyll a	-8.3	-0.1	1.00	22	16	72.7	1/7/2008	11/17/2009
	Alkalinity	-1.2	-2.5	1.00	23	23	100	7/24/2007	9/14/2009
	Dissolved oxygen	-5.6	-0.5	0.50	21	21	100	1/7/2008	9/14/2009
	Hardness	0	0	1.00	23	23	100	7/24/2007	9/14/2009
	pH	0.6	0.05	0.37	51	51	100	11/18/2003	9/14/2009
	Specific conductance	-4.5	-22	1.00	21	21	100	1/7/2008	9/14/2009
	TDS	0.9	3	1.00	20	20	100	1/7/2008	9/14/2009
Temperature	-1.0	-0.1	0.83	52	52	100	11/18/2003	9/14/2009	
TOC	1.3	0.045	0.77	33	33	100	4/13/2004	11/17/2009	
Turbidity	8.8	0.2	0.72	21	12	57.1	1/7/2008	9/14/2009	
VM40	Cadmium	NA	NA	Not enough detected data	17	0	0	5/9/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	17	0	0	5/9/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	2	0	0	8/11/2002	3/14/2006
	Selenium	4.89	0.2	0.34	17	11	64.7	5/9/2006	7/14/2009
	Zinc	NA	NA	Not enough detected data	17	0	0	5/9/2006	7/14/2009
	Escherichia coli	0.2	0.38	0.64	58	58	100	8/29/2001	7/14/2009
	Total Coliform	0	0	1.00	59	59	100	8/29/2001	7/14/2009
	Orthophosphate as P	0	0	0.90	25	5	20	8/11/2002	7/14/2009
	Total Phosphorus	0	0	0.76	26	17	65.4	8/11/2002	7/14/2009
	Ammonia Nitrogen as N	0	0	0.85	25	2	8	8/11/2002	7/14/2009
	Nitrate + Nitrite as N	-2.4	-0.0045	0.48	25	25	100	4/13/2004	7/14/2009
	Nitrogen, Kjeldahl	NA	NA	Not enough detected data	1	1	100	8/11/2002	8/11/2002
	Total Nitrogen	-1.0	-0.0050	0.90	25	25	100	4/13/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	-0.6	-0.39	0.93	43	43	100	8/11/2002	7/14/2009
	Dissolved oxygen	0	0	0.90	40	40	100	4/21/2004	9/8/2009
	Hardness	0.4	1	0.85	42	42	100	3/16/2004	7/14/2009
	pH	-0.3	-0.022	0.51	68	68	100	10/10/2001	11/10/2009
	Specific conductance	0.2	1.17	0.90	15	15	100	7/9/2002	11/10/2009
	TDS	NA	NA	Non-conforming data <sup>1</sup>	2	2	100	7/9/2002	8/11/2002
	Temperature	-10.6	-1.32	0.0003	91	91	100	10/10/2001	11/10/2009
TOC	2.1	0.069	0.22	26	26	100	8/11/2002	7/14/2009	
Turbidity	0	0	0.62	5	5	100	8/11/2002	8/24/2006	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
VM30	Cadmium	0	0	0.59	31	6	19.4	3/11/2003	7/14/2009
	Copper	0	0	0.48	31	4	12.9	3/11/2003	7/14/2009
	Mercury	NA	NA	Not enough detected data	2	0	0	8/11/2002	3/14/2006
	Selenium	0	0	0.88	31	23	74.2	3/11/2003	7/14/2009
	Zinc	0	0	0.80	31	12	38.7	3/11/2003	7/14/2009
	Escherichia coli	-0.1	-0.12	0.97	57	57	100	8/29/2001	7/14/2009
	Total Coliform	-0.7	-24	0.24	59	59	100	8/29/2001	7/14/2009
	Orthophosphate as P	0	0	0.94	25	3	12	8/11/2002	7/14/2009
	Total Phosphorus	0	0	0.89	27	18	66.7	8/11/2002	7/14/2009
	Ammonia Nitrogen as N	0	0	1.00	26	3	11.5	8/11/2002	7/14/2009
	Nitrate + Nitrite as N	-1.4	-0.0023	0.95	26	26	100	4/13/2004	7/14/2009
	Nitrogen, Kjeldahl	NA	NA	Not enough detected data	1	1	100	8/11/2002	8/11/2002
	Total Nitrogen	1.6	0.0071	0.65	25	24	96	4/13/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	-0.7	-0.69	0.71	81	81	100	10/31/2000	7/14/2009
	Dissolved oxygen	-0.5	-0.05	0.37	77	77	100	11/28/2000	10/13/2009
	Hardness	0.7	2.58	0.78	80	80	100	10/31/2000	7/14/2009
	pH	0.02	0.0017	0.95	87	87	100	10/31/2000	11/10/2009
	Specific conductance	0	0	0.65	15	15	100	8/11/2002	11/10/2009
	TDS	NA	NA	Not enough detected data	1	1	100	8/11/2002	8/11/2002
	Temperature	-2.6	-0.33	0.33	111	111	100	11/28/2000	11/10/2009
	TOC	1.8	0.06	0.52	26	26	100	8/11/2002	7/14/2009
	TSS	NA	NA	Non-conforming data <sup>1</sup>	2	2	100	5/9/2006	11/14/2006
Turbidity	-0.2	-0.2	0.64	5	5	100	8/11/2002	8/24/2006	
M130	Copper	2.7	0.067	0.18	114	108	94.7	4/18/2001	9/14/2009
	Mercury	-31.1	-0.68	1.00	20	20	100	1/14/2008	11/17/2009
	Selenium	18.9	0.4	0.01	13	13	100	6/8/2005	7/14/2009
	Escherichia coli	2.1	2.54	0.04	120	120	100	3/14/2001	11/17/2009
	Total Coliform	4.4	66.7	0.01	120	120	100	3/14/2001	11/17/2009
	Dissolved Phosphorus	2.7	0.00025	0.11	120	118	98.3	3/14/2001	9/14/2009
	Orthophosphate as P	0	0	0.44	120	72	60	3/14/2001	9/14/2009
	Total Phosphorus	0	0	0.92	120	120	100	3/14/2001	9/14/2009
	Ammonia Nitrogen as N	0.0	0	0.95	120	103	85.8	3/14/2001	9/14/2009
	Nitrate + Nitrite as N	8.4	0.023	0.003	120	119	99.2	3/14/2001	9/14/2009
	Nitrogen, Kjeldahl	0.6	0.0023	0.72	120	120	100	3/14/2001	9/14/2009
	Total Nitrogen	-6.3	-0.04	0.28	50	50	100	10/19/2005	9/14/2009
	Chlorophyll a	-36.0	-0.74	1.00	22	21	95.5	1/14/2008	11/17/2009
	Alkalinity	2.2	2.42	0.20	115	115	100	4/18/2001	9/14/2009
	Dissolved oxygen	1.0	0.093	0.27	118	118	100	3/14/2001	9/14/2009
	Hardness	1.1	4.50	0.31	61	61	100	4/18/2001	9/14/2009
	pH	-0.5	-0.04	0.005	120	120	100	3/14/2001	9/14/2009
	Specific conductance	2.2	19.3	0.21	120	120	100	3/14/2001	9/14/2009
	TDS	1.8	11.5	0.10	115	115	100	4/18/2001	9/14/2009
	Temperature	-4.2	-0.5	0.07	120	120	100	3/14/2001	9/14/2009
	TOC	1.4	0.058	0.23	111	111	100	4/18/2001	11/17/2009
	Turbidity	-0.8	-0.065	0.69	110	94	85.5	4/18/2001	9/14/2009

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
<b>M140</b>	Copper	5.5	0.19	0.01	115	113	98.3	4/18/2001	9/14/2009
	Mercury	-14.9	-0.29	1.00	13	13	100	1/14/2008	11/17/2009
	Selenium	-3.9	-0.073	0.78	11	11	100	6/10/2005	7/14/2009
	Escherichia coli	4.3	8	0.04	121	121	100	3/14/2001	11/17/2009
	Total Coliform	3.7	87.9	0.07	121	121	100	3/14/2001	11/17/2009
	Dissolved Phosphorus	1.2	0.011	0.44	124	124	100	3/14/2001	9/14/2009
	Orthophosphate as P	2.5	0.021	0.32	123	120	97.6	3/14/2001	9/14/2009
	Total Phosphorus	-0.4	-0.0039	0.80	126	124	98.4	3/14/2001	9/14/2009
	Ammonia Nitrogen as N	-0.2	-0.00059	0.46	124	123	99.2	3/14/2001	9/14/2009
	Nitrate + Nitrite as N	-1.4	-0.056	0.56	125	124	99.2	3/14/2001	9/14/2009
	Nitrogen, Kjeldahl	-1.5	-0.018	0.26	126	125	99.2	3/14/2001	9/14/2009
	Total Nitrogen	0.7	0.033	0.76	56	56	100	10/21/2005	9/14/2009
	Chlorophyll a	-23.6	-0.89	0.55	25	24	96	1/14/2008	11/17/2009
	Alkalinity	1.2	1.24	0.43	115	115	100	4/18/2001	9/14/2009
	Dissolved oxygen	-0.1	-0.01	0.87	124	124	100	3/14/2001	9/14/2009
	Hardness	0	0	0.95	61	61	100	4/18/2001	9/14/2009
	pH	0	0	0.33	126	126	100	3/14/2001	9/14/2009
	Specific conductance	1.4	11.25	0.29	126	126	100	3/14/2001	9/14/2009
	TDS	1.3	7.7	0.45	115	115	100	4/18/2001	9/14/2009
	Temperature	-3.2	-0.41	0.03	126	126	100	3/14/2001	9/14/2009
TOC	0.7	0.041	0.68	115	115	100	4/18/2001	11/17/2009	
Turbidity	-0.8	-0.11	0.28	110	98	89.1	4/18/2001	9/14/2009	
<b>M150</b>	Copper	5.9	0.19	0.003	115	111	96.5	4/18/2001	9/14/2009
	Mercury	9.9	0.15	0.76	16	16	100	10/21/2005	7/14/2009
	Selenium	3.9	0.1	0.23	54	54	100	3/10/2005	9/14/2009
	Escherichia coli	3.5	7	0.06	121	121	100	3/14/2001	11/17/2009
	Total Coliform	4.7	97.6	0.07	121	121	100	3/14/2001	11/17/2009
	Dissolved Phosphorus	1.1	0.01	0.58	119	119	100	3/14/2001	9/14/2009
	Orthophosphate as P	2.3	0.021	0.25	118	118	100	3/14/2001	9/14/2009
	Total Phosphorus	0.3	0.0035	0.80	119	119	100	3/14/2001	9/14/2009
	Ammonia Nitrogen as N	-0.03	-0.00010	0.87	118	118	100	3/14/2001	9/14/2009
	Nitrate + Nitrite as N	-1.0	-0.042	0.87	119	119	100	3/14/2001	9/14/2009
	Nitrogen, Kjeldahl	-0.01	-0.00013	0.92	119	119	100	3/14/2001	9/14/2009
	Total Nitrogen	2.5	0.15	0.16	50	50	100	10/21/2005	9/14/2009
	Chlorophyll a	-45.3	-1.57	0.23	22	22	100	1/14/2008	11/17/2009
	Alkalinity	-0.5	-0.61	0.79	115	115	100	4/18/2001	9/14/2009
	Dissolved oxygen	0.5	0.05	0.72	118	118	100	3/14/2001	9/14/2009
	Hardness	0	0	0.77	62	62	100	4/18/2001	9/14/2009
	pH	-0.4	-0.029	0.03	120	120	100	3/14/2001	9/14/2009
	Specific conductance	0.8	7.63	0.50	120	120	100	3/14/2001	9/14/2009
	TDS	0.5	3	0.87	115	115	100	4/18/2001	9/14/2009
	Temperature	-2.9	-0.35	0.13	120	120	100	3/14/2001	9/14/2009
TOC	0.8	0.045	0.59	114	114	100	4/18/2001	11/17/2009	
Turbidity	0.4	0.029	0.69	111	100	90.1	4/18/2001	9/14/2009	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
VM20	Cadmium	NA	NA	Not enough detected data	18	0	0	3/14/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	18	0	0	3/14/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	0	0	0.90	18	18	100	3/14/2006	7/14/2009
	Zinc	0	0	0.90	18	16	88.9	3/14/2006	7/14/2009
	Escherichia coli	0.4	1.04	0.88	51	51	100	2/12/2002	7/14/2009
	Total Coliform	-0.9	-70	0.64	52	52	100	1/8/2002	7/14/2009
	Orthophosphate as P	0	0	0.87	24	24	100	7/20/2004	7/14/2009
	Total Phosphorus	0	0	0.87	24	24	100	7/20/2004	7/14/2009
	Ammonia Nitrogen as N	0	0	0.46	23	8	34.8	7/20/2004	7/14/2009
	Nitrate + Nitrite as N	0	0	0.87	24	24	100	7/20/2004	7/14/2009
	Total Nitrogen	0	0	0.87	24	24	100	7/20/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	-7.7	-10.2	0.85	16	16	100	2/13/2007	7/14/2009
	Dissolved oxygen	0	0	Non-conforming data <sup>1</sup>	12	12	100	4/22/2008	10/13/2009
	Hardness	-16.2	-63.7	0.55	15	15	100	2/13/2007	6/9/2009
	pH	-0.1	-0.0075	0.56	67	67	100	10/10/2001	11/10/2009
	Specific conductance	-5.7	-48.5	0.72	14	14	100	4/22/2008	11/10/2009
	Temperature	2.2	0.26	0.43	67	67	100	10/10/2001	11/10/2009
	TOC	0	0	0.87	24	24	100	7/20/2004	7/14/2009
VM10	Cadmium	NA	NA	Not enough detected data	18	0	0	3/14/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	18	0	0	3/14/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	0	0	1.00	18	18	100	3/14/2006	7/14/2009
	Zinc	0	0	1.00	18	8	44.4	3/14/2006	7/14/2009
	Escherichia coli	-0.2	-1	0.82	15	15	100	1/17/2006	7/14/2009
	Total Coliform	3.4	317	0.82	15	15	100	1/17/2006	7/14/2009
	Orthophosphate as P	0	0	0.90	18	17	94.4	3/14/2006	7/14/2009
	Total Phosphorus	0	0	0.71	18	18	100	3/14/2006	7/14/2009
	Ammonia Nitrogen as N	0	0	0.91	19	7	36.8	7/19/2005	7/14/2009
	Nitrate + Nitrite as N	0	0	0.90	18	18	100	3/14/2006	7/14/2009
	Total Nitrogen	0	0	1.00	18	18	100	3/14/2006	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	4.2	9	0.57	16	16	100	2/13/2007	7/14/2009
	Dissolved oxygen	-16.7	-1.4	0.72	13	13	100	4/22/2008	11/10/2009
	Hardness	8.1	50.5	0.34	16	16	100	2/13/2007	7/14/2009
	pH	-0.1	-0.0088	0.68	70	70	100	10/10/2001	11/10/2009
	Specific conductance	-23.9	-319	0.72	14	14	100	4/22/2008	11/10/2009
	Temperature	1.7	0.19	0.45	70	70	100	10/10/2001	11/10/2009
	TOC	0.8	0.043	0.70	19	19	100	7/19/2005	7/14/2009

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
VT30	Cadmium	NA	NA	Not enough detected data	17	0	0	3/14/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	16	0	0	3/14/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	-9.3	-0.15	0.22	17	16	94.1	3/14/2006	7/14/2009
	Zinc	0	0	0.78	16	1	6.3	3/14/2006	7/14/2009
	Escherichia coli	0	0	0.86	54	54	100	8/29/2001	7/14/2009
	Total Coliform	1.3	18.3	0.69	56	56	100	8/29/2001	7/14/2009
	Orthophosphate as P	0	0	1.00	22	2	9.1	7/20/2004	7/14/2009
	Total Phosphorus	0	0	0.25	22	4	18.2	7/20/2004	7/14/2009
	Ammonia Nitrogen as N	NA	NA	Not enough detected data	22	0	0	7/20/2004	7/14/2009
	Nitrate + Nitrite as N	0	0	1.00	23	15	65.2	7/20/2004	7/14/2009
	Total Nitrogen	0	0	0.60	22	12	54.5	7/20/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	2.6	3.25	1.00	15	15	100	2/13/2007	7/14/2009
	Dissolved oxygen	-13.0	-1.1	1.00	10	10	100	4/22/2008	10/13/2009
	Hardness	2.1	5.75	0.85	15	15	100	2/13/2007	7/14/2009
	pH	-0.3	-0.022	0.45	63	63	100	10/10/2001	11/10/2009
	Specific conductance	1.8	10.5	1.00	13	13	100	4/22/2008	11/10/2009
Temperature	0.6	0.054	0.92	64	64	100	10/10/2001	11/10/2009	
TOC	-1.9	-0.053	0.34	23	23	100	7/20/2004	7/14/2009	
VT20	Cadmium	NA	NA	Not enough detected data	17	0	0	3/14/2006	7/14/2009
	Copper	NA	NA	Not enough detected data	17	0	0	3/14/2006	7/14/2009
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	-8.4	-0.9	0.15	17	17	100	3/14/2006	7/14/2009
	Zinc	0	0	0.44	17	5	29.4	3/14/2006	7/14/2009
	Escherichia coli	0.3	2	0.72	57	57	100	8/29/2001	7/14/2009
	Total Coliform	-0.7	-106	0.37	58	58	100	8/29/2001	7/14/2009
	Orthophosphate as P	0	0	0.77	22	12	54.5	7/20/2004	7/14/2009
	Total Phosphorus	4.1	0.002	0.58	23	22	95.7	7/20/2004	7/14/2009
	Ammonia Nitrogen as N	0	0	1.00	22	3	13.6	7/20/2004	7/14/2009
	Nitrate + Nitrite as N	-2.9	-0.02	0.73	23	23	100	7/20/2004	7/14/2009
	Total Nitrogen	3.6	0.057	0.49	23	23	100	7/20/2004	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	-6.1	-16	0.57	15	15	100	2/13/2007	7/14/2009
	Dissolved oxygen	-18.8	-1.7	0.45	10	10	100	4/22/2008	10/13/2009
	Hardness	-10.3	-107.5	0.57	15	15	100	2/13/2007	7/14/2009
	pH	-0.3	-0.026	0.07	66	66	100	10/10/2001	11/10/2009
	Specific conductance	-16.3	-354.5	0.72	14	14	100	4/22/2008	11/10/2009
Temperature	3.3	0.33	0.24	67	67	100	10/10/2001	11/10/2009	
TOC	-0.9	-0.038	0.58	23	23	100	7/20/2004	7/14/2009	

Table D-1. Raw Mann-Kendall Statistical Testing Results

Station	Analyte	Sen Slope (as % of mean)	Sen Slope	p-value ( 0.1 shaded)	# Analyzed	# Detected	% Detected	Earliest Sample Date	Latest Sample Date
VT10	Cadmium	NA	NA	Not enough detected data	8	0	0	3/14/2006	12/11/2007
	Copper	NA	NA	Not enough detected data	8	0	0	3/14/2006	12/11/2007
	Mercury	NA	NA	Not enough detected data	1	0	0	3/14/2006	3/14/2006
	Selenium	-13.3	-1.5	0.75	8	8	100	3/14/2006	12/11/2007
	Zinc	0	0	1.00	8	7	87.5	3/14/2006	12/11/2007
	Escherichia coli	0.7	1.96	0.81	52	52	100	8/29/2001	12/11/2007
	Total Coliform	1.3	293	0.41	52	52	100	8/29/2001	12/11/2007
	Orthophosphate as P	6.5	0.010	0.48	14	11	78.6	7/20/2004	12/11/2007
	Total Phosphorus	0	0	0.66	36	35	97.2	7/15/2003	12/11/2007
	Ammonia Nitrogen as N	0	0	0.67	36	36	100	7/15/2003	12/11/2007
	Nitrate + Nitrite as N	-1.3	-0.037	0.57	35	35	100	7/15/2003	12/11/2007
	Total Nitrogen	1.7	0.08	0.42	14	14	100	7/20/2004	12/11/2007
	Alkalinity	NA	NA	Non-conforming data <sup>1</sup>	6	6	100	2/13/2007	12/11/2007
	Hardness	NA	NA	Non-conforming data <sup>1</sup>	6	6	100	2/13/2007	12/11/2007
	pH	-0.1	-0.01	0.72	54	54	100	10/10/2001	12/11/2007
	Temperature	5.9	0.65	0.13	56	56	100	10/10/2001	12/11/2007
	TOC	2.0	0.095	0.30	14	14	100	7/20/2004	12/11/2007
TSS	6.3	4.1	0.16	26	26	100	7/15/2003	11/15/2005	
VT05	Cadmium	NA	NA	Not enough detected data	10	0	0	4/22/2008	7/14/2009
	Copper	NA	NA	Not enough detected data	10	0	0	4/22/2008	7/14/2009
	Selenium	9.5	1	1.00	10	10	100	4/22/2008	7/14/2009
	Zinc	0	0	1.00	9	2	22.2	4/22/2008	7/14/2009
	Escherichia coli	94.8	303.5	0.62	7	7	100	4/22/2008	7/14/2009
	Total Coliform	136.9	15510	0.62	7	7	100	4/22/2008	7/14/2009
	Orthophosphate as P	-61.3	-0.06	0.13	10	9	90	4/22/2008	7/14/2009
	Total Phosphorus	-13.2	-0.028	1.00	10	10	100	4/22/2008	7/14/2009
	Ammonia Nitrogen as N	41.1	0.2735	0.62	10	10	100	4/22/2008	7/14/2009
	Nitrate + Nitrite as N	12.3	0.24	1.00	10	10	100	4/22/2008	7/14/2009
	Total Nitrogen	-1.4	-0.07	1.00	10	10	100	4/22/2008	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	2.7	7.5	1.00	10	10	100	4/22/2008	7/14/2009
	Dissolved oxygen	-5.9	-0.5	1.00	11	11	100	4/22/2008	10/13/2009
	Hardness	0.3	2.5	1.00	10	10	100	4/22/2008	7/14/2009
	pH	0.3	0.02	1.00	13	13	100	4/22/2008	10/13/2009
	Specific conductance	2.1	39	1.00	14	14	100	4/22/2008	11/10/2009
Temperature	-16.3	-2.2	0.72	14	14	100	4/22/2008	11/10/2009	
TOC	-3.9	-0.2	1.00	10	10	100	4/22/2008	7/14/2009	
VM05	Cadmium	NA	NA	Not enough detected data	10	0	0	4/22/2008	7/14/2009
	Copper	NA	NA	Not enough detected data	10	0	0	4/22/2008	7/14/2009
	Selenium	7.0	0.45	0.62	10	10	100	4/22/2008	7/14/2009
	Zinc	0	0	1.00	10	2	20	4/22/2008	7/14/2009
	Escherichia coli	78.7	231	0.62	7	7	100	4/22/2008	7/14/2009
	Total Coliform	94.4	5045	0.62	7	7	100	4/22/2008	7/14/2009
	Orthophosphate as P	19.6	0.045	0.62	10	10	100	4/22/2008	7/14/2009
	Total Phosphorus	-3.1	-0.01	1.00	10	10	100	4/22/2008	7/14/2009
	Ammonia Nitrogen as N	76.0	0.124	0.62	10	5	50	4/22/2008	7/14/2009
	Nitrate + Nitrite as N	90.6	1.00	0.13	10	10	100	4/22/2008	7/14/2009
	Total Nitrogen	66.0	1.785	0.13	10	10	100	4/22/2008	7/14/2009
	Chlorophyll a	NA	NA	Non-conforming data <sup>1</sup>	4	4	100	4/14/2009	7/14/2009
	Alkalinity	-2.8	-7	1.00	10	10	100	4/22/2008	7/14/2009
	Dissolved oxygen	-6.0	-0.60	0.72	13	13	100	4/22/2008	11/10/2009
	Hardness	-3.2	-22.5	1.00	10	10	100	4/22/2008	7/14/2009
	pH	0.13	0.010	0.72	14	14	100	4/22/2008	11/10/2009
	Specific conductance	-7.90	-123	0.72	14	14	100	4/22/2008	11/10/2009
Temperature	-15.2	-2.26	1.00	14	14	100	4/22/2008	11/10/2009	
TOC	23.5	1.03	0.62	10	10	100	4/22/2008	7/14/2009	

<sup>1</sup>Non-conforming data - means fewer than half the monthly values were each missing more than half the possible comparisons between the first and last 20% of the years.