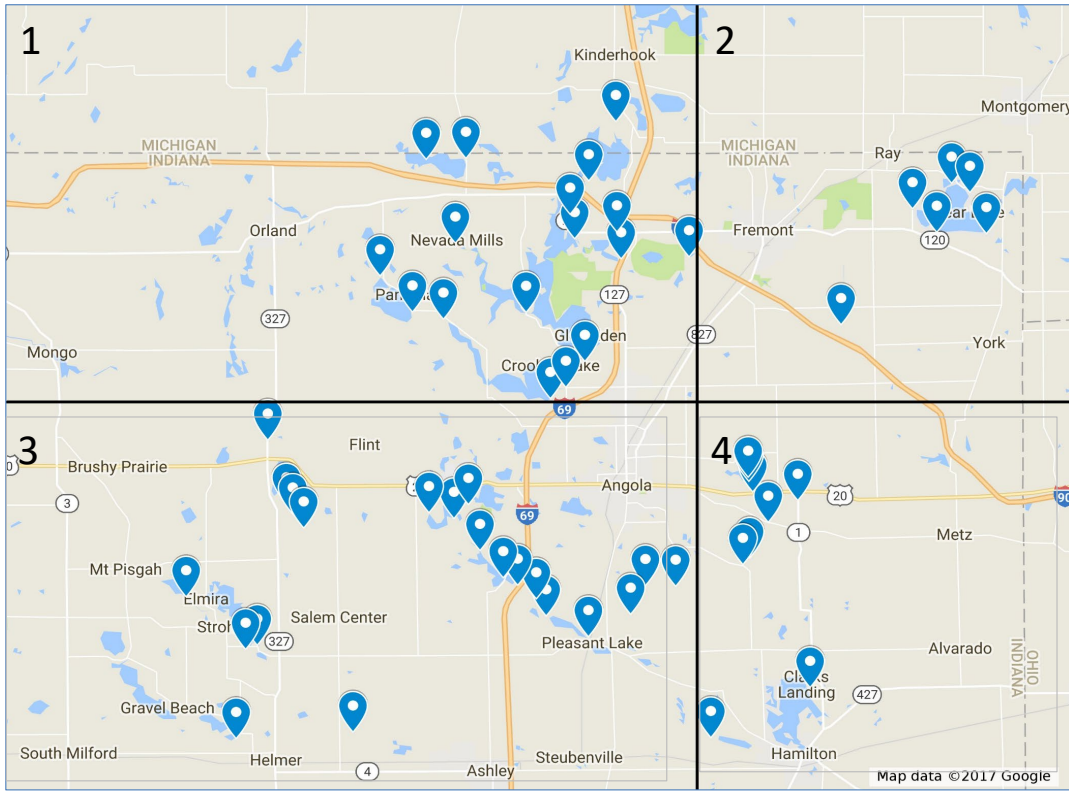


Click the quadrant of interest to view data



Other Links
[Site Key Page](#)
[Google Map](#)
[SCLC Web Site](#)

Steuben County Lakes Council

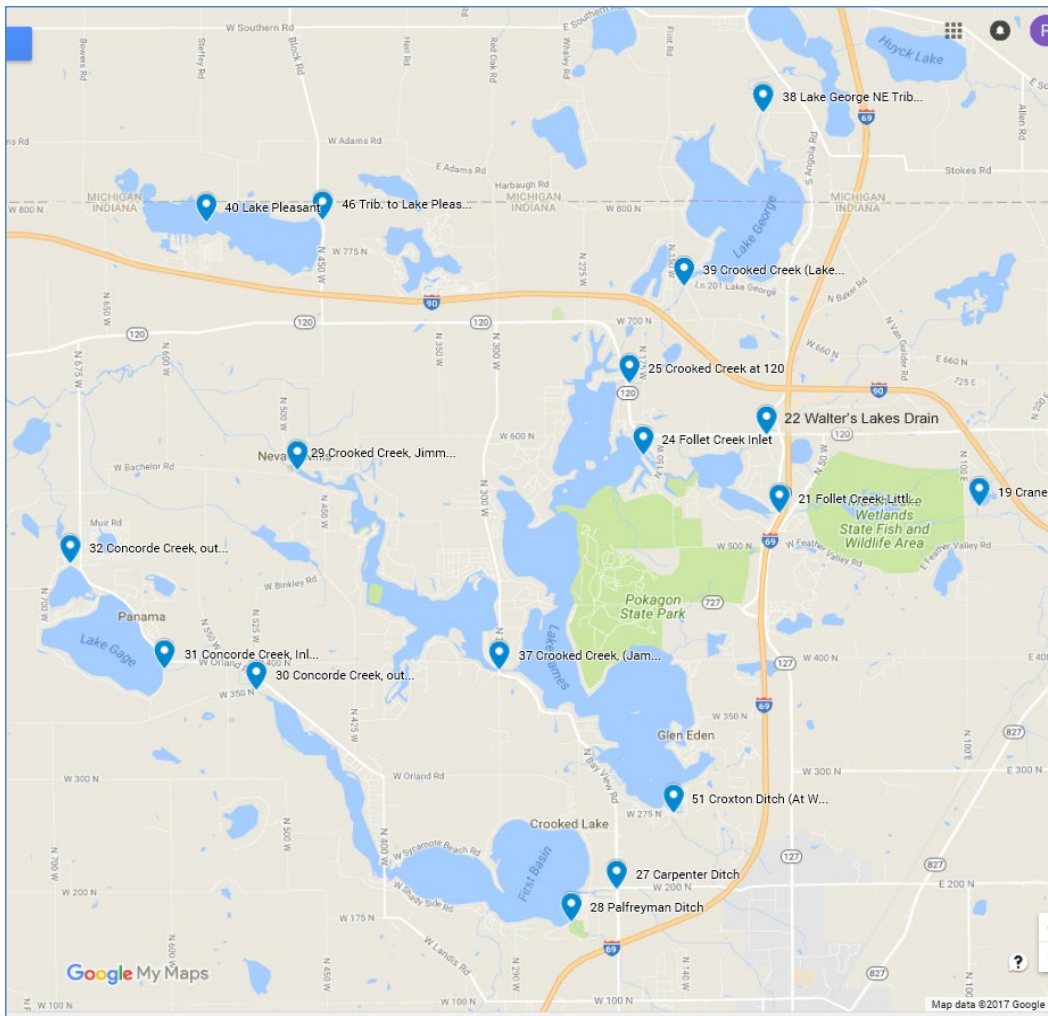
2017 Water Testing Data

Quad 1



Click the site of interest to view data

[Back to county map](#)



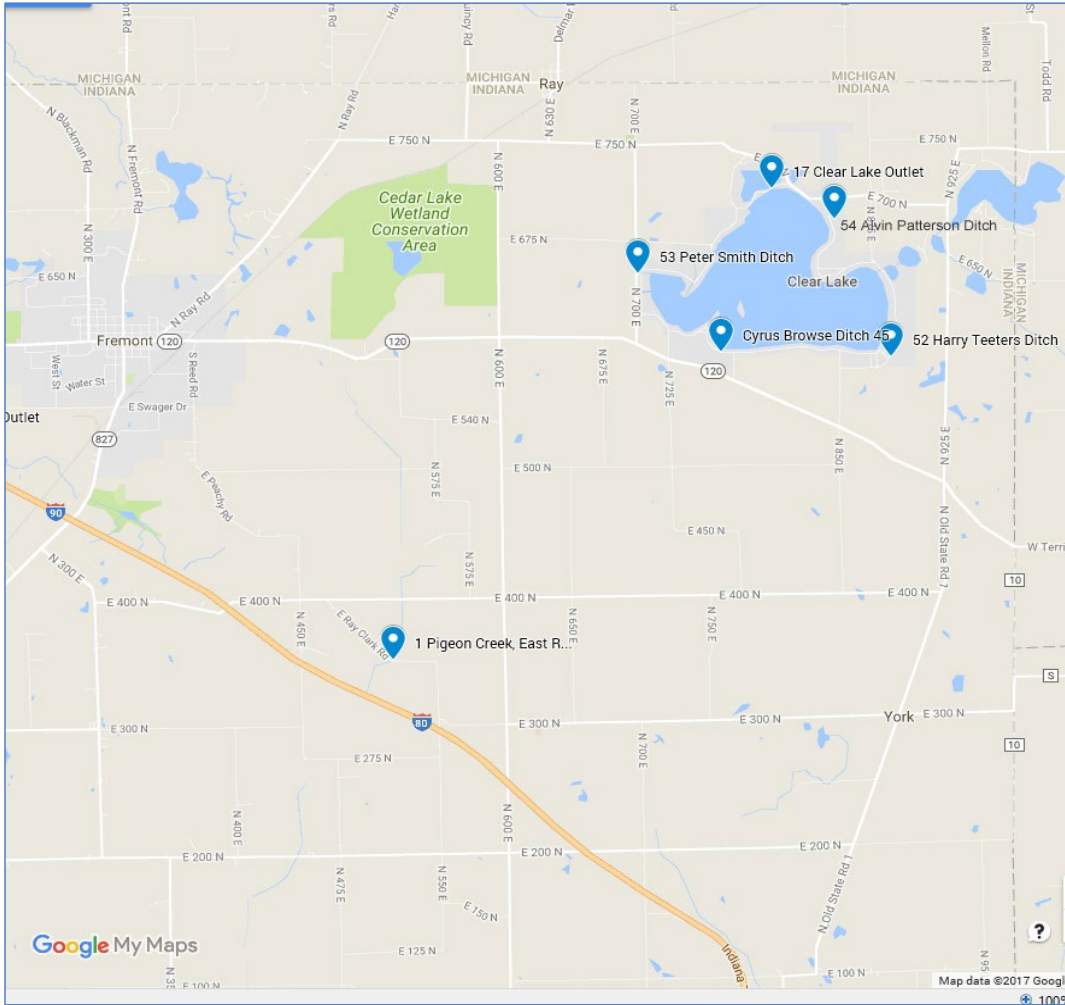
Use Alt + left arrow to return to previous page

LakesCouncil.org



Click the site of interest to view data

[Back to county map](#)



Use Alt + left arrow to return to previous page

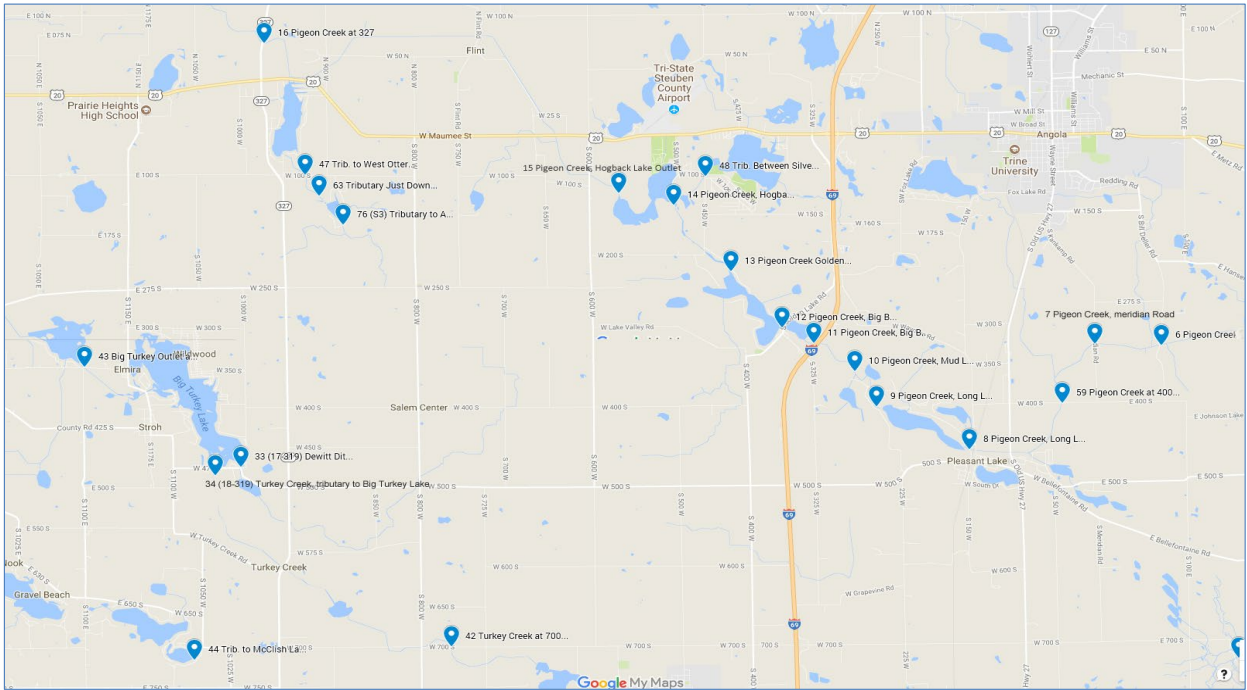
LakesCouncil.org

Steuben County Lakes Council 2017 Water Testing Data Quad 3



Click the site of interest to view data

[Back to county map](#)



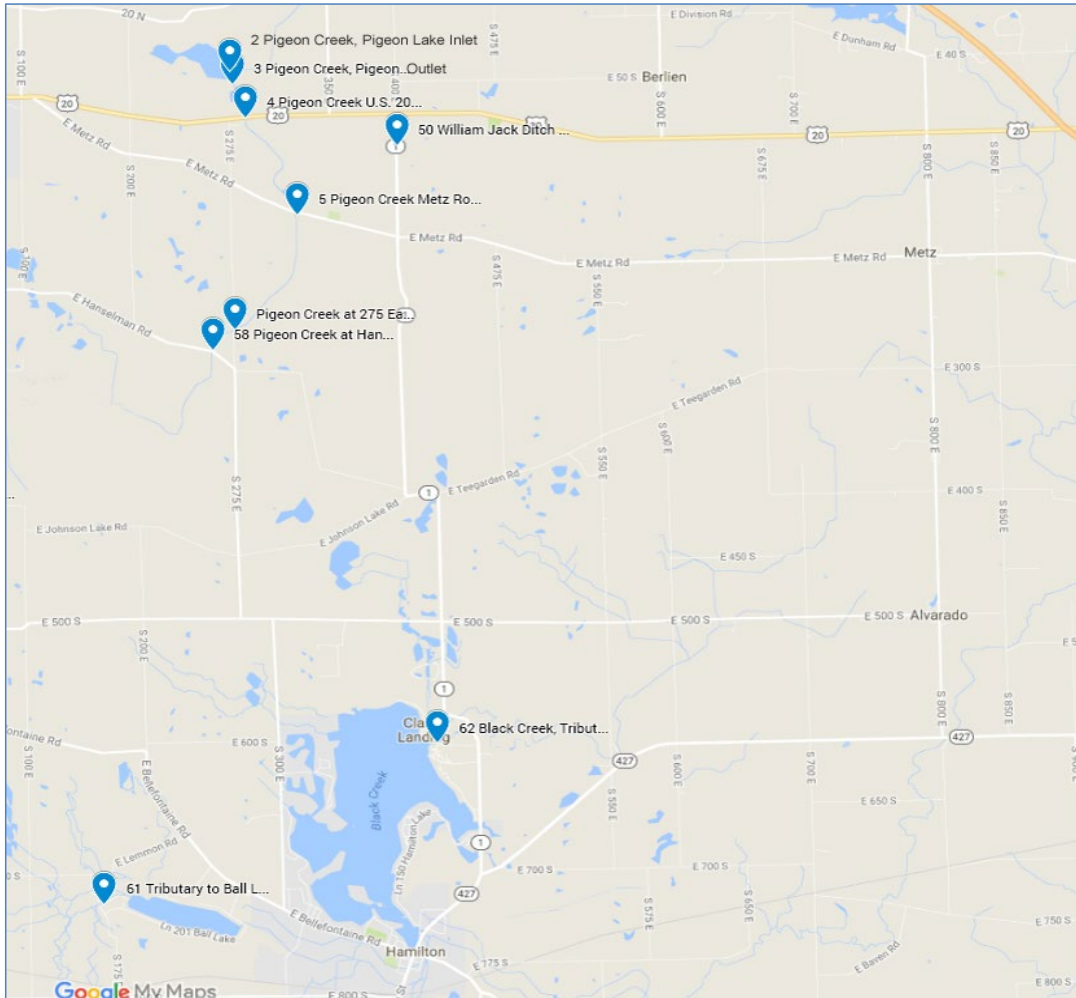
Use Alt + left arrow to return to previous page

LakesCouncil.org



Click the site of interest to view data

[Back to county map](#)



Use Alt + left arrow to return to previous page

LakesCouncil.org

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

Table 1. Site 1. Summary Data for the 2014-2015 Season

Year	Site	Species	Count	Notes
2014	1	...	...	...
2015	1	...	...	...

Click on the tabs below to view the data for each species. The tabs are: All Species, Amphibians, Birds, Fish, Invertebrates, Mammals, Reptiles, and Snails.

Field Notes

Field Notes - A record of observations made during the field work. This includes the date, time, location, weather, and any other relevant information. The notes should be written in a clear and concise manner, and should be organized in a way that is easy to read and understand. The notes should be written in a clear and concise manner, and should be organized in a way that is easy to read and understand.

Field Notes - A record of observations made during the field work. This includes the date, time, location, weather, and any other relevant information. The notes should be written in a clear and concise manner, and should be organized in a way that is easy to read and understand. The notes should be written in a clear and concise manner, and should be organized in a way that is easy to read and understand.

Year	Site	Species	Count	Notes
2014	1	...	...	...
2015	1	...	...	...

CITY OF CHICAGO - 2020		2020		2021		2022		2023		2024		2025		2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		2036		2037		2038		2039		2040		2041		2042		2043		2044		2045		2046		2047		2048		2049		2050		2051		2052		2053		2054		2055		2056		2057		2058		2059		2060		2061		2062		2063		2064		2065		2066		2067		2068		2069		2070		2071		2072		2073		2074		2075		2076		2077		2078		2079		2080		2081		2082		2083		2084		2085		2086		2087		2088		2089		2090		2091		2092		2093		2094		2095		2096		2097		2098		2099		2100	
------------------------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--	------	--

FOR ALL INFORMATION CONTACT THE CHIEF FINANCIAL OFFICER AT 312-742-2525

Notes to Financial Statements

1. Description of the City
The City of Chicago is a special district established in 1837 and is one of the largest and most diverse municipalities in the United States. The City's population is approximately 2.7 million and its area is approximately 469 square miles. The City's economy is diverse and includes manufacturing, retail, health care, and education. The City's major industries are manufacturing, retail, health care, and education. The City's major employers are the City of Chicago, Cook County, and various private companies. The City's major revenue sources are property taxes, sales taxes, and income taxes. The City's major expenses are salaries and benefits, capital expenditures, and interest on debt. The City's major assets are real estate, infrastructure, and equipment. The City's major liabilities are debt, pension obligations, and other long-term liabilities. The City's major risks are natural disasters, economic downturns, and political changes. The City's major opportunities are population growth, economic development, and infrastructure improvements. The City's major challenges are maintaining and improving infrastructure, providing quality public services, and addressing social and economic inequalities. The City's major goals are to maintain and improve infrastructure, provide quality public services, and address social and economic inequalities. The City's major strategies are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major initiatives are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major programs are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major projects are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major actions are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major decisions are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major policies are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major regulations are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major standards are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major guidelines are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major procedures are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major processes are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major methods are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major techniques are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major approaches are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major frameworks are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major models are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major tools are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major instruments are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major mechanisms are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major means are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major measures are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major methods are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major techniques are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major approaches are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major frameworks are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major models are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major tools are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major instruments are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major mechanisms are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major means are to invest in infrastructure, provide quality public services, and address social and economic inequalities. The City's major measures are to invest in infrastructure, provide quality public services, and address social and economic inequalities.

Table 1: 2018-2019 Performance Data		
Measure	2018-2019	2017-2018
1.01: Patient Safety	95%	92%
1.02: Clinical Effectiveness	88%	85%
1.03: Patient and Family Engagement	78%	75%
1.04: Workforce Well-being	82%	80%
1.05: Community Health Improvement	80%	78%
1.06: Data Transparency	85%	83%
1.07: Financial Performance	87%	84%
1.08: Environmental Sustainability	83%	81%
1.09: Governance and Leadership	90%	88%
1.10: Innovation	86%	84%
1.11: Quality Improvement	89%	87%
1.12: Regulatory Compliance	92%	90%
1.13: Information Management	84%	82%
1.14: Legal and Compliance	88%	86%
1.15: Risk Management	85%	83%
1.16: Strategic Planning	87%	85%
1.17: Human Resources	83%	81%
1.18: Patient Access	80%	78%
1.19: Quality Improvement	89%	87%
1.20: Regulatory Compliance	92%	90%

Table 1: 2018-2019 Performance Data

1.01: Patient Safety - 95% (2018-2019) vs 92% (2017-2018)

1.02: Clinical Effectiveness - 88% (2018-2019) vs 85% (2017-2018)

1.03: Patient and Family Engagement - 78% (2018-2019) vs 75% (2017-2018)

1.04: Workforce Well-being - 82% (2018-2019) vs 80% (2017-2018)

1.05: Community Health Improvement - 80% (2018-2019) vs 78% (2017-2018)

1.06: Data Transparency - 85% (2018-2019) vs 83% (2017-2018)

1.07: Financial Performance - 87% (2018-2019) vs 84% (2017-2018)

1.08: Environmental Sustainability - 83% (2018-2019) vs 81% (2017-2018)

1.09: Governance and Leadership - 90% (2018-2019) vs 88% (2017-2018)

1.10: Innovation - 86% (2018-2019) vs 84% (2017-2018)

1.11: Quality Improvement - 89% (2018-2019) vs 87% (2017-2018)

1.12: Regulatory Compliance - 92% (2018-2019) vs 90% (2017-2018)

1.13: Information Management - 84% (2018-2019) vs 82% (2017-2018)

1.14: Legal and Compliance - 88% (2018-2019) vs 86% (2017-2018)

1.15: Risk Management - 85% (2018-2019) vs 83% (2017-2018)

1.16: Strategic Planning - 87% (2018-2019) vs 85% (2017-2018)

1.17: Human Resources - 83% (2018-2019) vs 81% (2017-2018)

1.18: Patient Access - 80% (2018-2019) vs 78% (2017-2018)

1.19: Quality Improvement - 89% (2018-2019) vs 87% (2017-2018)

1.20: Regulatory Compliance - 92% (2018-2019) vs 90% (2017-2018)

Tab 6, SCLC Un-numbered Site, Pigeon Creek at midpoint between Metz and 275 E

Sampling Date	8/19/2009
E-coli (CFU or colonies/100 ml)	10360
E-coli collection date (if different)	
Total Phos. (ppm)	
Total Suspended Solids (ppm)	
D.O.	
pH	
Temp. (c)	
Specific Conductance	
Post Rain Event	
CFM Discharge Estimate	
T.S.S. Loading Estimate Kg/day	0.00
Phos. Loading Estimate Kg/day	0.00

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 7, SCLC Un-numbered Site, Pigeon Creek at 275 East

Sampling Date	8/19/2009
E-coli (CFU or colonies/100 ml)	9800
E-coli collection date (if different)	
Total Phos. (ppm)	
Total Suspended Solids (ppm)	
D.O.	
pH	
Temp. (c)	
Specific Conductance	
Post Rain Event	
CFM Discharge Estimate	
T.S.S. Loading Estimate Kg/day	0.00
Phos. Loading estimate Kg/day	0.00

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Table B. SCLC SCLC SS. Pigeon Creek at E. Highway Rd.

Table with 48 columns representing various water quality parameters and 12 rows of data points.

SCLC - Water Quality Unit

Quality Indicators include certain SCLC environmental water quality

Back to: [County Map](#) [Q1](#) [Q2](#) [Q3](#) [Q4](#) [Q5](#) [Q6](#) [Q7](#) [Q8](#) [Q9](#) [Q10](#) [Q11](#) [Q12](#) [Q13](#) [Q14](#) [Q15](#) [Q16](#) [Q17](#) [Q18](#) [Q19](#) [Q20](#) [Q21](#) [Q22](#) [Q23](#) [Q24](#) [Q25](#) [Q26](#) [Q27](#) [Q28](#) [Q29](#) [Q30](#) [Q31](#) [Q32](#) [Q33](#) [Q34](#) [Q35](#) [Q36](#) [Q37](#) [Q38](#) [Q39](#) [Q40](#) [Q41](#) [Q42](#) [Q43](#) [Q44](#) [Q45](#) [Q46](#) [Q47](#) [Q48](#)

Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genus of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in water indicates a potential presence of associated disease causing organisms, it is measured on a log scale of tenness or drinking water. A count of 200 CFU or higher in lake waters generally indicates unsuitability for swimming or boating.

Total Phos: (Total phosphorus) Level of total phosphorus present in lake waters, measured in parts per million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. It is a nutrient necessary for the growth of planktonic algae. Phosphorus levels probably influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L. D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of at least 5 to 6 parts per million are required to sustain most fish and other groundwater aquatic animals and their larvae.

pH: A scientific scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be used as an indicator of certain biological activities. The growth of aquatic plants and algae leads to an increase in pH, while the decomposition of organic matter in the water can cause the pH to decrease. Streams with unusually high or low pH measurements may be an indicator for certain aquatic organisms.

Temperature: Temperature can be an important abiotic factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as trout require relatively low water temperatures to survive. In addition, the species is generally only present in streams with cool temperatures and temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ionic content of water.

TCM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

TSS Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day or the time of sampling, given in kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.

NH3 (Nitrogen, Nitrite + Nitrate): A measurement of non-ammonia species of nitrogen in water given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other sources of pollution in surface waters. High nitrate levels can contribute to overall eutrophication, including increased growth of aquatic plants and algae and the associated chemical. Nitrate can also contribute to health problems if present in large enough quantities in drinking water.

TN (Nitrogen, Ammonia, Total): A measurement of the concentration of organic species of nitrogen and ammonia in water given in ppm (mg/L). This quantifies nitrogen species not measured by tests for Nitrite + Nitrate. A high TN can be an indicator of human and animal waste or other sources of pollution in surface waters.

TSS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling. Given in kg/day.

Tab 9, SCLC Un-numbered Site, Pigeon Creek Upstream of Johnson Ditch

Sampling Date	8/19/2009
E-coli (CFU or colonies/100 ml)	5400
E-coli collection date (if different)	
Total Phos. (ppm)	
Total Suspended Solids (ppm)	
D.O.	
pH	
Temp. (c)	
Specific Conductance	
Post Rain Event	
CFM Discharge Estimate	
T.S.S. Loading Estimate Kg/day	0.00
Phos. Loading estimate Kg/day	0.00

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 10. SCLC Site 63. Tributary just downstream of Arrowhead lake

	7/14/2015	8/18/2015	9/21/2015	1/14	9/28/2015	9/28/2015	7/28/2015	8/27/2015	9/21/2017	ND 7/2017	ND 8/2017	9/12/2018	9/21/2018	7/22/2018	8/28/2018	8/28/2018	7/5/2019	8/24/2019	9/27/2019	7/22/2021	8/28/2021
E-coli (CFU or colonies/100 ml)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-coli collection date (if different)																					
Total Phos. (ppm)	0.272	0.168	0.035	ND	0.075	0.075	0.045	0.038	0.079	ND	ND	0.055	ND	0.079	0.079	0.055	0.099	0.193	0.041	0.051	ND
Total Suspended Solids (ppm)	<5.00	5.34	2	ND	7	<1	28.22	2.5	2.7	ND	ND	<1.0	ND	2.4	1.8	1.8	2.7	6	1.1	2.8	ND
D.O.	4.88	3.1	10.1	ND	5.33	4.61	7.31	4.63	ND	ND	ND	5.31	ND	6.04	3.87	6	4.4	5.1	4.5	7.6	ND
pH	7.7	7.62	8.11	ND	7.55	7.7	7.89	7.95	7.71	ND	ND	7.85	ND	7.87	7.35	7.51	7.75	7.7	7.62	7.52	ND
Specific Conductance	199	434	487	ND	375	350	392	350	451.8	ND	ND	337	ND	309	312	473	511	495	300	338	ND
Flow Rate (cfs)																					
CFM Discharge Estimate	64.08	ND	ND	ND	2.08	NAP	407.04	41.31	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
T.S.S. Loading Estimate (kg/day)	0.06	ND	ND	ND	0.17	ND	29.22	4.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phos. Loading Estimate (kg/day)	5.28	ND	ND	ND	0.01	ND	0.75	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Nitrogen Loading Estimate (kg/day)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading Estimate (kg/day)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Nitrate Loading Estimate (kg/day)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading Estimate (kg/day)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Pigeon Creek, Downstream of Zabst Ditch, SEE BELOW

BCL = below detection limit
 ND = not detected
 IDEM recommended water quality minimums

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use AR + left arrow to return to previous page

Pigeon Creek, Downstream of Zabst Ditch

	8/13/2022
E-coli (CFU or colonies/100 ml)	ND
E-coli collection date (if different)	
Total Phos. (ppm)	
Total Suspended Solids (ppm)	
D.O.	
pH	
Temp. (C)	
Specific Conductance	
Flow Rate (cfs)	
CFM Discharge Estimate	
T.S.S. Loading Estimate (kg/day)	0.00
Phos. Loading Estimate (kg/day)	0.00
TKN Nitrogen Loading Estimate (kg/day)	
TKN Loading Estimate (kg/day)	
TKN Nitrate Loading Estimate (kg/day)	
TKN Loading Estimate (kg/day)	

Parameters Defined

E-coli: A count of a particular genus of bacteria that provides an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking water. A count of 200 CFU (E-coli) or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos. (total phosphorus): Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic," while those with a pH above 7 are "basic." In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

TKN Nitrogen, Nitrate + Nitrite: A measurement of non-ammonia species of nitrogen in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrate can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Table 1: Financial Statement											
Line Item	Account	Amount	Category	Sub-Category	Period	Start Date	End Date	Start Date	End Date	Start Date	End Date
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											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											
56											
57											
58											
59											
60											
61											
62											
63											
64											
65											
66											
67											
68											
69											
70											
71											
72											
73											
74											
75											
76											
77											
78											
79											
80											
81											
82											
83											
84											
85											
86											
87											
88											
89											
90											
91											
92											
93											
94											
95											
96											
97											
98											
99											
100											

Table 2: Summary Data	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10

Table 3: Detailed Description

This table provides a detailed description of the data presented in the tables above. It includes information about the items, their categories, and any relevant notes or comments.

Table 4: Additional Information

This table contains additional information related to the data, such as dates, locations, and other contextual details.

Table 5: Final Summary

This table provides a final summary of the data, highlighting key findings and conclusions.

Tab 13. SCLC Site 89, Pigeon Creek at 400 South

Parameter	01/20	02/20	03/20	04/20	05/20	06/20	07/20	08/20	09/20	10/20	11/20	12/20	01/21	02/21	03/21	04/21	05/21	06/21	07/21	08/21	09/21	10/21	11/21	12/21	01/22	02/22	03/22	04/22	05/22	06/22	07/22	08/22	09/22	10/22	11/22	12/22	
Temp (Celsius)	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Temp (Fahrenheit)	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Total Phos (ppm)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Total Suspended Solids (ppm)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Back to County Site [Count 1](#) [Count 2](#) [Count 3](#) [Count 4](#) [Count 5](#) [Count 6](#) [Count 7](#) [Count 8](#) [Count 9](#) [Count 10](#) [Count 11](#) [Count 12](#) [Count 13](#) [Count 14](#) [Count 15](#) [Count 16](#) [Count 17](#) [Count 18](#) [Count 19](#) [Count 20](#) [Count 21](#) [Count 22](#) [Count 23](#) [Count 24](#) [Count 25](#) [Count 26](#) [Count 27](#) [Count 28](#) [Count 29](#) [Count 30](#) [Count 31](#) [Count 32](#) [Count 33](#) [Count 34](#) [Count 35](#) [Count 36](#) [Count 37](#) [Count 38](#) [Count 39](#) [Count 40](#) [Count 41](#) [Count 42](#) [Count 43](#) [Count 44](#) [Count 45](#) [Count 46](#) [Count 47](#) [Count 48](#) [Count 49](#) [Count 50](#) [Count 51](#) [Count 52](#) [Count 53](#) [Count 54](#) [Count 55](#) [Count 56](#) [Count 57](#) [Count 58](#) [Count 59](#) [Count 60](#) [Count 61](#) [Count 62](#) [Count 63](#) [Count 64](#) [Count 65](#) [Count 66](#) [Count 67](#) [Count 68](#) [Count 69](#) [Count 70](#) [Count 71](#) [Count 72](#) [Count 73](#) [Count 74](#) [Count 75](#) [Count 76](#) [Count 77](#) [Count 78](#) [Count 79](#) [Count 80](#) [Count 81](#) [Count 82](#) [Count 83](#) [Count 84](#) [Count 85](#) [Count 86](#) [Count 87](#) [Count 88](#) [Count 89](#) [Count 90](#) [Count 91](#) [Count 92](#) [Count 93](#) [Count 94](#) [Count 95](#) [Count 96](#) [Count 97](#) [Count 98](#) [Count 99](#) [Count 100](#)

Parameters Defined

C-coli: A count of a particular genus of bacteria that provide an indication of the presence of human or animal waste. C-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of C-coli is an indicator of fecal contamination, a potential presence of fecal coliform bacteria suggests that the water may contain other harmful bacteria. It is measured in ppm. The ability of swimming or bathing in water with a count of C-coli above 1000 is generally considered unsuitable for swimming or bathing.

Total Phos (Total phosphorus): Level of total phosphorus present in lake waters, measured in parts per million. Includes dissolved phosphorus as well as that captured in algae, rocks, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of at least 1 to 2 ppm are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in mols of water per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of oceanographic activity. The growth of aquatic plants and algae depends on rates of photosynthesis, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In addition this species is generally only present in streams with good summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the salt content of water.

Chlorophyll a (chl-a): An estimate of algal flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling, given in kg/day.

NH4 (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrogen in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other sources of pollution in surface waters. High nitrate levels can contribute to eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TN (Nitrogen, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TN can be an indicator of human and animal waste or other sources of pollution in surface waters.

TSS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling. Given in kg/day.

Tab 14, Un-numbered Site, Pigeon Creek S. Old US Highway 27

Sampling Date	8/19/2009
E-coli (CFU or colonies/100 ml)	6480
E-coli collection date (if different)	
Total Phos. (ppm)	
Total Suspended Solids (ppm)	
D.O.	
pH	
Temp. (c)	
Specific Conductance	
Post Rain Event	
CFM Discharge Estimate	
T.S.S. Loading Estimate Kg/day	0.00
Phos. Loading estimate Kg/day	0.00

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Question	Response	Percentage	Count
1. How often do you participate in safety training?	Never	10%	10
	Rarely	20%	20
	Sometimes	30%	30
	Frequently	40%	40

Back to: [Home](#) [Survey](#) [Data](#) [Charts](#) [Reports](#) [Help](#) [Logout](#) [View All Links](#) [Print](#) [Export](#)

Question	Response	Percentage	Count

Question 1:
 How often do you participate in safety training?
 1. Never
 2. Rarely
 3. Sometimes
 4. Frequently

Response 1:
 Never
 10% (10)

Response 2:
 Rarely
 20% (20)

Response 3:
 Sometimes
 30% (30)

Response 4:
 Frequently
 40% (40)

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

Line	Description	2024		2023		2022	
		Amount	Amount	Amount	Amount	Amount	Amount
1	Adjusted gross income						
2	Standard deduction						
3	Adjusted taxable income						
4	Estimated tax payments						
5	Refund of estimated tax						
6	Taxable income						
7	Income tax						
8	Estimated tax						
9	Refund						
10	Overpayment						

File by: [January 15, 2025](#) [Print](#) [Download](#) [Close](#) [Help](#) [Back](#) [Close](#) [View PDF](#) [Print](#) [Close](#) [View PDF](#) [Print](#) [Close](#)

1041-ES (2024)	
1041-ES (2023)	
1041-ES (2022)	

Estimated Tax Worksheet

Part I Enter the amount of your adjusted gross income for 2024 in the column labeled "2024" in row 1, column 2. If you are a nonresident alien, enter your taxable income in the column labeled "2024" in row 1, column 2. If you are a resident alien, enter your adjusted gross income in the column labeled "2024" in row 1, column 2. Do not include the amount of your adjusted gross income that is exempt from tax under section 933.

Part II Enter the amount of your standard deduction for 2024 in the column labeled "2024" in row 2, column 2. If you are a resident alien, you may be eligible for a higher standard deduction. See the instructions for line 2.

Part III Enter the amount of your adjusted taxable income for 2024 in the column labeled "2024" in row 3, column 2. If you are a nonresident alien, enter your taxable income in the column labeled "2024" in row 3, column 2. If you are a resident alien, enter your adjusted taxable income in the column labeled "2024" in row 3, column 2.

Part IV Enter the amount of your estimated tax payments for 2024 in the column labeled "2024" in row 4, column 2. Enter the amount of your refund of estimated tax for 2024 in the column labeled "2024" in row 5, column 2.

Part V Enter the amount of your taxable income for 2024 in the column labeled "2024" in row 6, column 2. Enter the amount of your income tax for 2024 in the column labeled "2024" in row 7, column 2. Enter the amount of your estimated tax for 2024 in the column labeled "2024" in row 8, column 2. Enter the amount of your refund of estimated tax for 2024 in the column labeled "2024" in row 9, column 2. Enter the amount of your overpayment for 2024 in the column labeled "2024" in row 10, column 2.

Table 10: 2015-2016 Survey on Employee Engagement

Survey Item	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
1. I am proud to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
2. I am excited to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
3. I am proud to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
4. I am excited to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5. I am proud to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6. I am excited to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
7. I am proud to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
8. I am excited to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
9. I am proud to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
10. I am excited to tell others I work for this organization.	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Click on the buttons below to view the survey results. The survey results are located on the previous page.

View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results	View Survey Results
---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------	---------------------

Survey Results:

Employee Engagement: A measure of the employee's commitment to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Commitment: A measure of the employee's loyalty to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Involvement: A measure of the employee's participation in the organization's activities and decisions. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Loyalty: A measure of the employee's dedication to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Identification: A measure of the employee's sense of belonging to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Dedication: A measure of the employee's commitment to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Identification with the Organization: A measure of the employee's sense of belonging to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Involvement in the Organization: A measure of the employee's participation in the organization's activities and decisions. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Loyalty to the Organization: A measure of the employee's dedication to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Identification with the Organization's Success: A measure of the employee's sense of belonging to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Involvement in the Organization's Success: A measure of the employee's participation in the organization's activities and decisions. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Loyalty to the Organization's Success: A measure of the employee's dedication to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Identification with the Organization's Future: A measure of the employee's sense of belonging to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Involvement in the Organization's Future: A measure of the employee's participation in the organization's activities and decisions. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Employee Loyalty to the Organization's Future: A measure of the employee's dedication to the organization and its success. It is a combination of the employee's identification with, involvement in, and loyalty to the organization.

Tab 24, SCLC Site 18, Hamilton Lake

Sampling Date	5/23/2008	7/30/2008	10/7/2008	5/29/2009	7/28/2009	8/27/2009	5/24/2010	7/26/2010	8/17/2010	5/24/2011	7/19/2011	8/11/2011	5/14/2012	7/3/2012	8/16/2012	
E-coli (CFU or colonies/100 ml)	<3	8	16	0	12	2	278	0	1	22	30	18	<1.0	<1.0	<1.0	no data for 2013
E-coli collection date (if different)				6/1/2009												no data for 2014
Total Phos. (ppm)	<.01	BDL	BDL	BDL	<.01	0.01	0.06	0.02	0.02	0.05	0.03	0.02	0.02	0.016	<0.020	no data for 2015
Total Suspended Solids (ppm)	2	3	BDL	BDL	<1	2	16	4	4	9	4	2	<2	<2	1.2	no data for 2016
D.O.	18.48	7.85	8.20	8.85	8.43	6.31	9.33	7.78	6.54	10.4	7.29	7.41	10.29	7.49	7.12	no data for 2017
pH	7.91	8.23	8.20	7.90	8.51	8.01	8.33	8.06	8.24	8.73	8.4	8.02	8.41	7.38	8.53	no data for 2018
Temp. (c)	16.4	27.1	17.1	20.7	24.3	23.1	20.4	27.7	22.4	20	29.4	26.1	19.3	28.3	24.2	no data for 2019
Specific Conductance	349.7	335.6	322.4	294.7	323.9	308.6	336.6	354.8	356.9	358.9	368.2	258	380	346.5	341.5	no data for 2020
Post Rain Event																no data for 2021
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Table 28. SCLC Site 19. Copper Mine Output (continued to March 2016)

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production (Moz)	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Reserves (Moz)	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
Reserves (Moz)	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2

Highly variable column totals. Row 10: 10.2 Moz. Use 10.2 Moz to reflect in previous page.

Production Method: A count of particles per unit of volume that provides an indication of the amount of volume of water...

Total Phos. Total phosphorus. Sum of total phosphorus present in the water, measured as total phosphorus...

Total Suspended Solids. Is the amount of the particulate material present in a water sample given in grains or mg/L...

DO. Dissolved Oxygen. Total of dissolved oxygen present in the water, measured in parts per million...

pH. A numerical scale used to indicate how acidic or basic an aqueous solution is. It is logarithmic the negative of the...

Resistivity. Resistivity is the reciprocal of conductivity. It is the magnitude of electric impedance present in an...

Specific Conductance. Is a measure of the ability of water to conduct electricity. Conductivity is loosely related to the...

TSS. Total Suspended Solids. An estimate of the weight of total suspended solids floating in the sampling site per...

Phos. Loading estimate. An estimate of the weight of total phosphorus floating in the sampling site per day at the...

DO. Dissolved Oxygen. A measurement of the concentration of dissolved oxygen in water given in parts per million...

pH. Loading estimate. A measurement of the concentration of hydrogen ions in water given in parts per million...

Specific Conductance. A measurement of the concentration of ionic species of nitrogen and phosphorus in water given in...

TSS. Total Suspended Solids. An estimate of the weight of total suspended solids floating in the sampling site per day at the...

Tab 20, SCLC Site 20, Deller Ditch (Tributary to Marsh Lake)

Sampling Date	5/27/2008	7/25/2008	10/3/2008	5/25/2009	7/26/2009	8/26/2009	5/20/2010	7/26/2010	8/19/2010	5/26/2011	7/22/2011	8/22/2011	5/14/2012	7/23/2012	8/21/2012	8/28/2015	7/27/2016	8/30/2016
E-coli (CFU or colonies/100 ml)	790	262	312	723	140	178	47.1	196	364	128	1080	320	194	548	230	390	341.5	101.5
E-coli collection date (if different)	5/29/2008		10/9/2008	5/29/2009	7/20/2009													
Total Phos. (ppm)	<0.01	0.02	0.01	0.03	0.04	0.03	0.05	0.08	0.06	0.04	0.04	0.04	0.037	0.078	0.058	0.029	0.032	0.03
Total Suspended Solids (ppm)	8	8	1	BDL	4	9	13	2	15	9	11	11	8	45	-5.8	3.6	4.7	2.8
D.O.	7.96	7.48	8.22	8.22	7.09	6.76	8.33	7.55	7.15	8.35	6.5	7.67	8.27	6.77	7.53	8.63	6.85	6.38
pH	7.72	7.90	7.96	7.98	7.91	7.57	7.91	7.78	7.83	7.47	7.59	7.85	7.71	8.16	8.07	8.07	8.07	8.09
Temp. (°C)	15.9	19.2	16.4	16	16.4	18.1	17.1	22	20.2	20.4	24	17.4	16.4	21.9	17.2	19.5	22.2	21.7
Specific Conductance	801	844	410.1	558	870	838	710	844	821	749	889	913	800	925	920	945	887	896
Post Rain Event																		
Rain event (yes or no)																		
CFM Discharge Estimate	476.94	381.99	408.77	726.08	557.30	237.34	898.34	239.97	204.39	848.72	239.75	252.45	338.16	161.84	5.92	277.55	162.76	244.12
T.S.S. Loading Estimate Kg/day	155.48	124.53	16.65	BDL	90.84	87.05	475.92	19.56	124.94	311.28	107.47	113.17	110.25	269.79	1.4	40.75	31.2	27.88
Phos. Loading estimate Kg/day	BDL	0.31	0.17	0.89	0.91	0.29	1.83	0.78	0.50	0.48	0.39	0.41	0.51	0.51	ND	0.35	0.21	0.3
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 26. SCLC Site 22. Water's Leaked Drain (Inflow to Big City Lake)

Parameter	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Temperature (°C)	12.5	13.5	14.5	15.5	16.5	17.5	18.5	19.5	20.5	21.5	22.5	23.5	24.5	25.5	26.5	27.5	28.5	29.5	30.5	31.5	32.5	33.5	34.5	35.5	36.5	37.5	38.5	
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Total Dissolved Solids (mg/L)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Ammonia Nitrogen (mg/L)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total Nitrogen (mg/L)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Total Phosphorus (mg/L)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Chlorophyll a (µg/L)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Dissolved Oxygen (mg/L)	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Conductivity (µmhos/cm)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Specific Conductance (µmhos/cm)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Flow (m³/s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Flow (cfs)	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35

Use the [Navigation](#) buttons on the left side of the table to navigate to the previous page. Use the [Navigation](#) buttons on the right side of the table to navigate to the next page.

Parameters defined:

4-cell: A subset of particular genera of bacteria that provide an indication of the presence of human or animal waste. Each is generally resistant to dry desiccation, boiling, acids or alkalies, and chlorination of water. Because the presence of large numbers of coliform bacteria in water indicates a potential presence of associated disease-causing organisms, it is measured to give the safety of swimming or drinking water. A count of 1000 CFU of coliform bacteria in one water sample is generally considered unacceptable for swimming or drinking.

Ammonia Nitrogen: Ammonia nitrogen is the sum of free ammonia, ammonium ions, and nitrite ions in water. Ammonia nitrogen is also known as ammonia-nitrogen. It is a form of nitrogen that is readily available to plants and animals. Ammonia nitrogen is also a form of nitrogen that is readily available to plants and animals. Ammonia nitrogen is also a form of nitrogen that is readily available to plants and animals.

Chlorophyll a: Chlorophyll a is a green pigment found in all photosynthetic organisms. It is the primary photosynthetic pigment in plants and algae. Chlorophyll a is responsible for the green color of plants and algae. Chlorophyll a is also a form of nitrogen that is readily available to plants and animals.

Conductivity: Conductivity is a measure of the ability of water to conduct electricity. Conductivity is directly related to the ion content of water.

Dissolved Oxygen: Dissolved oxygen is the amount of oxygen gas that is dissolved in water. Dissolved oxygen is important for the survival of many aquatic organisms. Dissolved oxygen is also a form of nitrogen that is readily available to plants and animals.

Flow: Flow is the volume of water that flows past a point in a given time. Flow is measured in cubic feet per second (cfs) or cubic meters per second (m³/s). Flow is also a form of nitrogen that is readily available to plants and animals.

Flow (cfs): Flow (cfs) is the volume of water that flows past a point in a given time, measured in cubic feet per second. Flow (cfs) is also a form of nitrogen that is readily available to plants and animals.

Flow (m³/s): Flow (m³/s) is the volume of water that flows past a point in a given time, measured in cubic meters per second. Flow (m³/s) is also a form of nitrogen that is readily available to plants and animals.

Specific Conductance: Specific conductance is a measure of the ability of water to conduct electricity. Conductivity is directly related to the ion content of water.

Temperature: Temperature is a measure of the average kinetic energy of the particles in a substance. Temperature is measured in degrees Celsius (°C) or degrees Fahrenheit (°F). Temperature is also a form of nitrogen that is readily available to plants and animals.

Total Dissolved Solids: Total dissolved solids (TDS) is the amount of dissolved solids in water. TDS is measured in milligrams per liter (mg/L) or milligrams per gallon (mg/gal). TDS is also a form of nitrogen that is readily available to plants and animals.

Total Nitrogen: Total nitrogen (TN) is the sum of all nitrogen species in water. TN is measured in milligrams per liter (mg/L) or milligrams per gallon (mg/gal). TN is also a form of nitrogen that is readily available to plants and animals.

Total Phosphorus: Total phosphorus (TP) is the sum of all phosphorus species in water. TP is measured in milligrams per liter (mg/L) or milligrams per gallon (mg/gal). TP is also a form of nitrogen that is readily available to plants and animals.

Water's Leaked Drain: Water's Leaked Drain is a point source of pollution that discharges water into a water body. Water's Leaked Drain is also a form of nitrogen that is readily available to plants and animals.

Water's Leaked Drain (Inflow to Big City Lake): Water's Leaked Drain (Inflow to Big City Lake) is a point source of pollution that discharges water into a water body. Water's Leaked Drain (Inflow to Big City Lake) is also a form of nitrogen that is readily available to plants and animals.

Tab 29, SCLC Site 23, Follet Creek, Big Otter Lake Outlet

Sampling Date	5/27/2008	7/25/2008	10/3/2008	5/29/2009	7/26/2009	8/26/2009	5/20/2010	7/21/2010	8/19/2010	5/25/2011	7/26/2011	8/22/2011	5/14/2012	7/23/2012	8/17/2012	
E-coli (CFU or colonies/100 ml)	<3	6	0	12	0	0	<1	4	2	14.6	46	18	39.3	8.5	10.3	no data for 2013 no data for 2014
E-coli collection date (if different)	5/28/2008		10/9/2008		7/29/2009											
Total Phos. (ppm)	<0.1	BDL	BDL	0.01	<0.1	BDL	0.01	0.02	0.01	0.01	0.01	<0.1	0.017	<0.010	<0.020	no data for 2015 no data for 2016 no data for 2017
Total Suspended Solids (ppm)	<1	2	BDL	1	<1	7	1	5	9	3	2	11	<2	<4	1.21	no data for 2018
D.O.	9.65	10.37	8.54	7.21	9.48	8.16	9.51	7.31	7.68	7.86	7.64	7.71	9.78	6.26	8.76	no data for 2019
pH	8.19	8.25	8.02	8.11	8.53	8.07	8.24	7.91	8.26	8.14	8.02	7.98	8.33	7.96	8.47	no data for 2020
Temp. (C)	18.8	26.7	18.8	19.3	23.5	23.1	17.5	27.1	26.3	21.4	28.3	24.8	21.8	27.5	24.1	no data for 2021
Specific Conductance	637	615	636	521	619	623	660	691	617	626	555	633	690	7.41	624	
Post Rain Event																
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 19. BCLC Site 19. Copeland Creek & King George Outlet

Parameter	Unit	Frequency	Method	Location	Notes
Ammonia Nitrogen	mg/L	Monthly	Colorimetric	Site 19	
Total Phosphate	mg/L	Monthly	Ascorbic Acid Reduction	Site 19	
Total Suspended Solids	mg/L	Monthly	Gravimetric	Site 19	
Flow	MGD	Continuous	Flowmeter	Site 19	
Water Temperature	°F	Continuous	Thermometer	Site 19	
Dissolved Oxygen	mg/L	Continuous	Dissolved Oxygen Meter	Site 19	
pH	Unitless	Continuous	pH Meter	Site 19	
Electrical Conductivity	µmhos/cm	Continuous	Conductivity Meter	Site 19	
Total Suspended Solids	mg/L	Monthly	Gravimetric	Site 19	
Ammonia Nitrogen	mg/L	Monthly	Colorimetric	Site 19	
Total Phosphate	mg/L	Monthly	Ascorbic Acid Reduction	Site 19	
Flow	MGD	Continuous	Flowmeter	Site 19	
Water Temperature	°F	Continuous	Thermometer	Site 19	
Dissolved Oxygen	mg/L	Continuous	Dissolved Oxygen Meter	Site 19	
pH	Unitless	Continuous	pH Meter	Site 19	
Electrical Conductivity	µmhos/cm	Continuous	Conductivity Meter	Site 19	

Blanking table column color: **Red** to **Green**, **Blue**, **Black**, **White**, **Grey**, **Yellow**, **Light Blue**. Use 0's to 9's to refer to previous page

Parameters Defined

BOD - A count of a particular group of bacteria that provide an indication of the amount of carbon or organic matter in a sample measured 5 days after incubation at 20°C in the dark in a 2-liter bottle of water. Because the incubation time is fixed at 5 days, the bacteria population (measured in colonies) that grows in the medium, generally reflects the amount of organic matter present in the sample. Thus, BOD is used as a measure of the organic matter content of a sample. The amount of BOD that can be obtained from a sample is referred to as the ultimate carbonaceous BOD (UCB). The amount of BOD that has been obtained from a sample at any time is referred to as the carbonaceous BOD (CBOD).

Total Phos. Total phosphorus is the sum of all phosphorus in a water sample, regardless of its chemical form. It is measured in mg/L. It includes both dissolved and particulate phosphorus. It is not a measure of the growth of algae or other organisms. It is a measure of the total phosphorus in a water sample.

Total Suspended Solids - Is the amount of the particles retained on a 45 µm sieve from a water sample. It is measured in mg/L. It includes both dissolved and particulate solids. It is not a measure of the growth of algae or other organisms. It is a measure of the total suspended solids in a water sample.

pH - A measure of the acidity or basicity of an aqueous solution. It is a logarithmic measure of the concentration of hydrogen ions in a solution. A pH of 7 is neutral, values below 7 are acidic, and values above 7 are basic. The pH scale ranges from 0 to 14, with 7 being neutral. The pH of a solution is determined by the relative concentrations of hydrogen ions and hydroxide ions. The pH of a solution is a measure of its acidity or basicity. It is not a measure of the growth of algae or other organisms. It is a measure of the acidity or basicity of an aqueous solution.

Electrical Conductivity - A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of ions in the water.

Total Suspended Solids - An estimate of the weight of suspended solids that pass through the sampling site per day or other period of time.

Total Phosphate - An estimate of the weight of total phosphorus that passes through the sampling site per day or other period of time.

Flow - An estimate of the weight of water that passes through the sampling site per day or other period of time.

Water Temperature - An estimate of the temperature of the water at the sampling site.

Dissolved Oxygen - An estimate of the amount of oxygen in the water at the sampling site.

pH - A measure of the acidity or basicity of an aqueous solution. It is a logarithmic measure of the concentration of hydrogen ions in a solution.

Electrical Conductivity - A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of ions in the water.

Total Suspended Solids - An estimate of the weight of suspended solids that pass through the sampling site per day or other period of time.

Total Phosphate - An estimate of the weight of total phosphorus that passes through the sampling site per day or other period of time.

Flow - An estimate of the weight of water that passes through the sampling site per day or other period of time.

Water Temperature - An estimate of the temperature of the water at the sampling site.

Dissolved Oxygen - An estimate of the amount of oxygen in the water at the sampling site.

pH - A measure of the acidity or basicity of an aqueous solution. It is a logarithmic measure of the concentration of hydrogen ions in a solution.

Electrical Conductivity - A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of ions in the water.

Tab 20 - 2014 Site 24 - Proposed Cows at 120 (Following to Beep Table)

Paddock		Lot		Miles		Miles		Miles		Miles		Miles		Miles		Miles		Miles		Miles		Miles		Miles	
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

Click on the links below to view the data for each paddock. If you have any questions, please contact the Hudson County Water District at 973-329-2200.

Return to [Main Page](#) | [Data](#) | [Info](#) | [Help](#) | [Home](#)

Parameters

As with any monitoring program of surface flow, it is important to understand the parameters of interest in order to interpret the results. The following table provides a brief overview of the parameters and their units. The units are given in parentheses. For more information on the parameters, please refer to the manual.

Total Suspended Solids (TSS) - A measure of the particulate material present in a water sample, given in mg/L.

pH - A measure of the acidity or basicity of an aqueous solution. It is technically the negative of the base 10 logarithm of the concentration of hydrogen ions in the solution.

Temperature - The temperature of the water sample, given in degrees Celsius.

Specific Conductance - A measure of the ability of water to conduct electricity. It is related to the concentration of dissolved ions.

DO Saturation Deficit - An estimate of the amount of oxygen that is lacking in the water.

DO Saturation - The amount of oxygen that is present in the water.

Flow Velocity - A measure of the speed of the water flow.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Dissolved Oxygen (DO) - The amount of oxygen dissolved in the water, given in mg/L.

BOD5 - The amount of organic matter in the water, given in mg/L.

Flow - The amount of water flowing past a point in a given time, given in m³/s.

Flow Velocity - A measure of the speed of the water flow, given in m/s.

Water Temperature - The temperature of the water sample, given in degrees Celsius.

Tab 34, SCLC Site 26, Carpenter Ditch (outlet from Center Lake)

Sampling Date	7/30/2008	10/6/2008	5/30/2009	7/30/2009	8/27/2009	5/21/2010	7/16/2010	8/18/2010	5/25/2011	7/19/2011	8/26/2011	5/15/2012	7/2/2012	8/14/2012	8/28/2015
E-coli (CFU or colonies/100 ml)	314	520	220	1500	1152	206.4	3140	540	60.9	2080	620	240	517	570	730
E-coli collection date (if different)		10/8/2008	5/28/2009												
Total Phos. (ppm)	0.07	0.01	0.07	0.06	0.09	0.19	0.05	0.08	0.09	0.04	0.04	0.078	0.07	0.074	0.05
Total Suspended Solids (ppm)	5	21	28	10	26	46	35	28	15	4	8	9	<5	1	1.1
D.O.	4.95	8.79	9.44	7.06	5.32	6.59	5.68	6.01	7.31	5.25	6.89	5.77	5.1	5.36	7.36
pH	7.60	8.27	8.81	7.66	7.48	7.93	7.38	8.00	8	7.39	7.15	8.09	7.61	7.6	7.68
Temp. (celsius)	27.8	19.3	21.1	22.2	17.4	18.0	21.8	22.8	21	25.2	19.7	17.9	22.1	17.5	18.9
Specific Conductance	443.3	424.6	382.7	463.7	429.8	415.6	476.9	411.3	429.6	614	667	446.6	593	696	649
Post Rain Event					*	*	0.02								
CFM Discharge Estimate	23.84	8.30	74.07	18.02	4.92	249.62	7.43	65.94	177.01	7.66	ND	24.88	10.61	2.54	6.66
T.S.S. Loading Estimate Kg/day	4.86	7.10	84.52	7.34	5.21	467.94	10.60	75.24	108.20	1.25	ND	3.1	BDL	0.1	0.28
Phos. Loading estimate Kg/day	0.06	0.00	0.21	0.04	0.02	1.93	0.02	0.21	0.85	0.01	ND	0.08	0.03	0.01	0.01
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL = below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Table 20: 2014-2016 Site 27 - Copperhead Peak (Highway to Crooked Lake)

Parameter	Unit	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Flow (m³/s)																												
Concentration (mg/L)																												

Flow (m³/s) is an estimate of the amount of water that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is present in a given volume of water. It is typically measured in milligrams per liter (mg/L). The concentration is measured at the dam's outlet.

Flow (m³/s) × Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Flow (m³/s) × Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Flow (m³/s) is an estimate of the amount of water that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is present in a given volume of water. It is typically measured in milligrams per liter (mg/L). The concentration is measured at the dam's outlet.

Flow (m³/s) × Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Flow (m³/s) × Concentration (mg/L) is a measure of the amount of a substance (in this case, copper) that is discharged from the dam. It is calculated based on the dam's spillway characteristics and the water level in the reservoir. The flow is measured at the dam's outlet.

Table 37. SCUG SDR #1: Capstone Plant, Highway to Lake, James & Leppert Park

Table with 49 columns and 28 rows of numerical data representing water quality parameters across various monitoring points.

SCUG Notice Section 318
Notice of Public Hearing
SCUG Resource Quality Report

Parameters Defined

SRB: Source of particulate matter or chemical that results in introduction of the parameter of interest to natural water. It can be generally measured as a turbidity reading, or coliform per 100 milliliters of water.

Total Phos (Total Phosphorus): Level of total phosphorus present in lake waters, measured in parts per million. Excessive phosphorus is one of the primary causes of eutrophication in aquatic systems and is a nutrient necessary for the growth of phytoplankton.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L. Suspended Solids: Level of dissolved organic present in lake waters, measured in parts per million.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured ratio of molar base, of hydrogen ions.

Temperature: Temperature can be an important determining factor in the abundance of aquatic organisms present in an aquatic system. Dissolved oxygen levels are affected by temperature.

SRB: Source of particulate matter or chemical that results in introduction of the parameter of interest to natural water. It can be generally measured as a turbidity reading, or coliform per 100 milliliters of water.

SRB: Source of particulate matter or chemical that results in introduction of the parameter of interest to natural water. It can be generally measured as a turbidity reading, or coliform per 100 milliliters of water.

SRB: Source of particulate matter or chemical that results in introduction of the parameter of interest to natural water. It can be generally measured as a turbidity reading, or coliform per 100 milliliters of water.

SRB: Source of particulate matter or chemical that results in introduction of the parameter of interest to natural water. It can be generally measured as a turbidity reading, or coliform per 100 milliliters of water.

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

Year	Q1	Q2	Q3	Q4	Total	Growth (%)
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						
2023						
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						
2035						
2036						
2037						
2038						
2039						
2040						
2041						
2042						
2043						
2044						
2045						
2046						
2047						
2048						
2049						
2050						

Table 1: Summary of Key Performance Indicators (KPIs)

1. Revenue Growth: The primary metric for financial performance, showing a consistent upward trend from 2014 to 2050.

2. Market Penetration: Measured by the number of active users and market share, indicating strong growth in the target market.

3. Customer Retention: High retention rates are observed, suggesting a loyal user base and effective customer support.

4. Operational Efficiency: Improvements in process automation and resource utilization have led to faster service delivery and lower costs.

5. Innovation & R&D: Significant investments in research and development have resulted in the launch of new products and services.

6. Sustainability & Compliance: Adherence to industry standards and regulations, along with a commitment to environmental and social responsibility.

7. Risk Management: Proactive identification and mitigation of potential risks, ensuring business continuity and resilience.

Tab 44, Un-numbered Site , Fox Lake Outlet

Sampling Date	7/30/2008	10/6/2008	5/30/2009	7/30/2009	8/27/2009	5/24/2010	7/15/2010	8/19/2010
E-coli (CFU or colonies/100 ml)	76	44	16	54	840	12	500	NO FLOW
E-coli collection date (if different)		9/10/2008	5/28/2009					
Total Phos. (ppm)	0.09		BDL	<.01	0.05	0.09	<.01	ND
Total Suspended Solids (ppm)	BDL		12	6	2	14	4	ND
D.O.	6.18	no flow	9.79	6.09	4.00	8.57	8.57	ND
pH	8.05		8.51	7.79	7.90	8.42	8.39	ND
Temp. (c)	26.2		22.7	18.6	18.6	23.7	30.6	ND
Specific Conductance	468.9		461.9	482.6	528	488.6	469	ND
Post Rain Event					*	*	BDL	
CFM Discharge Estimate	14.42	NF	206.22	3.56	ND	1769.85	43.06	ND
T.S.S. Loading Estimate Kg/day	BDL	NF	100.84	0.87	ND	1009.75	7.02	ND
Phos. Loading estimate Kg/day	0.05	NF	BDL	BDL	ND	6.49	BDL	ND

no data for 2011
no data for 2012
no data for 2013
no data for 2014
no data for 2015
no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 45. SCLC Site 36, Crooked Creek (Snow Lake outlet, Inlet to James)

Sampling Date	5/27/2008	7/25/2008	10/3/2008	5/25/2009	7/26/2009	8/26/2009	5/20/2010	7/26/2010	8/19/2010	5/25/2011	7/26/2011	8/22/2011	5/14/2012	7/23/2012	8/17/2012	6/24/2013	9/17/2013	
E-coli (CFU or colonies/100 ml)	<3	2	4	3	58	0	3.1	14	6	5.2	4	60	1	4.1	29	0	0	no data for 2014
E-coli collection date (if different)	5/28/2008		10/9/2008	5/29/2009	7/29/2009													no data for 2015
Total Phos. (ppm)	<.01	BDL	0.01	BDL	<.01	BDL	0.02	0.01	<.01	0.01	0.01	0.01	<.010	<.010	<.020	0.11	0.06	no data for 2016
Total Suspended Solids (ppm)	<1	2	BDL	33	3	5	12	5	4	6	7	14	<2	<4	1.41	3	1	no data for 2017
D.O.	9.19	8.27	7.71	8.89	8.44	7.18	10.00	8.11	8.80	8.39	6.57	7.05	9.86	6.56	7.46	8.05	8.01	no data for 2018
pH	8.07	8.12	7.88	8.29	8.33	7.89	8.45	8.20	8.21	8.4	8	7.92	8.38	7.96	8.43	8.2	8.54	no data for 2019
Temp. (c.)	18.0	26.5	18.9	21.0	23.3	23.1	18.0	28.3	26.6	21.8	27.9	25.1	21.6	27.5	23.9	25.3	19.3	no data for 2020
Specific Conductance	524	525	527	479	504	508	554	516	520	557	551	554	540	525	534	ND	ND	no data for 2021
Post Rain Event																		
CFM Discharge Estimate	3737.69	NMF	NMF	ND	ND	ND	NMF	NMF	NMF	NMF	NMF	NMF	NMF	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	BDL	NMF	NMF	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	BDL	NMF	NMF	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Table 47. SCLC SILE 40 - Lake Phosphorus

Parameter/Location	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050		
TP (ppm)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

SCLC Lake Phosphorus (TP) Data Summary

Parameters Defined: TP (Total Phosphorus) is a measure of phosphorus in lake water...

Total Phosphorus (TP): Level of total phosphorus present in lake water, measured in parts per million...

Total Suspended Solids (TSS): A measurement of the particulate material present in a water sample given in ppm or mg/L...

BOD5 (Biochemical Oxygen Demand): Level of dissolved oxygen present in lake water, measured in parts per million...

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is...

Dissolved Oxygen (DO): The amount of oxygen dissolved in water, measured in parts per million...

Temperature: Temperature can be an important determining factor in the availability of aquatic organisms present...

Specific Conductance: A measure of the ability of water to conduct electricity...

Flow Velocity Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day...

Flow Loading Estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day...

TP Flow Loading Estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day...

Total Nitrogen (TN): A measurement of total nitrogen species of nitrogen in water given in ppm...

Total Phosphorus (TP): A measurement of the concentration of organic species of phosphorus and inorganic species...

Total Suspended Solids (TSS): An estimate of the weight of total suspended solids flowing past the sampling site per day...

Tab 48. SCLC Site 61, Ball Lake

Sampling Date	5/24/2008	7/30/2008	10/7/2008	5/28/2009	7/28/2009	8/27/2009	5/24/2010	7/28/2010	8/17/2010	5/24/2011	7/19/2011	8/11/2011	5/14/2012	7/3/2012	8/16/2012	7/28/2014	5/28/2015	5/8/19	7/1/19	8/26/19
E-coli (CFU or colonies/100 mL)	3	6	66	14	67	296	2	6	20	0	18	1	3	5.3	278.1	660	688.6	1,263.30	3,455.80	
E-coli collection site (if different)																				
Total Phos. (ppm)	<0.01	BDL	BDL	0.01	<0.01	0.01	0.12	0.02	0.02	0.06	0.02	0.02	0.039	0.019	<0.020	0.049	0.39	0.174	0.174	0.185
Total Suspended Solids (ppm)	<1	4	4	4	5	2	19	<1	6	<1	4	2	5	<2	2.2	6	6	9.6		
D.O.	9.54	9.29	8.11	9.82	10.22	7.41	8.23	8.60	8.72	8.23	8.92	7.43	11.36	7.22	9.31	8.48	8.05	9.78	8.16	7.7
pH	8.00	8.39	8.14	8.30	8.70	8.33	7.93	8.31	8.47	7.87	8.72	8.01	8.45	9.04	8.87	8.19	8.02	7.84	7.91	8.185
Temp. (c.)	16.3	26.9	18.8	19.6	24.5	23.1	20.5	27.9	27.2	20.4	28.8	25.9	19.6	24.3	18	14.9	55.6	72.7	68.5	
Specific Conductance	418.6	403.7	415.4	390.3	446.6	417.3	390.7	432.6	411.3	436.3	439.9	417	480	420.3	399.4	669	671	472	606	553
Phos. (Rain Event)																				
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	93.41	95.95	540.29	388.94	269.79
T.S.S. Loading Estimate Kg/day	BDL	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.38	6	215.93	128.48	990.2
Phos. Loading estimate Kg/day	BDL	ND	ND	BDL	ND	ND	BDL	ND	BDL	ND	ND	ND	ND	BDL	BDL	0.19	0.39	3.83	2.76	2.04
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

no data for 2020
no data for 2021

BDL= below detection limit
Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 49. SCLC Site 42, Turkey Ck at 7000 east of 800W, below Little Turkey and Deep Ditch Impoundment

Table with 25 columns representing sampling dates from 8/14/2012 to 8/22/2021 and 25 rows representing various water quality parameters such as Temperature, pH, Turbidity, and Dissolved Oxygen.

8/14 = 1st time indicator test

Shading indicates exceeds current SCLC recommended water quality standard

Back to: County Map, Quad 1, Quad 2, Quad 3, Quad 4 Use Alt + left arrow to return to previous page

Fauna/Biota Defined

E.coli: A count of a particular genus of bacteria that provide an indication of the presence of human or animal waste. E.coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E.coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E.coli or higher in lake waters generally indicates unsuitability for swimming or boating.

Total Phos.: (total phosphorus) Level of total phosphorus present in lake waters, measured in parts per million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L. D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and most trees.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic," while those with a pH above 7 are "basic." In aquatic systems pH can be useful as an indicator of aquatic plants activity. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. It includes this specific generally only present in streams with cold summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water. CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute. T.S.S Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.

NH4 (Nitrogen, Nitrate + Nitrite): A measurement of non ammonia species of nitrate in waters given ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution to surface waters. High nitrate levels can contribute to oxygen depletion, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given ppm (mg/L). This quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TN can be an indicator of human and animal waste or other source of pollution to surface waters.

TSS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling. Given in kg/day.

Table 51. SCLM Site #4, Trip To Moccasin Lake (part 2)

Parameter	1/11	1/12	1/13	1/14	1/15	1/16	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24	1/25	1/26	1/27	1/28	1/29	1/30	1/31	2/1	2/2	2/3	2/4	2/5	2/6	2/7	2/8	2/9	2/10	2/11	2/12	2/13	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27	2/28	2/29	2/30		
Temperature (°C)	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5			
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5		
Dissolved Oxygen (%)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Site 4033 Station 1/11
Sampling station record number
Date recorded and party

Parameter Defintion

DO Dissolved Oxygen: Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of about 5 to 6 parts per million are required to sustain most fish and other aquatic organisms and their eggs.

pH A measure of the acidity or basicity of an aqueous solution. It is traditionally the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH value of 7 are neutral, values below 7 are acidic, and values above 7 are basic. In aquatic systems, pH is an important indicator of water quality. The growth of most plants and algae does not require high pH, while the development of algae, bacteria in the water can thrive at low pH or high pH. Values with a pH below 6.5 or above 9.0 are considered to be outside the normal range of natural systems.

Temperature Temperature can be an important determining factor in the development of aquatic organisms present in a water body. For example, many species of fish will not survive that require colder water temperatures to survive. It indicates the degree of potential energy present in a substance and is related to the kinetic energy of the particles that make up the substance.

Specific Conductance A measure of the ability of water to conduct electricity. Conductivity is directly related to the concentration of ions.

TSS Discharge Estimate An estimate of coarse flow given in cubic feet per minute.

TSS Loading Estimate An estimate of the dry weight of total suspended solids leaving past the sampling site per day or month of sampling given in kg/day.

Flow Loading Estimate An estimate of the weight of total phosphorus leaving and the sampling site per day at the time of sampling. Units in kg/day.

TPN Discharge Estimate A measurement of the amount of total phosphorus leaving past the sampling site per day (kg/day). High values may be due to a variety of factors and may indicate an increase in phosphorus in the water. High values may be due to a variety of factors and may indicate an increase in phosphorus in the water. High values may be due to a variety of factors and may indicate an increase in phosphorus in the water. High values may be due to a variety of factors and may indicate an increase in phosphorus in the water.

TPN Loading Estimate A measurement of the concentration of nitrogen leaving past the sampling site per day (kg/day). High values may be due to a variety of factors and may indicate an increase in phosphorus in the water. High values may be due to a variety of factors and may indicate an increase in phosphorus in the water. High values may be due to a variety of factors and may indicate an increase in phosphorus in the water.

TSS Loading An estimate of the weight of TSS leaving past the sampling site per day at the time of sampling. Units in kg/day.

Use the 'X' button to return to previous page

Tab 53. SCLC Site 47. Top To West Order (Shannon, Georgetown and Otero)

Parameter	1/16	2/16	3/16	4/16	5/16	6/16	7/16	8/16	9/16	10/16	11/16	12/16	1/17	2/17	3/17	4/17	5/17	6/17	7/17	8/17	9/17	10/17	11/17	12/17	1/18	2/18	3/18	4/18	5/18	6/18	7/18	8/18	9/18	10/18	11/18	12/18
Chloride (mg/L)	176	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208	208
Total Phosphate (mg/L)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Ammonia (mg/L)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

SCLC Inlet Station 47
 SCLC Inlet Station 47
 SCLC Inlet Station 47

Parameters Defined

- Chloride:** A measure of particulate matter that provides an indication of the presence of metals and other water. It can be generally measured as Chloride (mg/L) or chlorine per 100 million (L) of water. Because the presence of large numbers of chloride ions indicates a general presence of dissolved mineral salts, chlorine is measured to give the safety of swimming or drinking water. A count of 250 Chloride is not higher in lake water, generally indicates contamination by swimming or bathing.
- Total Phosphate:** Level of total phosphate present in lake water, measured in parts per million. Includes dissolved phosphate as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphate levels particularly influence lake productivity and water clarity/opacity.
- Total Suspended Solids:** A measurement of the particulate material present in a water sample given in ppm or mg/L.
- Dissolved Oxygen:** Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of 100 to 140 ppm are required to sustain most fish and other aquatic breathing aquatic animals and insect larvae.
- pH:** A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured with a glass electrode, of hydrogen ions. Solutions with a pH value of 7 are neutral, below 7 are acidic and above 7 are basic. pH is a logarithmic scale, so a change of one unit represents a tenfold change in the concentration of hydrogen ions. The pH of aquatic systems can range from 6.5 to 8.5, with the most common range being 7.0 to 8.0. The pH of aquatic systems can range from 6.5 to 8.5, with the most common range being 7.0 to 8.0. The pH of aquatic systems can range from 6.5 to 8.5, with the most common range being 7.0 to 8.0.
- Temperature:** Temperature can be an important determining factor in the abundance of aquatic organisms present in an aquatic system. The number, size, species of fish and other aquatic organisms in a water body are highly dependent on temperature. In addition, the rate of chemical reactions in aquatic systems is highly dependent on temperature. The rate of chemical reactions in aquatic systems is highly dependent on temperature.
- Specific Conductance:** A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of ions.
- Dissolved Oxygen:** An estimate of dissolved oxygen in water in mg/L.
- Total Suspended Solids:** An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling. Given in kg/day.
- Total Phosphate:** An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.
- Total Nitrogen:** An estimate of the concentration of nitrogen species in water given in ppm.
- Total Ammonia:** An estimate of the concentration of ammonia species in water given in ppm.
- Total Suspended Solids:** An estimate of the weight of total suspended solids flowing past the sampling site per day at the time of sampling. Given in kg/day.

Tab. 04. SCLC Site 49. Top. Between Silt and Phosphorus

Parameter	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Flow (gpm)	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Flow (mgd)	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.73	0.74	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.95	0.96	0.97	0.98	0.99	1.00														

SCLC Site 49
Sanborn County Water Council
Sanborn County Water Quality

Back to [Sanborn](#) [Home](#) [Site 1](#) [Site 2](#) [Site 3](#) [Site 4](#) [Site 5](#) [Site 6](#) [Site 7](#) [Site 8](#) [Site 9](#) [Site 10](#) [Site 11](#) [Site 12](#) [Site 13](#) [Site 14](#) [Site 15](#) [Site 16](#) [Site 17](#) [Site 18](#) [Site 19](#) [Site 20](#) [Site 21](#) [Site 22](#) [Site 23](#) [Site 24](#) [Site 25](#) [Site 26](#) [Site 27](#) [Site 28](#) [Site 29](#) [Site 30](#) [Site 31](#) [Site 32](#) [Site 33](#) [Site 34](#) [Site 35](#) [Site 36](#) [Site 37](#) [Site 38](#) [Site 39](#) [Site 40](#) [Site 41](#) [Site 42](#) [Site 43](#) [Site 44](#) [Site 45](#) [Site 46](#) [Site 47](#) [Site 48](#) [Site 49](#) [Site 50](#) [Site 51](#) [Site 52](#) [Site 53](#) [Site 54](#) [Site 55](#) [Site 56](#) [Site 57](#) [Site 58](#) [Site 59](#) [Site 60](#) [Site 61](#) [Site 62](#) [Site 63](#) [Site 64](#) [Site 65](#) [Site 66](#) [Site 67](#) [Site 68](#) [Site 69](#) [Site 70](#) [Site 71](#) [Site 72](#) [Site 73](#) [Site 74](#) [Site 75](#) [Site 76](#) [Site 77](#) [Site 78](#) [Site 79](#) [Site 80](#) [Site 81](#) [Site 82](#) [Site 83](#) [Site 84](#) [Site 85](#) [Site 86](#) [Site 87](#) [Site 88](#) [Site 89](#) [Site 90](#) [Site 91](#) [Site 92](#) [Site 93](#) [Site 94](#) [Site 95](#) [Site 96](#) [Site 97](#) [Site 98](#) [Site 99](#) [Site 100](#)

Parameters Defined

- Flow** - Measure of particulate growth of amount that passes or is collected in the presence of normal or actual water. It can be generally measured as Chlorophyll (fluorescence) or volume per 100 milliliters of water. Because the presence of large numbers of cells in water indicates a potential presence of toxicogenic cyanobacteria, it is measured to give the safety of swimming or drinking water. A count of 200 Chloro-C-cells or higher in lake water, generally indicates susceptibility for swimming or boating.
- Total Phos.** (total phosphorus): Level of total phosphorus present in lake water, measured in parts per million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of phytoplankton, phosphorus levels particularly influence lake productivity and water clarity/opacity.
- Total Suspended Solids**: A measurement of the particulate material present in a water sample given in ppm or mg/L.
- BOD₅ (Dissolved Oxygen)**: Level of dissolved oxygen present in lake water, measured in parts per million. Dissolved oxygen levels of 1 mg/L or higher per million are required to sustain most fish and other aquatic breathing animals and insect larvae.
- pH**: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured using units of moles per liter, of hydrogen ions. Solutions with a pH value of 7 are neutral; those with a pH value of 7 or higher are basic, while those with a pH value of 7 or lower are acidic. The pH scale can extend beyond 14, with some acids having a pH as low as -10 and some bases having a pH as high as 14. The pH scale is logarithmic, so a change of 1 unit represents a tenfold change in the concentration of hydrogen ions.
- Temperature**: Temperature can be an important determining factor in the morphology of aquatic organisms present in an aquatic system. The optimal water temperature for each species varies, but most aquatic animals have a narrow temperature range for survival. In lakes, the water temperature can vary significantly from one season to the next, and the temperature can vary from one location to another.
- Specific Conductance**: A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of ions.
- OTD (Oxygen Demand)**: An estimate of oxygen flow given in cubic feet per minute.
- TSS (Total Suspended Solids)**: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling. Given in kg/day.
- Phos. loading estimate**: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.
- OTD (Oxygen Demand)**: A measurement of the oxygen consumption of oxygen in water given in ppm (mg/L). Water oxygen consumption is an indicator of the amount of oxygen and other dissolved oxygen in the water. High OTD values can indicate the presence of algae, including cyanobacteria, and the presence of organic matter in the water. High OTD values can also indicate the presence of organic matter in the water, such as that from animal waste or other sources of pollution in surface water.
- Phos. loading estimate**: An estimate of the weight of Phos. loading past the sampling site per day at the time of sampling. Given in kg/day.

Tab 55, SCLC Site 49, Trib. To Snow Lake (Pokagon State Park)

Sampling Date	5/27/2010	7/28/2010	8/23/2010	5/24/2011	7/21/2011	8/18/2011	5/16/2012	7/24/2012	8/21/2012	
E-coli (CFU or colonies/100 ml)	16	74	48	2	22	104	1	24.1	5.9	no data for 2013
E-coli collection date (if different)										no data for 2014
Total Phos. (ppm)	0.85	3.6	0.9	1.2	0.06	0.5	0.096	0.683	0.323	no data for 2015
Total Suspended Solids (ppm)	6	3	<1	2	4	9	<5	<5	<1.00	no data for 2016
										no data for 2017
D.O.	9.32	6.95	7.76	8.78	7.28	8.11	8.8	7	6.72	no data for 2018
pH	7.78	7.78	7.76	7.8	7.08	7.00	7.82	7.94	7.67	no data for 2019
Temp. (c)	20.3	23.7	21.7	17.7	25.9	22.7	15.6	24.2	21.1	no data for 2020
Specific Conductance	2887	2317	2223	2172	2184	2608	4935	2485	2764	no data for 2021
Post Rain Event										
CFM Discharge Estimate	1.48	2.74	3.06	1.34	3.81	2.69	2.26	3.34	2.14	
T.S.S. Loading Estimate Kg/day	0.36	0.30	BDL	0.11	0.62	0.99	BDL	BDL	BDL	
Phos. Loading estimate Kg/day	0.05	0.36	0.11	0.07	0.01	0.05	0.01	0.09	0.03	

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 5B_SCLC Site 64_Alynn Patterson Ditch (Clear Lake Tributary)

Table with multiple columns representing different sampling locations (e.g., Station 100, 101, 102, etc.) and rows for various water quality parameters such as Temperature, Dissolved Oxygen, pH, and Turbidity. The table contains numerical data for each parameter at each station.

Back to Contents | [Data 1](#) | [Data 2](#) | [Data 3](#) | [Data 4](#) | [Data 5](#) | Use Alt + left arrow to return to previous page

SCLC water pollution line
Shelton indicates exceeds criteria
SCLC noncompliance water quality

Parameters Defined

Water Quality - A water quality parameter that provides an indication of the presence of toxins in animal waste. E coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E coli in water indicate potential presence of associated disease causing organisms, it is measured to give the safety of swimming or drinking waters. A count of 235 CFU E coli or higher in lake waters generally indicates unsuitable for swimming or boating.

Total Phos. (total phosphorus) - Level of total phosphorus present in lake waters, measured in parts per million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient measure for the growth of planktonic algae, phosphorus levels generally influence lake productivity and water clarity/quality.

Total Suspended Solids - A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O. (Dissolved Oxygen) - Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other self-breathing aquatic animals and invertebrates.

pH - A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of animal biological activity. The growth of aquatic plants and algae leads to increased pH levels, while the decomposition of organic matter in the water can create low pH acidity. Waters with unusually high or low pH measurements may be suitable for certain aquatic organisms.

Temperature - Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In addition this species is generally only present in streams with cool temperatures temperatures that result from groundwater discharge.

Specific Conductance - A measure of the ability of water to conduct electricity. Conductivity is closely related to the salt content of water.

CFM Discharge Estimate - An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate - An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in kg/day.

Phos. Loading estimate - An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.

Ammonia, Nitrate, Nitrite - A measurement of non-ammonia species of nitrate in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to harmful eutrophication including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems in people present in large enough quantities in drinking water.

TAN (Nitrogen, Kjeldahl Total) - A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TAN identifies nitrogen species that measured by tests for Nitrate + Nitrite. A high TAN can be an indicator of human and animal waste or other source of pollution in surface waters.

TN Loading - An estimate of the weight of TN flowing past the sampling site per day at the time of sampling. Given in kg/day.

Table 5B. SCLC Site 53. Surface Data (CWA/MS4/TSDF/MSWLF)

Parameter	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	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Flow (m³/sec)	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6	6.9	7.2	7.5	7.8	8.1	8.4	8.7	9.0	9.3	9.6	9.9	10.2	10.5	10.8	11.1	11.4	11.7	12.0	12.3	12.6	12.9	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6	15.9	16.2	16.5	16.8	17.1	17.4	17.7	18.0	18.3	18.6	18.9	19.2	19.5	19.8	20.1	20.4	20.7	21.0	21.3	21.6	21.9	22.2	22.5	22.8	23.1	23.4	23.7	24.0	24.3	24.6	24.9	25.2	25.5	25.8	26.1	26.4	26.7	27.0	27.3	27.6	27.9	28.2	28.5	28.8	29.1	29.4	29.7	30.0	30.3	30.6	30.9	31.2	31.5	31.8	32.1	32.4	32.7	33.0	33.3	33.6	33.9	34.2	34.5	34.8	35.1	35.4	35.7	36.0	36.3	36.6	36.9	37.2	37.5	37.8	38.1	38.4	38.7	39.0	39.3	39.6	39.9	40.2	40.5	40.8	41.1	41.4	41.7	42.0	42.3	42.6	42.9	43.2	43.5	43.8	44.1	44.4	44.7	45.0	45.3	45.6	45.9	46.2	46.5	46.8	47.1	47.4	47.7	48.0	48.3	48.6	48.9	49.2	49.5	49.8	50.1	50.4	50.7	51.0	51.3	51.6	51.9	52.2	52.5	52.8	53.1	53.4	53.7	54.0	54.3	54.6	54.9	55.2	55.5	55.8	56.1	56.4	56.7	57.0	57.3	57.6	57.9	58.2	58.5	58.8	59.1	59.4	59.7	60.0	60.3	60.6	60.9	61.2	61.5	61.8	62.1	62.4	62.7	63.0	63.3	63.6	63.9	64.2	64.5	64.8	65.1	65.4	65.7	66.0	66.3	66.6	66.9	67.2	67.5	67.8	68.1	68.4	68.7	69.0	69.3	69.6	69.9	70.2	70.5	70.8	71.1	71.4	71.7	72.0	72.3	72.6	72.9	73.2	73.5	73.8	74.1	74.4	74.7	75.0	75.3	75.6	75.9	76.2	76.5	76.8	77.1	77.4	77.7	78.0	78.3	78.6	78.9	79.2	79.5	79.8	80.1	80.4	80.7	81.0	81.3	81.6	81.9	82.2	82.5	82.8	83.1	83.4	83.7	84.0	84.3	84.6	84.9	85.2	85.5	85.8	86.1	86.4	86.7	87.0	87.3	87.6	87.9	88.2	88.5	88.8	89.1	89.4	89.7	90.0	90.3	90.6	90.9	91.2	91.5	91.8	92.1	92.4	92.7	93.0	93.3	93.6	93.9	94.2	94.5	94.8	95.1	95.4	95.7	96.0	96.3	96.6	96.9	97.2	97.5	97.8	98.1	98.4	98.7	99.0	99.3	99.6	99.9	100.2	100.5	100.8	101.1	101.4	101.7	102.0	102.3	102.6	102.9	103.2	103.5	103.8	104.1	104.4	104.7	105.0	105.3	105.6	105.9	106.2	106.5	106.8	107.1	107.4	107.7	108.0	108.3	108.6	108.9	109.2	109.5	109.8	110.1	110.4	110.7	111.0	111.3	111.6	111.9	112.2	112.5	112.8	113.1	113.4	113.7	114.0	114.3	114.6	114.9	115.2	115.5	115.8	116.1	116.4	116.7	117.0	117.3	117.6	117.9	118.2	118.5	118.8	119.1	119.4	119.7	120.0	120.3	120.6	120.9	121.2	121.5	121.8	122.1	122.4	122.7	123.0	123.3	123.6	123.9	124.2	124.5	124.8	125.1	125.4	125.7	126.0	126.3	126.6	126.9	127.2	127.5	127.8	128.1	128.4	128.7	129.0	129.3	129.6	129.9	130.2	130.5	130.8	131.1	131.4	131.7	132.0	132.3	132.6	132.9	133.2	133.5	133.8	134.1	134.4	134.7	135.0	135.3	135.6	135.9	136.2	136.5	136.8	137.1	137.4	137.7	138.0	138.3	138.6	138.9	139.2	139.5	139.8	140.1	140.4	140.7	141.0	141.3	141.6	141.9	142.2	142.5	142.8	143.1	143.4	143.7	144.0	144.3	144.6	144.9	145.2	145.5	145.8	146.1	146.4	146.7	147.0	147.3	147.6	147.9	148.2	148.5	148.8	149.1	149.4	149.7	150.0	150.3	150.6	150.9	151.2	151.5	151.8	152.1	152.4	152.7	153.0	153.3	153.6	153.9	154.2	154.5	154.8	155.1	155.4	155.7	156.0	156.3	156.6	156.9	157.2	157.5	157.8	158.1	158.4	158.7	159.0	159.3	159.6	159.9	160.2	160.5	160.8	161.1	161.4	161.7	162.0	162.3	162.6	162.9	163.2	163.5	163.8	164.1	164.4	164.7	165.0	165.3	165.6	165.9	166.2	166.5	166.8	167.1	167.4	167.7	168.0	168.3	168.6	168.9	169.2	169.5	169.8	170.1	170.4	170.7	171.0	171.3	171.6	171.9	172.2	172.5	172.8	173.1	173.4	173.7	174.0	174.3	174.6	174.9	175.2	175.5	175.8	176.1	176.4	176.7	177.0	177.3	177.6	177.9	178.2	178.5	178.8	179.1	179.4	179.7	180.0	180.3	180.6	180.9	181.2	181.5	181.8	182.1	182.4	182.7	183.0	183.3	183.6	183.9	184.2	184.5	184.8	185.1	185.4	185.7	186.0	186.3	186.6	186.9	187.2	187.5	187.8	188.1	188.4	188.7	189.0	189.3	189.6	189.9	190.2	190.5	190.8	191.1	191.4	191.7	192.0	192.3	192.6	192.9	193.2	193.5	193.8	194.1	194.4	194.7	195.0	195.3	195.6	195.9	196.2	196.5	196.8	197.1	197.4	197.7	198.0	198.3	198.6	198.9	199.2	199.5	199.8	200.1	200.4	200.7	201.0	201.3	201.6	201.9	202.2	202.5	202.8	203.1	203.4	203.7	204.0	204.3	204.6	204.9	205.2	205.5	205.8	206.1	206.4	206.7	207.0	207.3	207.6	207.9	208.2	208.5	208.8	209.1	209.4	209.7	210.0	210.3	210.6	210.9	211.2	211.5	211.8	212.1	212.4	212.7	213.0	213.3	213.6	213.9	214.2	214.5	214.8	215.1	215.4	215.7	216.0	216.3	216.6	216.9	217.2	217.5	217.8	218.1	218.4	218.7	219.0	219.3	219.6	219.9	220.2	220.5	220.8	221.1	221.4	221.7	222.0	222.3	222.6	222.9	223.2	223.5	223.8	224.1	224.4	224.7	225.0	225.3	225.6	225.9	226.2	226.5	226.8	227.1	227.4	227.7	228.0	228.3	228.6	228.9	229.2	229.5	229.8	230.1	230.4	230.7	231.0	231.3	231.6	231.9	232.2	232.5	232.8	233.1	233.4	233.7	234.0	234.3	234.6	234.9	235.2	235.5	235.8	236.1	236.4	236.7	237.0	237.3	237.6	237.9	238.2	238.5	238.8	239.1	239.4	239.7	240.0	240.3	240.6	240.9	241.2	241.5	241.8	242.1	242.4	242.7	243.0	243.3	243.6	243.9	244.2	244.5	244.8	245.1	245.4	245.7	246.0	246.3	246.6	246.9	247.2	247.5	247.8	248.1	248.4	248.7	249.0	249.3	249.6	249.9	250.2	250.5	250.8	251.1	251.4	251.7	252.0	252.3	252.6	252.9	253.2	253.5	253.8	254.1	254.4	254.7	255.0	255.3	255.6	255.9	256.2	256.5	256.8	257.1	257.4	257.7	258.0	258.3	258.6	258.9	259.2	259.5	259.8	260.1	260.4	260.7	261.0	261.3	261.6	261.9	262.2	262.5	262.8	263.1	263.4	263.7	264.0	264.3	264.6	264.9	265.2	265.5	265.8	266.1	266.4	266.7	267.0	267.3	267.6	267.9	268.2	268.5	268.8	269.1	269.4	269.7	270.0	270.3	270.6	270.9	271.2	271.5	271.8	272.1	272.4	272.7	273.0	273.3	273.6	273.9	274.2	274.5	274.8	275.1	275.4	275.7	276.0	276.3	276.6	276.9	277.2	277.5	277.8	278.1	278.4	278.7	279.0	279.3	279.6	279.9	280.2	280.5	280.8	281.1	281.4	281.7	282.0	282.3	282.6	282.9	283.2	283.5	283.8	284.1	284.4	284.7	285.0	285.3	285.6	285.9	286.2	286.5	286.8	287.1	287.4	287.7	288.0	288.3	288.6	288.9	289.2	289.5	289.8	290.1	290.4	290.7	291.0	291.3	291.6	291.9	292.2	292.5	292.8	293.1	293.4	293.7	294.0	294.3	294.6	294.9	295.2	295.5	295.8	296.1	296.4	296.7	297.0	297.3	297.6	297.9	298.2	298.5	298.8	299.1	299.4	299.7	300.0

SCLC Site 53 Data

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Sanborn County Water Council

Table 60. SCLC Site 45 - Top To Clay Lake (Cyanobacteria Data)

Table with 45 columns representing various parameters (e.g., Temperature, pH, Conductivity, Turbidity, Chlorophyll a) and 45 rows representing different sampling dates from 2017 to 2021.

SCLC Data Section 45-1
Cyanobacteria (Microcystis) Concentration

Table with 2 columns: Parameter and Value. Rows include Microcystis (µg/L), Microcystin-LR (µg/L), and Microcystin-LR (µg/L).

Parameters Defined

6.661 A color of a particular genus of bacteria that provides an indication of the presence of toxin or another toxin that is generally measured in a 20 degree forcing well or otherwise per 100 milliliters of water. Because the presence of large numbers of cyanobacteria indicates a potential presence of associated disease-causing organisms, it is measured as an indicator of water quality. A count of 200 cells or higher in lake waters generally indicates a potential for cyanobacteria.

Total Phos: Total phosphorus: Level of total phosphorus present in lake water, measured in parts per million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of phytoplankton, algae, phosphorus levels particularly influence lake productivity in warm environments.

D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake water, measured in parts per million. Dissolved oxygen levels of at least 5 to 6 ppm per volume are required to sustain most fish and other gill-breathing aquatic animals and avoid hypoxia.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured on a scale from 0 to 14, of hydrogen ions. Solutions with a pH below 7 are acidic, with those with a pH above 7 being basic. Neutral solutions are said to be neutral, an indicator of certain biological activities. The growth of aquatic plants or algae blooms can raise pH levels greatly, with the microorganisms of aquatic systems in the same can control the pH of acidity. Rivers with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Water Quality: Measurement of an organism's development, from the abundance of aquatic organisms present in an aquatic system. For instance, many species of fish such as trout that require relatively low water temperatures to survive. To insure this species is generally present in streams with low summer-time temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

OTW Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

TSS: Total Suspended Solids: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in kg/day.

Phos: Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling, given in kg/day.

NH4-Nitrogen: Nitrate - Nitrite: A measurement of the nitrogen species of nitrate in water given in parts per million (ppm). Nitrate and nitrite can be indicators of organic and inorganic matter in other sources of pollution in surface waters. High nitrate levels can contribute to several eutrophication, including increased growth of aquatic plants and algae and the associated problems. Nitrate can also contribute to health problems if present in high enough quantities drinking water.

NH4-Nitrogen: Ammonia: A measurement of the concentration of nitrogen species of nitrogen and ammonia in water given in parts per million (ppm). This quantity of nitrogen species not measured by tests for Nitrate - Nitrite. A high TNx can be an indicator of natural and anthropogenic or other sources of pollution in surface waters.

TSS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling. Given in kg/day.

Back to: [Cyanobacteria](#), [Data 1](#), [Data 2](#), [Data 3](#), [Data 4](#), [Data 5](#), [Data 6](#). Use Alt + left arrow to return to previous page.

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

Tab 62, SCLC Site 56, Steuben Regional Waste District Effluent (Trib. To Pigeon)

Sampling Date	5/31/2011	7/21/2011	8/17/2011	5/16/2012	7/5/2012	8/6/2012	
E-coli (CFU or colonies/100 ml)	29.5	30	12	<1.0	3.1	2	no data for 2013
E-coli collection date (if different)							no data for 2014
Total Phos. (ppm)	0.19	0.8	0.4	0.253	0.463	0.295	no data for 2015
Total Suspended Solids (ppm)	2	3	7	<4	<4	<5	no data for 2016
D.O.	11.34	5.42	6.01	8.38	7.55		no data for 2017
pH	8.14	7.34	7.32	7.77	7.74	7.83	no data for 2018
Temp. (c)	20.7	24.3	22.8	15.1	15.3		no data for 2019
Specific Conductance	2810	3181	3240	3214	3145		no data for 2020
Post Rain Event							no data for 2021
CFM Discharge Estimate	53.29	35.19	30.08	23.49	60.53	38.06	
T.S.S. Loading Estimate Kg/day	4.34	4.3	8.58	BDL	BDL	BDL	
Phos. Loading estimate Kg/day	0.41	1.15	0.49	0.24	1.14	0.46	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 63, SCLC Site 57, Crooked Lake Third Basin discontinued 2012

Sampling Date	5/31/11	7/19/11	8/12/11	
E-coli (CFU or colonies/100 ml)	8.6	26.00	38	no data for 2012
E-coli collection date (if different)				no data for 2013
Total Phos. (ppm)	0.02	0.03	0.02	no data for 2014
Total Suspended Solids (ppm)	2	15.00	19	no data for 2015
				no data for 2016
				no data for 2017
D.O.	7.7	6.54	7.06	no data for 2018
pH	8.13	7.97	7.86	no data for 2019
Temp. (c)	22	30.50	25.2	no data for 2020
Specific Conductance	425.7	517.00	499	no data for 2021
Post Rain Event				
CFM Discharge Estimate	LS	LS	LS	
T.S.S. Loading Estimate Kg/day	LS	LS	LS	
Phos. Loading estimate Kg/day	LS	LS	LS	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 64. SCLC Site 55, Walter's Lakes Drain at 660 North

Sampling Date	5/23/2011	7/22/2011	8/15/2011	8/11/2012	7/3/2012	8/17/2012	8/24/2013	7/29/2013	8/21/2013	9/17/2013	1/23/2014	2/26/2014	3/20/2014	4/22/2014	5/28/2014	6/26/2014	
E-coli (CFU or colonies/100 ml)	320	5600	420	19.9	NO FLOW	4330	1400	100	300	100	ND	ND	100	0	0	0	no data for 2015
E-coli collection date (if different)																	no data for 2016
Total Phos. (ppm)	0.07	0.15	0.08	0.059	ND	0.077	0.35	0.23	0.43	0.45	ND	ND	0.08	0.1	0.32	0.56	no data for 2017
Total Suspended Solids (ppm)	3	4.00	14	5	ND	2.93	5	7	5	5	ND	ND	3	3	4	6	no data for 2018
D.O.	6.41	6.46	6.54	6.92	ND	ND	6.92	6.72	5.45	3.85	ND	ND	9.63	7	3.92	4.33	no data for 2019
pH	7.56	7.53	7.2	7.37	ND	7.81	7.82	7.94	7.91	7.92	ND	ND	7.84	7.84	7.76	7.85	no data for 2020
Temp. (c.)	21.9	24.40	22.8	20.2	ND	ND	18.3	14.5	16.6	13.7	ND	ND	2	12.9	21.7	21.7	no data for 2021
Specific Conductance	505	455.50	458.8	464.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Post Rain Event																	
rain event (yes or no)																	
CFM Discharge Estimate	203.96	35.87	9.68	81.65	ND	1.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	24.94	5.85	5.52	16.64	ND	0.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	0.58	0.22	0.03	0.2	ND	<.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 65, SCLC Site 60, Fish Lake (Fremont)

Sampling Date	8/11/2011	5/11/2012	7/19/2012	8/16/2012	8/28/2017
E-coli (CFU or colonies/100 ml)	0	1	<1.0	5.8	707
E-coli collection date (if different)					
Total Phos. (ppm)	0.03	0.02	0.02	<0.020	0.081
Total Suspended Solids (ppm)	10	<2	<4	1.2	5.8
D.O.	6.57	9.13	6.09	ND	8.07
pH	7.54	8.38	8.11	8.16	8.27
Temp. (c)	25.1	22.40	29.2	ND	17.6
Specific Conductance	442	403.40	445.5	ND	706
Post Rain Event					
rain event (yes or no)					
CFM Discharge Estimate	ND	ND	ND	ND	341.48
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	80.77
Phos. Loading estimate Kg/day	ND	ND	ND	ND	1.13
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND

no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 66. SCLC Site 61. Tributary to Ball Lake

	8/20/2013	7/22/2013	8/20/2013	8/20/2014	8/20/2014	8/20/2015	7/16/2015	8/24/2015	8/26/2017	7/7/2017	8/28/2017	8/16/2018	7/25/2018	8/28/2018	8/28/2018	7/11/2018	8/28/2018	8/28/2018	7/21/2020	8/28/2020	8/24/2021	7/16/2021	8/23/2021
E-coli CFU/100 ml (water/100 ml)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
E-coli coliforms (CFU/100 ml)	0.078	0.35	0.054	0.045	0.129	0.1	0.205	1.24	0.179	0.107	0.064	0.812	0.59	0.054	0.174	0.185	0.18	0.068	0.09	0.044	0.19	0.099	
Total Suspended Solids (mg/l)	2.6	5.76	1.9	ND	2.2	6.7	6	3	14	11	7.2	2.8	47	2.8	2	9.8	6.1	36	9.2	6.4	13	1.9	7.7
D.O.	7.39	8.16	8.68	8.54	8.48	7.63	8.05	7.79	7.04	ND	8.65	9.01	7.79	7.96	9.78	8.16	7.7	8.2	8.9	8.8	7.6	9	8.8
pH	7.39	7.5	8.15	7.8	8.19	8.57	8.55	7.73	7.38	7.3	8.51	8.11	7.52	8.1	8.05	7.85	7.81	8.52	7.95	8.07	8.18	7.58	7.51
Temp. (C)	19.2	18.8	19.7	17.8	18	20.9	14.4	19	16.3	18.6	20.4	16.1	17.6	21	20.8	22.2	22.4	23.2	20.1	22.3	23.4	21.2	21.2
Specific Conductance	663	696	696	384	699	732	671	691	392	429.6	645	7	228.6	697	695	477	699	593	431	666	665	791	497
Flow Rate (m³/s)																							
CFM Discharge Estimate	79.25	433.95	89.91	1448.95	93.41	73.66	35.99	270.25	63.99	689.66	171.76	60.89	2493.82	82.12	77.37	545.29	388.34	269.79	588.21	88.78	54.92	63.17	556.49
T.S.S. Loading Estimate (kg/day)	8.4	116.93	8.97	4729.23	8.38	20.33	23.48	33.09	36.31	ND	32.43	8.48	9398.07	9.38	8.31	275.93	139.48	999.2	220.69	151.27	29.72	174.42	7.43
Phos. Loading Estimate (kg/day)	0.05	7.05	0.2	38.27	0.19	0.29	0.35	2.27	3.22	ND	0.71	0.16	61.24	0.3	0.2	3.83	2.79	2.04	4.39	0.24	0.2	0.17	4.4
TKN Nitrogen (Nitrate + Nitrite)	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Nitrogen	4.85	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrate + Nitrite + NNN)	6.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

PDF is better resolution font

Shelburne Lakes Council
IEM recommended water quality minimums

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos: (total phosphorus): Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels probably influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3.5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants or algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In addition the species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling. Given in kg/day.

Phos. Loading Estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.

NNN Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrate + Nitrite + Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in kg/day.

Tab 87. SCLC Site 62, Black Creek Tributary to Hamilton Lake

Table with 26 columns representing sampling dates from 2/28/2014 to 8/23/2021 and 20 rows of water quality parameters including E. coli, Total Phosphorus, Total Suspended Solids, Dissolved Oxygen, pH, Total Phosphate, Total Ammonia Nitrate, Total Nitrate Nitrogen, and Total Nitrogen.

NO3 - Nitrate Detection limit. Missing indicates exceed criteria

Back to: [Current Site](#) [Data 1](#) [Data 2](#) [Data 3](#) [Data 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

- E. coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste.
Total Phos.: (total phosphorus): Level of total phosphorus present in lake waters, measured in parts-per-million.
Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.
pH: A numerical scale used to indicate how acidic or basic an aqueous solution is.
Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system.
Specific Conductance: A measure of the ability of water to conduct electricity.
CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.
TSS Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling. Given in kg/day.
Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in kg/day.
NH3 (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrogen in waters given in ppm (mg/L).
TKN (Nitrogen, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L).
TSS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling. Given in kg/day.

Tab 68, Un-numbered Site , Tributary Stream from Fish Lake at Fremont Road, just N of 700N

Sampling Date	6/26/2014	1/23/2014	2/26/2014	3/20/2014	4/22/2014	5/28/2014	6/26/2014
E-coli (CFU or colonies/100 ml)	0	ND	ND	300	0	100	800
E-coli collection date (if different)							
Total Phos. (ppm)	ND	ND	ND	0.19	0.18	0.37	0.42
Total Suspended Solids (ppm)	ND	ND	ND	10	9	8	18
D.O.	8.19	ND	ND	10.67	6.88	6.49	6.34
pH	8.13	ND	ND	8.15	8.37	8.03	7.92
Temp. (c)	25.1	ND	ND	3.6	13.3	24.9	24.5
Specific Conductance	ND	ND	ND	ND	ND	ND	ND
Post Rain Event							
rain event (yes or no)							
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND	ND
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND	ND
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND

no data for 2015
no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 69, Un-numbered Site ,Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W

Sampling Date	1/22/2014	2/25/2014	3/20/2014	4/21/2014	5/28/2014
E-coli (CFU or colonies/100 ml)	0	0	100	0	0
E-coli collection date (if different)					
Total Phos. (ppm)	0.12	0.11	0.16	0.14	0.13
Total Suspended Solids (ppm)	3	4	6	4	37
D.O.	11.09	11.09	10.97	10.17	8.26
pH	8.41	8.39	8.28	8.14	7.96
Temp. (c)	4.2	4.3	5.5	12.4	23
Specific Conductance	ND	ND	ND	ND	ND
Post Rain Event					
rain event (yes or no)					
CFM Discharge Estimate	ND	ND	ND	ND	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND
NNN (Nitrogen, Nitrate + Nitrite)	2.6	2.5	3.5	2.3	4.1
NNN Loading	ND	ND	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND

no data for 2015
no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit
Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 70, Un-numbered Site , Allen Rd (MI)

Sampling Date	1/23/2014	2/26/2014	3/20/2014	4/1/2214	5/28/2014	6/26/2014	
E-coli (CFU or colonies/100 ml)	ND	ND	300	0	400	250	no data for 2015
E-coli collection date (if different)							no data for 2016
Total Phos. (ppm)	ND	ND	0.12	0.18	0.22	0.39	no data for 2018
Total Suspended Solids (ppm)	ND	ND	14	7	4	13	no data for 2019
							no data for 2020
							no data for 2021
D.O.	ND	ND	10.63	8.54	10.48	7.4	
pH	ND	ND	7.83	8.96	8.22	7.95	
Temp. (c)	ND	ND	2.8	12.5	21.8	20.5	
Specific Conductance	ND	ND	ND	ND	ND	ND	
Post Rain Event							
rain event (yes or no)							
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND	
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	2.2	2.7	1.5	1.1	
NNN Loading	ND	ND	ND	ND	ND	ND	
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	
TKN Loading	ND	ND	ND	ND	ND	ND	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 71, Un-numbered Site, Crooked Lk Inlet from Loon Lk

Sampling Date	1/23/2014	2/26/2014	3/20/2014	4/22/2014	5/27/2014	6/26/2014	
E-coli (CFU or colonies/100 ml)	ND	ND	200	200	400	ND	no data for 2015
E-coli collection date (if different)							no data for 2016
Total Phos. (ppm)	ND	ND	0.1	0.1	0.39	ND	no data for 2017
Total Suspended Solids (ppm)	ND	ND	0	2	1	ND	no data for 2018
							no data for 2019
							no data for 2020
							no data for 2021
D.O.	ND	ND	10.73	7.99	7.15	ND	
pH	ND	ND	7.78	7.91	7.98	ND	
Temp. (c)	ND	ND	2.3	14.2	22.7	ND	
Specific Conductance	ND	ND	ND	ND	ND	ND	
Post Rain Event							
rain event (yes or no)							
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND	
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND	
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND	
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	1.2	1.3	1.2	ND	
NNN Loading	ND	ND	ND	ND	ND	ND	
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	
TKN Loading	ND	ND	ND	ND	ND	ND	

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 72, Un-numbered Site , W 650 N , stream: J. Roberts Ditch

Sampling Date	1/22/2014	2/25/2014	3/20/2014	4/21/2014	5/28/2014	6/26/2014
E-coli (CFU or colonies/100 ml)	0	0	100	0	1.6	100
E-coli collection date (if different)						
Total Phos. (ppm)	0.11	0.1	0.15	0.12	0.29	0.48
Total Suspended Solids (ppm)	3	3	3	3	3	10
D.O.	10.84	10.97	10.56	9.07	6.85	6.25
pH	8.21	8.23	8.23	8.13	7.88	7.83
Temp. (c)	4.6	4.3	5.9	12.2	17.3	19.7
Specific Conductance	ND	ND	ND	ND	ND	ND
Post Rain Event						
rain event (yes or no)						
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND
NNN (Nitrogen, Nitrate + Nitrite)	1.2	1.3	2.4	1.2	0.3	1.2
NNN Loading	ND	ND	ND	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND

no data for 2015
no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit
Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 73, Un-numbered Site, Feather Valley Rd (Seven Sisters Lk Outlet)

Sampling Date	1/23/2014	2/26/2014	3/20/2014	4/22/2014	5/28/2014	6/26/2014
E-coli (CFU or colonies/100 ml)	ND	ND	100	200	800	0
E-coli collection date (if different)						
Total Phos. (ppm)	ND	ND	0.15	0.14	0.29	0.41
Total Suspended Solids (ppm)	ND	ND	8	4	1	6
D.O.	ND	ND	9.33	4.95	4.57	3.3
pH	ND	ND	7.99	8.05	7.85	7.71
Temp. (c)	ND	ND	2.1	14.6	24.5	23.4
Specific Conductance	ND	ND	ND	ND	ND	ND
Post Rain Event						
rain event (yes or no)						
CFM Discharge Estimate	ND	ND	ND	ND	ND	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	ND	ND
Phos. Loading estimate Kg/day	ND	ND	ND	ND	ND	ND
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	1.5	0.6	0.9	0.3
NNN Loading	ND	ND	ND	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND

no data for 2015
no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit
Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 74, SCLC Site S1, Tributary to Arrowhead Lake at S 800 W

Sampling Date	5/28/2015	7/28/2015	8/28/2015
E-coli (CFU or colonies/100 ml)	162	747	170
E-coli collection date (if different)			
Total Phos. (ppm)	0.045	0.059	0.049
Total Suspended Solids (ppm)	2.5	2	1.8
D.O.	9.69	7.3	7.47
pH	7.7	7.45	7.72
Temp. (c)	13.5	19.4	15.3
Specific Conductance	742	747	766
Post Rain Event			
rain event (yes or no)			
CFM Discharge Estimate	11.91	26.82	5.15
T.S.S. Loading Estimate Kg/day	1.21	2.19	0.38
Phos. Loading estimate Kg/day	0.02	0.06	0.01
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND
NNN Loading	ND	ND	ND
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND
TKN Loading	ND	ND	ND

no data for 2016
no data for 2017
no data for 2018
no data for 2019
no data for 2020
no data for 2021

BDL= below detection limit
Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 75, SCLC Site S2, Tributary to Arrowhead Lake at W 250 S

Sampling Date	5/28/2015	7/28/2015	8/28/2015						
E-coli (CFU or colonies/100 ml)	1225	143	155	no data for 2016					
E-coli collection date (if different)				no data for 2017					
Total Phos. (ppm)	0.04	0.061	0.04	no data for 2018					
Total Suspended Solids (ppm)	6	5.1	3.2	no data for 2019					
				no data for 2020					
				no data for 2021					
D.O.	8.96	7.3	6.37						
pH	7.78	7.27	7.54						
Temp. (c)	15.7	19.9	15.1						
Specific Conductance	672	705	730						
Post Rain Event									
rain event (yes or no)									
CFM Discharge Estimate	18.63	45.7	19.01						
T.S.S. Loading Estimate Kg/day	4.56	9.5	2.48						
Phos. Loading estimate Kg/day	0.04	0.11	0.03						
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND						
NNN Loading	ND	ND	ND						
TKN (Nitrogen,Kjeldahl, Total)	ND	ND	ND						
TKN Loading	ND	ND	ND						

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen,Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 76, SCLC Site S3, Tributary to Arrowhead Lake, South End of the Lake

Sampling Date	5/28/2015	7/28/2015	8/28/2015				
E-coli (CFU or colonies/100 ml)	400	773	580	no data for 2016			
E-coli collection date (if different)				no data for 2017			
Total Phos. (ppm)	0.102	0.061	0.07	no data for 2018			
Total Suspended Solids (ppm)	6.6	3.8	3.2	no data for 2019			
				no data for 2020			
				no data for 2021			
D.O.	7.24	6.97	8.52				
pH	7.86	7.92	8.04				
Temp. (c)	18.3	23.1	15.7				
Specific Conductance	638	658	671				
Post Rain Event							
rain event (yes or no)							
CFM Discharge Estimate	17.57	274.24	28.44				
T.S.S. Loading Estimate Kg/day	4.73	42.5	3.71				
Phos. Loading estimate Kg/day	0.07	0.68	0.08				
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND				
NNN Loading	ND	ND	ND				
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND				
TKN Loading	ND	ND	ND				

BDL= below detection limit
 Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gage the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 77. SCLC Site 70. Fish Creek at E Metz Rd.

Sampling date	6/23/2017	7/28/2017	5/15/2018	7/25/2018	8/20/2018	5/8/2019	7/1/2019	8/26/2019	5/26/2020	7/21/2020	8/21/2020	5/24/2021	7/19/2021	8/23/2021
E-coli (CFU or colonies/100 ml)	1454.7	832.7	12033	830	959	371.5	776.5	1,032.00	315.2	866.4	686.7	387.3	461.1	2419.6
E-coli collection date (if different)														
Total Phos. (ppm)	0.073	0.059	0.615	0.073	0.098	0.084	0.109	0.092	0.098	0.091	0.079	0.039	0.083	0.085
Total Suspended Solids (ppm)	ND	ND	120	3.4	6.4	5.5	13.7	7.3	10.6	8.2	8.4	6.4	12	8.7
D.O.	ND	ND	7.82	7.11	7.09	9.65	8.82	7.99	8.6	8.3	7.5	5.9	8.1	5.7
pH	ND	ND	7.48	7.84	7.75	7.66	7.72	7.79	7.71	7.86	7.89	7.77	7.69	7.79
Temp. (c)	ND	ND	16.2	21.1	20.7	51.5	69.9	61.2	66.5	70	66.4	65.7	66	71.2
Specific Conductance	ND	ND	316.4	719	639	518	648	663	353	698	684	704	627	473
Post Rain Event	ND	ND												
rain event (yes or no)	ND	ND												
CFM Discharge Estimate	ND	ND	ND	550.51	1382.14	ND	2,191.39	1,386.00	ND	444.26	349.54	797.95	3256.77	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	76.33	360.73	ND	1,224.32	406.66	ND	148.56	119.74	208.26	1593.76	ND
Phos. Loading estimate Kg/day	ND	ND	ND	1.64	5.52	ND	9.74	5.13	ND	1.65	1.13	1.27	11.02	ND
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BDL= below detection limit

Shading indicates exceeds certain IDEM recommended water quality maximums.

Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants an algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 78. SCLC Site 71, Black Creek at S 600 E

Sampling Date	6/23/2017	7/21/2017	8/28/2017	5/15/2018	7/25/2018	8/20/2018	5/8/2019	7/1/2019	8/26/2019	5/26/2020	7/21/2020	8/21/2020	5/21/2021	7/19/2021	8/23/2021
E-coli (CFU or colonies/100 ml)	6498.3	3,075.90	442	10462	2613	2737.5	179.5	1,454.50	3,635.00	2,827.20	1,034.40	419.6	ND	821.2	770.1
E-coli collection date (if different)													ND		
Total Phos. (ppm)	0.3	0.433	0.16	0.573	0.158	0.209	0.123	0.218	0.193	0.158	0.198	0.237	ND	0.167	0.131
Total Suspended Solids (ppm)	ND	ND	9.2	71	6.6	10	9	21	20	21	14	12	ND	20.4	8.8
D.O.	ND	ND	5.4	7.44	7.58	7.65	11.8	7.97	8.14	8.7	5.7	6.3	ND	8.5	4.8
pH	ND	ND	7.93	7.35	7.91	8	7.91	7.78	7.93	7.88	7.94	8.09	ND	7.71	7.58
Temp. (c)	ND	ND	17.3	17.2	24.2	21.8	52.6	74.9	62.2	72.3	78.5	74.7	ND	67.9	72.2
Specific Conductance	ND	ND	725	232	624	615	434	517	520	443	659	584	ND	559	663
Post Rain Event															
rain event (yes or no)															
CFM Discharge Estimate	ND	ND	ND	ND	34.81	70.85	578.04	178.19	ND	314.14	11.2	ND	ND	459.21	ND
T.S.S. Loading Estimate Kg/day	ND	ND	ND	ND	0.37	28.89	212.16	153.46	ND	269.03	6.39	ND	ND	382.03	ND
Phos. Loading estimate Kg/day	ND	ND	ND	ND	0.22	0.6	2.9	1.59	ND	2.02	0.09	ND	ND	3.13	ND
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BDL = below detection limit
 Shading indicates exceeds
 certain IDEM recommended water quality maximums.
 Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 80, Site 64, Tributary to Arrowhead Lake at south end of Arrowhead Lake

Sampling Date	7/7/2017	8/29/2017	5/31/2018	7/27/2018	8/21/2018	8/19/2019	7/2/2019	8/30/2019	6/29/2020	7/24/2020	8/24/2020	8/24/2021	7/22/2021	8/26/2021
E-coli (CFU or colonies/100 ml)	729.9	601.2	1162	461.1	223.3	104.6	461.1	159.7	422.1	698.7	307.6	172.5	500.8	202.8
E-coli collection date (if different)														
Total Phos. (ppm)	0.095	0.101	0.12	0.089	0.121	0.075	0.125	0.111	0.096	0.129	0.113	0.058	0.094	0.128
Total Suspended Solids (ppm)	8.4	6.4	8.5	<2.0	3.2	7.1	9.3	3.8	9.1	4	4.5	2.3	6.6	1.9
D.O.	ND	8.76	5.8	6.37	5.39	9.04	8.06	6.9	6.9	7.5	8.6	7.3	9.1	8.2
pH	7.82	8.22	7.72	7.92	7.74	7.73	7.86	7.88	7.81	8.08	8.2	7.96	8.02	8.06
Temp. (C)	20.3	17.6	20	20.3	20.6	20.8	21.9	23.5	26	26	23.9	19.9	20.3	22.2
Specific Conductance	612	587	582	637	619	542	608	633	531	572	572	633	616	552
Pool Temp (mm)														
rain event (yes or no)														
CFM Discharge Estimate	92.86	30.63	511.86	47.78	126.48	452.18	300.18	33.26	444.23	33.07	6.26	66.37	43.87	20.62
T.S.S. Loading Estimate Kg/day	4.4	1.94	177.62	ND	16.37	130.93	121.43	0.15	127.75	5.52	1.15	9.23	11.83	1.58
Phos. Loading estimate Kg/day	0.32	0.13	2.5	0.17	0.62	1.38	1.83	0.15	1.38	0.18	0.03	0.16	0.17	0.11
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BDL = below detection limit
 Shading indicates exceeds certain IDEM recommended water quality measures.
 Back to: [County Map](#) [Quad 1](#) [Quad 2](#) [Quad 3](#) [Quad 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitable for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O. (Dissolved Oxygen): Level of dissolved oxygen present in lake waters, measured in parts per million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants or algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall Eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

Tab 81, Site 65, Fish Creek at 427

Sampling Date	8/28/2017	8/15/2018	7/25/2018	8/20/2018	5/8/2019	7/1/2019	8/30/2019	5/28/2020	7/24/2020	8/24/2020	5/21/2021	7/19/2021	8/23/2021
E-coli (CFU or colonies/100 ml)	707	48,392.00	1820	1936.5	126	967.5	1627	222.4	980.4	365.4	64.4	1119.9	344.8
E-coli collection date (if different)													
Total Phos. (ppm)	0.081	0.54	0.115	0.157	0.12	0.187	0.144	0.148	0.154	0.035	0.066	0.141	0.12
Total Suspended Solids (ppm)	5.8	64	8.8	14	5.2	30	18	5.8	10.6	7.1	3.9	24	9.4
D.O.	8.07	7.54	6.89	7.03	9.87	7.7	8.1	8	7.5	7.7	7.8	7.5	7.1
pH	8.27	7.54	8.17	8.07	7.89	7.9	8.13	7.92	8.45	8.24	8.04	7.98	8.16
Temp. (c)	17.6	16.9	21.4	21.4	52.2	71.9	63.5	68.2	73.7	69.1	69.7	68.7	72.9
Specific Conductance	706	339.5	677	591	506	599	645	497	659	627	581	626	649
Post-Rain Event													
rain event (yes or no)													
CFM Discharge Estimate	341.48	ND	1146.04	1329.75	4365.74	2146.8	1124.82	3031.26	522.4	397.15	870.62	2327.28	232.6
T.S.S. Loading Estimate Kg/day	80.77	ND	411.29	759.2	925.8	2626.45	825.68	719.98	225.82	114.99	135.47	2277.8	89.16
Phos. Loading estimate Kg/day	1.13	ND	5.37	8.51	21.36	16.37	6.61	18.3	3.28	0.57	2.34	13.38	1.14
NNN (Nitrogen, Nitrate + Nitrite)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
NNN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN (Nitrogen, Kjeldahl, Total)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TKN Loading	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

BDL = below detection limit
 Shading indicates exceeds
 certain IDEM recommended water quality maximums.
 Back to: [County Map](#) [Quid 1](#) [Quid 2](#) [Quid 3](#) [Quid 4](#) Use Alt + left arrow to return to previous page

Parameters Defined

E-coli: A count of a particular genera of bacteria that provide an indication of the presence of human or animal waste. E-coli is generally measured in CFU (colony forming units) or colonies per 100 milliliters of water. Because the presence of large numbers of E-coli in waters indicates a potential presence of associated disease causing organisms, it is measured to gauge the safety of swimming or drinking waters. A count of 235 CFU E-coli or higher in lake waters generally indicates unsuitability for swimming or bathing.

Total Phos.: (total phosphorus)- Level of total phosphorus present in lake waters, measured in parts-per-million. Includes dissolved phosphorus as well as that contained in plants, animals, and sediments suspended in the water column. As a nutrient necessary for the growth of planktonic algae, phosphorus levels profoundly influence lake productivity and water clarity/quality.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L.

D.O.: (Dissolved Oxygen)- Level of dissolved oxygen present in lake waters, measured in parts-per-million. Dissolved oxygen levels of at least 3 to 5 parts per million are required to sustain most fish and other gill-breathing aquatic animals and insect larvae.

pH: A numerical scale used to indicate how acidic or basic an aqueous solution is. It is technically the negative of the base 10 logarithm of the molar concentration, measured in units of moles per liter, of hydrogen ions. Solutions with a pH below 7 are "acidic" while those with a pH above 7 are "basic". In aquatic systems pH can be useful as an indicator of certain biological activities. The growth of aquatic plants and algae bloom can raise pH levels greatly, while the decomposition of organic matter in the water can create low pH or acidity. Waters with unusually high or low pH measurements may not be suitable for certain aquatic organisms.

Temperature: Temperature can be an important determining factor in the assemblage of aquatic organisms present in an aquatic system. For instance, many species of fish such as brook trout require relatively low water temperatures to survive. In Indiana this species is generally only present in streams with cool summertime temperatures that result from groundwater discharge.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is closely related to the ion content of water.

CFM Discharge Estimate: An estimate of stream flow given in cubic feet per minute.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling, given in Kg/day.

Phos. Loading estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling. Given in Kg/day.

NNN (Nitrogen, Nitrate + Nitrite): A measurement of non-ammonia species of nitrates in waters given in ppm (mg/L). High nitrate levels can be an indicator of human and animal waste or other source of pollution in surface waters. High nitrate levels can contribute to overall eutrophication, including increased growth of aquatic plants or algae and the associated effects. Nitrates can also contribute to health problems if present in large enough quantities in drinking water.

TKN (Nitrogen, Kjeldahl, Total): A measurement of the concentration of organic species of nitrogen and ammonia in waters given in ppm (mg/L). TKN quantifies nitrogen species not measured by tests for Nitrate + Nitrite. A high TKN can be an indicator of human and animal waste or other source of pollution in surface waters.

TKN Loading: An estimate of the weight of TKN flowing past the sampling site per day at the time of sampling. Given in Kg/day.

Tab 06 - Site 73 David Ditch, TNH, To Black Creek at S 550 E

Parameter	3/1/22		3/2/22		3/3/22		3/4/22		3/5/22		3/6/22		3/7/22		3/8/22		3/9/22	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Temperature (°F)	55	58	55	58	55	58	55	58	55	58	55	58	55	58	55	58	55	58
pH	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8	7.2	7.8
Dissolved Oxygen (mg/L)	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5	4.5	5.5
Total Phosphorus (ppm)	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05
Total Suspended Solids (ppm)	10	20	10	20	10	20	10	20	10	20	10	20	10	20	10	20	10	20
Specific Conductance (µmhos/cm)	150	200	150	200	150	200	150	200	150	200	150	200	150	200	150	200	150	200

Site: 73 David Ditch, TNH, To Black Creek at S 550 E
Batch to: 03/01/22, 03/02/22, 03/03/22, 03/04/22, 03/05/22, 03/06/22, 03/07/22, 03/08/22, 03/09/22

Assessment Defined
 A test of a particular genus of bacteria that provides an indication of the presence of human or animal waste. It is generally performed in the laboratory using a method that involves the detection of enzyme activity in the presence of a specific substrate. The presence of enzyme activity is generally indicated by the formation of a colored product. The test is generally performed in the laboratory using a method that involves the detection of enzyme activity in the presence of a specific substrate. The presence of enzyme activity is generally indicated by the formation of a colored product.

Total Phos: Total phosphorus is a measure of the phosphorus content of water. Phosphorus is an essential nutrient for plants and animals. High levels of phosphorus in water can lead to eutrophication, a process in which algae and other plants grow excessively, leading to a depletion of oxygen in the water. Phosphorus is generally measured in water samples using a colorimetric method.

Total Suspended Solids: A measurement of the particulate material present in a water sample given in ppm or mg/L. TSS is a measure of the turbidity of water. High levels of TSS can lead to a decrease in the amount of light that reaches the bottom of a water body, which can lead to a decrease in the amount of oxygen that is produced by the plants at the bottom. TSS is generally measured in water samples using a gravimetric method.

Specific Conductance: A measure of the ability of water to conduct electricity. Conductivity is directly related to the amount of dissolved solids in water. Specific conductance is generally measured in water samples using a conductivity meter.

OMN Discharge Estimate: An estimate of stream flow given in cubic feet per minute. OMN is a measure of the amount of water that is discharged from a water body into another water body. OMN is generally measured in water samples using a flow meter.

T.S.S. Loading Estimate: An estimate of the dry weight of total suspended solids flowing past the sampling site per day at the time of sampling given in kg/day.

Phos. Loading Estimate: An estimate of the weight of total phosphorus flowing past the sampling site per day at the time of sampling given in kg/day.

NH3-Nitrogen Nitrate - Nitrite: A measurement of ammonia species of nitrogen in water given in ppm (mg/L). Higher nitrate levels can be an indicator of human and animal waste or other sources of pollution in surface water. NH3-Nitrogen can be converted to nitrate by several biological processes, including increased growth of nearby plants or algae and the denitrification process. Nitrate can also contribute to health problems if present in large enough quantities in drinking water.

NH3-Nitrogen Ammonia Total: A measurement of the concentration of organic species of nitrogen and ammonia in water given in ppm (mg/L). This parameter is generally measured in water samples using a colorimetric method. High NH3-Nitrogen can be an indicator of human and animal waste or other sources of pollution in surface water.

TS Loading: An estimate of the weight of TSS flowing past the sampling site per day at the time of sampling given in kg/day.

Tab 07 - Site 09 - Fish Creek at E 400 S

Parameter	10/10	10/11	10/12	10/13	10/14	10/15	10/16	10/17	10/18	10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26	10/27	10/28	10/29	10/30	10/31	
Flow (cfs)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Temperature (°C)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
pH	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Dissolved Oxygen (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Suspended Solids (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Ammonia Nitrogen (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Nitrate Nitrogen (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Phosphorus (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Orthophosphate (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Total Nitrogen (mg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chlorophyll a (µg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chlorophyll b (µg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chlorophyll c (µg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Chlorophyll total (µg/L)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

Click on the parameter name to view the data for that parameter. [Click here to return to previous page](#)

Parameter Definition

- Flow (cfs)**: A measurement of the volume of water that flows past a particular point in a river or stream in a given amount of time. It is measured in cubic feet per second (cfs).
- Temperature (°C)**: A measure of the average kinetic energy of the particles in a substance. It is measured in degrees Celsius (°C).
- pH**: A measure of the acidity or basicity of an aqueous solution. It is defined as the negative logarithm of the hydrogen ion concentration.
- Dissolved Oxygen (mg/L)**: A measure of the amount of oxygen gas dissolved in water. It is measured in milligrams per liter (mg/L).
- Total Suspended Solids (mg/L)**: A measure of the amount of suspended solids in water. It is measured in milligrams per liter (mg/L).
- Ammonia Nitrogen (mg/L)**: A measure of the amount of ammonia nitrogen in water. It is measured in milligrams per liter (mg/L).
- Nitrate Nitrogen (mg/L)**: A measure of the amount of nitrate nitrogen in water. It is measured in milligrams per liter (mg/L).
- Total Phosphorus (mg/L)**: A measure of the amount of total phosphorus in water. It is measured in milligrams per liter (mg/L).
- Orthophosphate (mg/L)**: A measure of the amount of orthophosphate in water. It is measured in milligrams per liter (mg/L).
- Total Nitrogen (mg/L)**: A measure of the amount of total nitrogen in water. It is measured in milligrams per liter (mg/L).
- Chlorophyll a (µg/L)**: A measure of the amount of chlorophyll a in water. It is measured in micrograms per liter (µg/L).
- Chlorophyll b (µg/L)**: A measure of the amount of chlorophyll b in water. It is measured in micrograms per liter (µg/L).
- Chlorophyll c (µg/L)**: A measure of the amount of chlorophyll c in water. It is measured in micrograms per liter (µg/L).
- Chlorophyll total (µg/L)**: A measure of the amount of total chlorophyll in water. It is measured in micrograms per liter (µg/L).

Water testing KEY page.

Use KEY tab at the bottom to return to this KEY page.

[County Map Showing Sites](#)
[Google Online Map](#)
[LakesCouncil.org](#)

Tab	SCLC site #	Pigeon 319 site #	Location Description	NOTES :
1	1	1	Pigeon, East Ray Clark Road at culvert, below juncture with the Ryan Ditch	
2	2	2	Pigeon Creek, Pigeon Lake Inlet	
3	3	3	Pigeon Creek, Pigeon Lake Outlet	
4	4	4	Pigeon, U.S. 20 Bridge, Below juncture with Berlien Ditch	
5	5	5	Pigeon Creek, Metz Road	
6	un-numbered		Pigeon Creek between Metz and 275 E.	sampled 2009 E-coli only
7	un-numbered		Pigeon Creek at 275 E.	sampled 2009 E-coli only
8	58		Pigeon Creek at Hanselman	
9	un-numbered		Pigeon Creek between Johnson Ditch and Bill Deller Road	sampled 2009 E-coli only
10	63		Tributary just downstream of Arrowhead lake #63 Pigeon Creek downstream of Zabst Ditch	
11	6	6	Pigeon Creek, Bill Deller Road	
12	7	7	Pigeon Creek, Meridian Road	
13	59		Pigeon Creek at 400 South	
14	un-numbered		Pigeon Creek S. Old US Highway 27.	sampled 2009 E-coli only
15	8	8	Pigeon Creek, Long Lake Inlet	
16	9	9	Pigeon Creek, Long Lake Outlet	
17	10	10	Pigeon Creek, Mud Lake Outlet just west of Long Lake, Johnson Ditch from Ashley	
18	11	11	Pigeon Creek, Big Bower Lake Inlet	
19	12	12	Pigeon Creek, Big Bower Lake Outlet/Golden Lake Inlet	
20	13	13	Pigeon Creek, Golden Lake Outlet	
21	14	14	Pigeon Creek, Hogback Lake Inlet	
22	15	15	Pigeon Creek, Hogback Lake Outlet	
23	16	16	Pigeon Creek at 327	
24	18		Hamilton Lake	discontinued 2013
25	19		Crane Marsh Outlet, (tributary to Marsh Lake)	
26	20		Deller Ditch (Tributary to Marsh Lake)	
27	21		Follet Creek, Little Otter Lake Inlet	
28	22		Walter's Lakes Drain (tributary to Big Otter Lake)	
29	23		Follet Creek, Big Otter Lake Outlet	
30	24		Follet Creek, Snow Lake Inlet	
31	38		Lake George NE tributary (from Silver Lake)	
32	39		Crooked Creek (Lake George Outlet)	
33	25		Crooked Creek at 120 (Tributary to Snow Lake)	
34	26		Carpenter Ditch (outlet from Center Lake)	
35	27		Carpenter Ditch (Tributary to Crooked Lake)	
36	28		Palfreyman Ditch (Tributary to Crooked Lake)	
37	51		Croxtton Ditch, (Tributary to Lake James at Lagoona Park)	
38	29		Crooked Creek (Jimmerson outlet at Nevada Mills)	
39	30		Concorde Creek (Outlet from Crooked Lake)	
40	31		Concorde Creek (Inlet to Lake Gage)	
41	32		Concorde Creek (Outlet from Lime Lake)	
42	33	17	Dewitt Ditch (Tributary to Big Turkey Lake)	
43	34	18	Turkey Creek (Tributary to Big Turkey Lake)	
44			Fox Lake Outlet	discontinued 2011
45	36		Crooked Creek (Snow Lake outlet, Inlet to James)	
46	37		Crooked Creek (James Outlet, Jimmerson Inlet at 4 corners)	
47	40		Lake Pleasant	
48	61		Ball Lake	discontinued 2013
49	42		Turkey Ck at 700S east of 800W, below Little Turkey and Deetz Ditch juncture	
50	43		Big Turkey Outlet at 350S on curve north of Stroh or west of Turkey Lake Tavern	
51	44		Trib. To McClish Lake (east end)	
52	46		Trib. To Lake Pleasant (East End)	
53	47		Trib. To West Otter (Between Arrowhead and Otter)	
54	48		Trib. Between Silver and Hogback	
55	49		Trib. To Snow Lake (Pokagon State Park)	discontinued 2013
56	50		William Jack Ditch	
57	52		Harry Teeters Ditch (Clear Lake Tributary)	
58	54		Alvin Patterson Ditch (Clear Lake Tributary)	discontinued 2013
59	53		Smith Drain (Clear Lake Tributary)	discontinued 2013
60	45		Cyrus Brouse Ditch (Clear Lake Tributary)	
61	17		Clear Lake Outlet	
62	56		Steuben Regional Waste District Effluent (Trib. To Pigeon)	discontinued 2013
63	57		Crooked Lake Third Basin	discontinued 2012
64	55		Walter's Lakes Drain at 660 North	
65	60		Fish Lake (Fremont)	discontinued 2013
66	61		Tributary to Ball Lake	
67	62		Black Creek, tributary to Hamilton Lake	
68			Tributary Stream from Fish Lake at Fremont Road, just N of 700N	
69			Tributary Stream from Lime Lake at Lime Lk. Rd., W of 1025W	
70			Allen Rd (MI)	
71			Crooked Lk Inlet from Loon Lk	
72			Feather Valley Rd (Seven Sisters Lk Outlet)	
73			W 650 N (stream: J. Roberts Ditch)	
74	S1		Tributary to Arrowhead Lake at S 800 W	County Surveyor Site
75	S2		Tributary to Arrowhead Lake at W 250 S	County Surveyor Site
76	S3		Tributary to Arrowhead Lake, South End of the Lake	County Surveyor Site
77	70		Fish Creek at E Metz Rd.	
78	71		Black Creek at 600 E	
79	72		Tributary to Lake George at 150 W (Flint Rd. in MI) N. of launch	
80	64		Tributary to Arrowhead Lake at south end of Arrowhead Lake	
81	65		Fish Creek at 427	
82	66		Pokagon Effluent Outlet	
83	67		Silver Lake Outlet at S. Angola Rd	
84	69		Fish Creek at S 850 E (5/19/17 upstream of S 850 E)	
86	73		Davis Ditch, Trib. To Black Creek at S 550 E	
87	68		Fish Creek at E 400 S	
88	74		Trib. to Little Long Lake at Mead Rd.	
89	75		Trib. to Little Long Lake, Derr Drain	
90	76		Fox Lake Beach	

