

GREAT SACANDAGA LAKE COLIFORM MONITORING PROGRAM – 2023 Final Report



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Great Sacandaga Lake Coliform Monitoring Program

The Great Sacandaga Lake Coliform Monitoring Program (GSLCMP) for 2023 was designed to quantify the bacterial water quality at selected locations in the Great Sacandaga Lake and in selected streams that feed the lake.

The coliform sampling of the Great Sacandaga Lake was started in 1991 and has been performed every summer for the past 32 years except for the year 2020 due to the Covid-19 Pandemic. Public bathing beaches, recreational areas and feeder streams were the primary focus. Seventeen shoreline locations were sampled in June, and an additional twenty-two samples were taken on August 9, 2023. All of sampling results have shown that the Great Sacandaga Lake water is within allowable standards for recreational contact.

GSLA has been concerned about potential contamination from Kenyetto Creek. Just upstream of the lake on State Route 30 is Adirondack Animal Land, a potential source of bacteria. In the same area, Lane Winney owns 83 acres at the southern end of the Great Sacandaga Lake. The Town of Mayfield has granted approval for Winney to build a large RV park (more than 200 sites) on his land along Woods Hollow Road. In June the samples taken from Kenyetto Creek under the RT 30 bridge were unsafe for bathing (E. coli >2419.6 per 100 ml). The Kenyetto Creek flows into the Great Sacandaga Lake on a very narrow and shallow bay, locally known as Mussel Harbor. To better understand the impact of the creek and get historical information before the RV park is built, the August sampling included samples from Mussel Harbor. The sample taken under the RT 30 bridge was still unsafe for bathing; however, significantly improved to E. coli 307.6 per 100 ml.

One of the more popular locations on the lake where boaters go, and swim is Sand Island. Some boaters leave garbage and debris including human waste on the island. The Great Sacandaga Lake Advisory Council has been working for years to be able to put porta potties on the island. Current plans will have them there during the next boating season. On August 9th four samples were taken just off the Sand Island beach for historical baseline data.

Two primary measurements were made at each sampling location: Fecal Coliform (FC) and Escherichia coli (E.coli) Bacteria. These bacteria serve as indicators of the presence of animal or human waste. It should be noted that prior to 2019, the GSLCMP used different primary measurements: Total Coliform (TC) and Fecal Coliform (FC) Bacteria. Total coliforms include bacteria that are found in the soil, in water that has been influenced by surface water runoff, and human or animal waste. Fecal coliforms are the group of total coliforms that are present specifically in the gut and feces of warm-blooded animals. E. coli is a rod-shaped bacterium that is commonly found in the lower intestine of warm-blooded animals. In recent years, scientists believe that the use of FC and E. coli test provide a better indication of possible contamination than was obtained by using TC and FC analysis.

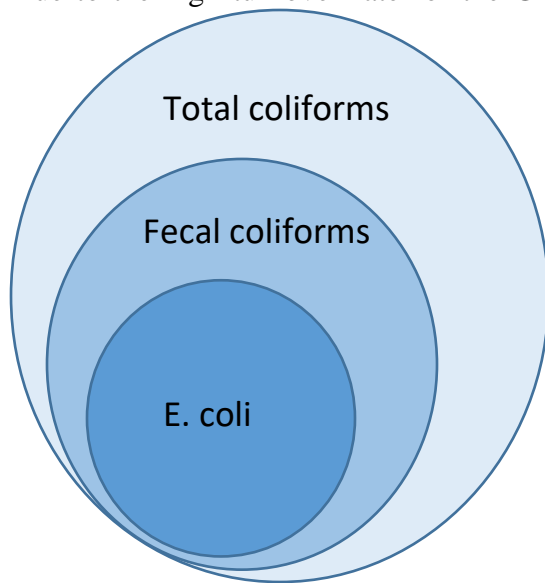
The presence of elevated levels of these bacteria serves as indicators that potentially disease-causing protozoa, bacteria or other microorganisms may be present in the water.

SUGGESTIONS FOR INTERPERTATION OF COLIFORM DATA

The New York State Department of Health has determined the maximum allowable bacterial levels for contact recreation (swimming, wading, etc.). When samples on beaches exceed allowable levels the New York State Health Department is notified. The Department of Health is empowered to close the location to bathing until the problem or problems are corrected.

Interpretation of data to determine contamination sources (human or other warm-blooded animals) require more than just the current bacterial levels. Knowledge of the history of the site, weather, geology of the area, drainage patterns, and some information on human activities in the area is also useful. We have sample results from 55 locations that were taken over the past 32 years to help in the interpretation. The locations of the sampling change from year to year. Prior years when the feeder streams were tested, the sample locations were taken under the first bridge upstream from the lake. This location provided easy access to the sampling point; however, because these locations could be several hundred yards up stream of the confluence, some sources of contamination may have been missed. This year the selected streams were sampled at the confluence of the stream and the Great Sacandaga Lake.

Due to the high turnover rate for the Great Sacandaga Lake the water has seen relatively low contamination levels over the past 30 years.



New York State Fecal Coliform and E. coli Standards in Waters Used for Contact Recreation (NYS Dept. of Health)

Maximum Allowable Levels of Coliform Bacteria in Water for Contact Recreation (NYS Dept. of Health)		
Bacterial Test	Max. 5 Sample mean*	Max. Single Result
Fecal Coliform	200 per 100 ml	1000 per 100 ml
E. coli	126 per 100 ml	235 per 100 ml

*Geometric mean of 5 samples collected within 30 days

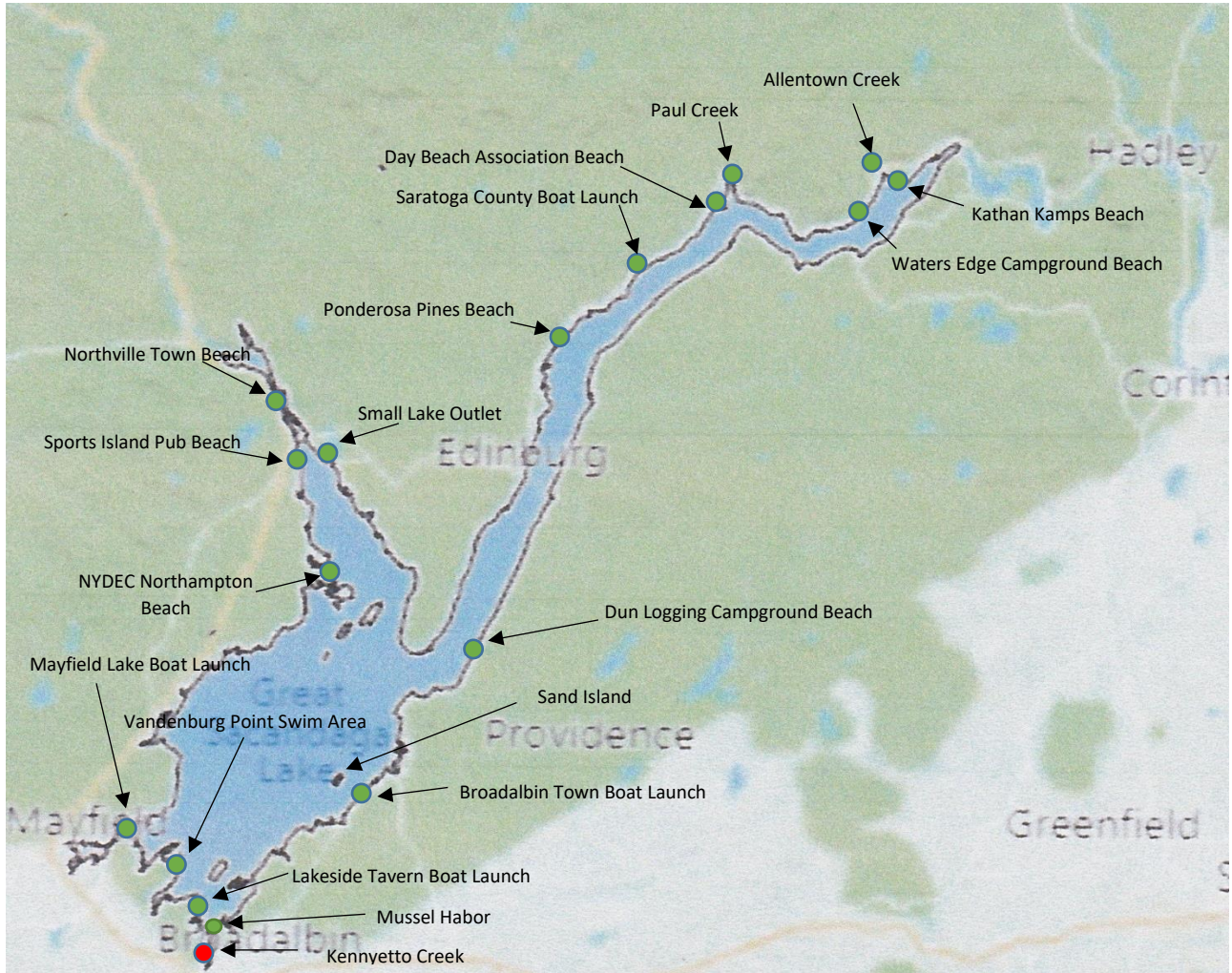
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SITE	DATE/ TIME	FC/100 ml	E coli/100 ml	Notes
Town of Day				
Allentown Creek at Confluence	6/15/2023 7:35	1.0	4.1	Water clear and calm, slight waves, cold and no fish. Sample taken 6 feet from shore.
	8/9/2023 11:45	1.0	4.1	Water was clear and calm. Sample taken 12 feet from shore middle of beach area.
Kathan Kamps Beach	6/15/2023 7:45	1.0	<1	Water clear, calm, slight waves, no fish. Sampled 10 feet from shore.
	8/9/2023 11:35	4.1	4.1	Water clear, calm, vegetation in water. Sampled 10 feet from shore.
Waters Edge Campground Beach	6/15/2023 7:55	1.0	<1	Sample taken at the end of middle dock, small swim area on right. dock, one boat nearby. Water clear and no fish. Two Jet skis and 11 boats tied to dock.
	8/9/2023 11:20	1.0	4.1	Sample taken from the second dock (guest dock) which is next to the swimming area. A bunch of boats moored by. Sample taken right next to the last boat at the end of the dock. Water was clear and calm.
Paul Creek at Confluence	6/15/2023 8:10	13.5	4.1	Sampled 50 yards from bridge, moderate flow, middle of creek, water clear, and no fish.
	8/9/2023 11:10	35.5	43.2	Sampled 50 yards from bridge, moderate flow, middle of creek.
Day Beach Assoc. Beach	6/15/2023 8:15	3.0	<1	Sampled 15 feet from shore with some fish, no birds, or geese poop. Seven boats moored.
	8/9/2023 11:00	4.1	3.1	Sampled middle of swimming area 10 feet from shore. Water clear and calm.
Saratoga Co. Boat Launch	6/15/2023 8:35	3.1	1.0	The water was turbid and a little choppy with many small fish. Sample taken at the end of dock. One dredge tied to dock.
	8/9/2023 10:45	2.0	3.1	Sample taken at the end of dock. Water clear and choppy.

SITE	DATE/TIME	FC/100 ml	E coli/100 ml	Notes
Town of Edinburg				
Ponderosa Pines Beach	6/15/2023 8:42	2.0	6.3	Water clear and choppy, no fish in swimming area. No swimmers. 5/6 boats moored nearby. Sample taken 15 feet from shore.
	8/9/2023 10:40	4.1	3.1	Water clear and choppy with 3 swimmers. Sample taken in the middle of swim area 12 feet from shore.
Town Northville				
Small Lake Outlet	6/15/2023 9:00	98.8	17.3	Sample taken 6 feet from shore. Duck with goslings swimming nearby. Water slightly turbid and no fish.
	8/9/2023 8:15	5.2	11.0	Water clear and calm. Goose poop on shore. Sample taken 4 ft from shore.
Sports Island Pub Beach	6/15/2023 9:17	2.0	2.0	Water clear and choppy. Two boats at a distance driving away. No fish or vegetation.
	8/9/2023 8:00	7.5	6.3	Sample taken in front of Mercruiser Stern Drives 12 feet from shore. The water was clear and calm with a moderate amount of vegetation nearby. Boats moored nearby.
Northville Town Beach	6/15/2023 9:20	2.0	5.2	The water was clear and calm. Sample taken 12 feet from shore.
	8/9/2023 8:10	9.7	12.0	The water was clear and calm. Sample taken right side of swim area, 20 feet from shore.
Town of Northampton				
NYSDEC Northampton Beach	6/15/2023 9:30	88.4	50.4	Water choppy with white caps, clear with a few tiny fish. Sample taken 10 feet from shore.
	8/9/2023 7:45	5.2	7.5	The water was clear and calm. Sample taken 12 feet from shore.
Town of Mayfield				
Mayfield Lake Boat Launch	6/15/2023 9:55	9.8	17.5	Sampled at 4 corners of dock. The water was calm and slightly turbid. One person was fishing by the dam, a massive pike nearby. Lots of boats parked nearby.
	8/9/2023 7:25	32.7	39.3	Sampled at the end of dock 1. Water clear and calm. Water flowing over dam. Buch of boats moored nearby.

SITE	DATE/TIME	FC/100 ml	E coli/100 ml	Notes
Town of Mayfield				
Vandenburg Point Beach	6/15/2023 10:10	2.0	11.0	Water clear and choppy, no fish. Sample taken 10 feet from shore.
	8/9/2023 7:15	9.7	13.2	Sample taken next to long dock, 10 feet from shore. Water clear and calm with water bugs. No boats.
Lakeside Tavern Boat Launch	6/15/2023 10:30	8.5	9.8	The water was calm and clear. Sample taken at end of dock. The water was calm and clear, with no fish, dozens of ducks nearby. No boats on dock, three boats moored across channel.
	8/9/2023 7:30	16.1	22.8	The water was calm and clear, with no fish, dozens of ducks nearby. No boats on dock, three boats moored across channel.
Kennyetto Creek	6/15/2023 10:35	>2419.6	>2419.6	Sampled under Rt 30 bridge six feet from shore. The creek had moderate flow with trash including a tire in the middle. One duck with 6 ducklings nearby.
	8/9/2023 6:40	365.4	307.6	Sampled under Rt 30 bridge 4 feet from shore. The creek had moderate flow, garbage nearby, no fish or animals.
Mussel Harbor	8/9/2023 6:55	43.5	31.8	Taken from right dock 34 Pedrick Rd. Water Clear and calm. 3 ducks.
Town of Broadalbin				
Broadalbin Boat Launch	6/15/2023 10:55	9.7	6.3	The water was choppy slight white caps, turbid and dark. No fish. One boat docking. Sample taken at end of dock.
	8/9/2023 6:25	20.3	28.1	The water was clear and choppy. No birds. Sample taken at end of dock.
Sand Island	8/9/2023 9:20	4.1	<1	By tall dead tree on northside of island. Sample taken 22 feet from shore in clear slightly choppy water.
	8/9/2023 9:25	<1	2.0	Sample taken 25 feet from southwest beach in clear and choppy water. Smells a little, campfires nearby.
	8/9/2023 9:30	25.0	33.2	Sample taken off of southeast beach in clear and calm water with small fish.
	8/9/2023 9:35	12.0	11.9	Sample taken from south end of island in clear and choppy water 30 feet from shore.

SITE	DATE	FC/100 ml	E coli/100 ml	Notes
Town of Providence				
Dun Logging Campground Beach	6/15/2023 11:15	4.1	45.5	The water was clear and calm, there was a slight amount of pond scum, and no fish. Sample taken 10 feet from shore.
	8/9/2023 6:15	10.8	18.1	The water was clear and choppy, no fish, birds, or algae.



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