



Log Details - #10

Aurora Lake

1206 Surfside Cir, Aurora, OH 44202,
USA

General Info

General Info

Weather Data				General Information	
Temperature	91°F			Start Date/Time	09/03/2026 10:30 AM
Conditions	Clouds	Wind	3.39 mph East	Lead Staff	Ed Kwietniewski
				Additional Staff	Ed Kwietniewski
Humidity	53%	Pressure	1014 hPa		
Sunrise/Sunset	6:55 AM / 7:54 PM				

Map



Map Graphics

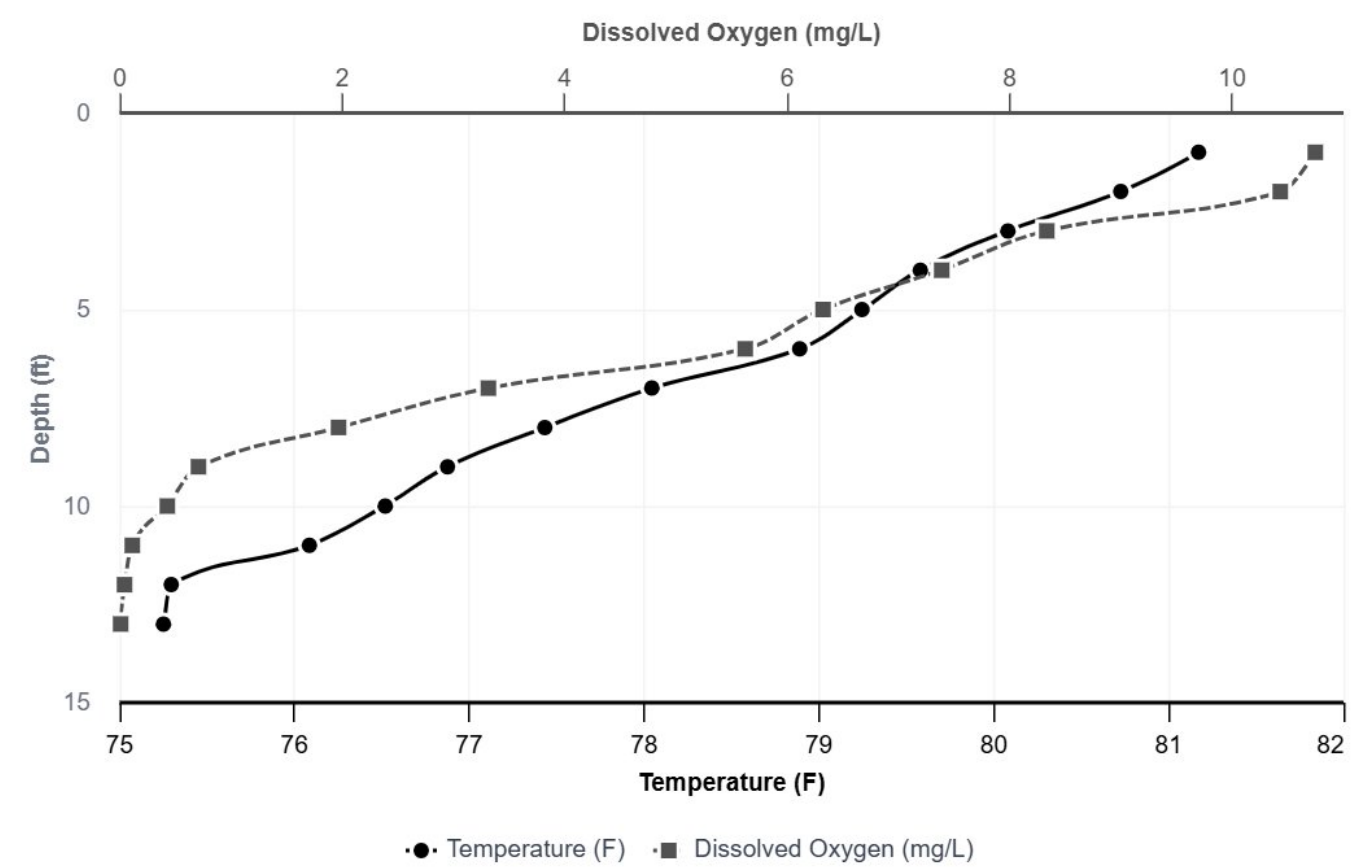
Type	Coordinates	Label	Area	Perimeter
marker	41.334934, -81.389631	AL 4	N/A	--
marker	41.337174, -81.383108	AL 2	N/A	--
marker	41.330809, -81.386605	AL 6	N/A	--
marker	41.332775, -81.380597	AL 5	N/A	--
marker	41.327281, -81.388429	AL 7	N/A	--
marker	41.329118, -81.381691	AL 8	N/A	--
marker	41.335611, -81.386155	AL 3	N/A	--
marker	41.326555, -81.381048	AL 9	N/A	--

Type	Coordinates	Label	Area	Perimeter
marker	41.339767, -81.388743	AL 1	N/A	--
marker	41.323558, -81.385232	AL 10	N/A	--

Depth Profile

Aurora Lake 1

Depth Profile - Aurora Lake - 9/3/2026



Profile Data 13 data points

Depth	Temperature (F)	Dissolved Oxygen (mg/L)
1.00	81.18	10.74
2.00	80.73	10.44
3.00	80.08	8.33
4.00	79.57	7.38
5.00	79.25	6.32
6.00	78.89	5.62

Depth	Temperature (F)	Dissolved Oxygen (mg/L)
7.00	78.04	3.32
8.00	77.43	1.97
9.00	76.87	0.71
10.00	76.51	0.42
11.00	76.08	0.11
12.00	75.29	0.04
13.00	75.25	0.00

Observation

Species	Type	Severity	Location	Treated
Cyanobacteria	Other	Medium	Site Wide	No

Photos



Aurora Lake launch - 9/3/2026



General appearance of water - 9/3/2026



Center of lake - 9/3/2026



Center of lake - 9/3/2026



West cove - 9/3/2026



South Beach - 9/3/2026



Hawthorn Inlet - 9/3/2026



Inlet to channels - 9/3/2026



Cleaning and calibration of buoy equipment -
9/3/2026

Notes

AQUA DOC - Visitation 10 - 9/3/2026

AQUA DOC conducted our 10th visit of the 2026 season to Aurora Lake on 9/3/2026. Heavy rain was projected into the afternoon but weather conditions were mostly sunny and warm during our visit. Rain was noted the previous night. Overall the lake was not exhibiting a strong quantity of surface algae biomass but, algae growth did seem to be present throughout the water column similarly to our previous visit. A rainy end of summer/fall may be pushing algae into the water column and reducing the frequency of surface blooms. No applications were conducted today as algae biomass was not condensed to any particular area of the lake and was throughout the lake's water column. Today's visitation consisted of our normal water monitoring procedures including a depth profile at the deepest point of the lake, spatial chlorophyll-a collected data (AL 1 - 10), and wet chemistry sampling that included a total phosphorus and microcystin sample at the deep point as well as E. coli sampling at the beaches. All samples were delivered to their respective labs for analysis same day.

Depth profile data showcases similar dissolved oxygen (DO) reduction trends that were observed over the past 2 visitations. DO was further reduced to almost anoxic ("0") conditions near the bottom 3 feet of water depth and confirmed hypoxia (nearing "0") from 7.0 ft to the bottom. DO concentrations below 4.0 mg/L (DO threshold for potential DO strain on gilled organisms) was present in the bottom 50% of the water column during today's visit which is the lowest observed so

far this season. Decomposition from dying algal biomass is likely a large contributor as photosynthetic capability is reduced near the bottom of the lake as turbidity (algal or otherwise) increases. With cooling temperatures quickly approaching, algal biomass should begin to naturally decline into the next few months and cold water temperatures should be able to sustain higher DO content. Oxidative-Reduction values were only negative at the bottom 2.0 ft of water depth suggesting hypoxic conditioning above 12 ft is likely a more recent event. Regardless, highly negative ORP values at the bottom do suggest internal phosphorus loading due to DO loss. This has been observed on the lake before.

Spatial chlorophyll data was overall lower than our previous visit with higher concentrations being present mid-lake compared to the north or south end. Average chlorophyll-a was estimated at 3.46 ug/L among the 10 sampling locations. Specifics are included below:

AL 1: 2.3 ug/L
AL 2: 3.7
AL 3: 2.49
AL 4: 3.71
AL 5: 4.45
AL 6: 3.70
AL 7: 3.47
AL 8: 2.57
AL 9: 4.90
AL 10: 3.54
Cove: 3.24

As we progress into Labor Day weekend, the lake appears to be in good condition as we get into the last big lake-use weekend. Although some algal biomass is present in the lake, E. coli and microcystin concentrations have been well below concerning thresholds all season for human health concerns. The lake should be in good conditions for contact recreational activities such as boating, swimming, water skiing, and others.

AQUA DOC has two more visits to the lake to get us through the rest of September into October.

Thanks!