



2019 Citizen Assisted Monitoring Program

Overview

Each year, the City of Lakeville participates in Met Council’s Citizen Assisted Monitoring Program (CAMP). CAMP’s purpose is to empower local residents and staff to track local water quality trends. As part of the program, surface water monitoring is conducted bi-weekly on Marion, Orchard, Kingsley, Lee, Valley and East lakes. Samples are analyzed for indicators of algae growth potential (nitrogen, phosphorus and chlorophyll-a). At each sampling event, surface water temperature and water transparency are also observed. For each monitoring parameter, the Met Council assigns a unique grade based on the lake’s ability to meet state water quality standards. The table below reflects the grades assigned to Lakeville lakes over the past three years of monitoring.



Practices

- ◆ Water quality monitoring
- ◆ Public education and engagement

Benefits

- ◆ Directs City water quality improvement initiatives
- ◆ Water quality protection

Partners

- ◆ Metropolitan Council
- ◆ Local lake residents
- ◆ Black Dog Watershed Management Organization

Timeline

- ◆ Bi-weekly April—October

Historic Transparency Averages

| Lake | Year | Transparency Avg (m) | Grade |
|----------|------|----------------------|-------|
| Kingsley | 2017 | 2.9 | B |
| | 2018 | 3.1 | A |
| | 2019 | 3.4 | A |
| East | 2017 | 0.8 | D |
| | 2018 | 0.6 | F |
| | 2019 | 1 | D |
| Lee | 2017 | 2 | C |
| | 2018 | 1.6 | C |
| | 2019 | 2.5 | B |
| Orchard | 2017 | 3 | A |
| | 2018 | 2.4 | B |
| | 2019 | 2.4 | B |
| Marion | 2017 | 2.5 | B |
| | 2018 | 2.3 | B |
| | 2019 | 2.1 | C |
| Valley | 2017 | 1.3 | C |
| | 2018 | 0.7 | D |
| | 2019 | 0.7 | D |



Funding

City of Lakeville: \$3,040

Black Dog WMO: \$1,520

Project Cost: \$4,560



(Left) Lotus lily pads on Lee Lake. This rare lily pad variety boasts large white flowers and grows above the water surface.



(Above) This painted turtle was found crossing the road next to Kingsley Lake. Luckily, staff were nearby to return it to the water.



(Above) Staff utilize a canoe to reach the deep spot of East Lake for water quality sampling (part of the standard sampling procedure).



(Above) The view from a shoreline restoration in bloom on Valley Lake.



(Above) Blue green algae bloomed on Valley Lake in 2019, leading staff to a decision to convert the beach to pollinator habitat.

(Right) Kingsley Lake set record lake levels due to heavy rainfall coupled with beaver activity.

