## Water Quality Testing at Lake Orono Beach

## **Testing Frequency**

Lake Orono will be assessed for E. coli (Escherichia coli) bacteria to determine fecal contamination in recreational waters. Elevated bacteria levels generally occur in aquatic environments after significant rain events when bacteria sources are washed into the lake from land.

Lake Orono will be tested twice weekly from Memorial Day through Labor Day by taking three samples each day (six samples per week). The Minnesota Pollution Control Agency guidelines for impaired water quality notifications will be followed. The beach will be closed if one of the following is found:

- Single-Sample Limit: A single result of over 235 organisms per 100 mL of water
- Geometric Mean: At minimum five samples equally spaced over a 30-day period exceed 126 organisms per 100 mL of water.

If a high reading is recorded, additional sampling will be done until results meet acceptable limits. Caution will only be posted if a high reading is recorded for at least two consecutive days. Caution will be removed after results return to acceptable limits.

If a high reading is recorded on a Thursday, the next sample is collected the following Monday. The company contracted for water testing is closed on weekends, and they require a 16-hour window to complete testing.

## Standard for Posting Warning

If E. coli levels are above the MPCA guidelines, signage shall be posted on the beach stating, "Caution-Impaired Water Quality-Potential Health Risk if Swallowed." Daily sampling will be conducted until the levels drops below the guidelines, at which time caution signs will be removed.

## Notify

- Recreation Manager
- Public Works Superintendent
- Park Foreman Placement & removal of signs at Orono Beach/public access when posting is required.
- Police Chief and Police Captain
- OLID Conduct a calling tree/email list to lake owners, oronolid@gmail.com
- Post notice on city website.
- City Administrator who will inform Mayor and City Council

Notify the above individuals again when the Caution notice is lifted.

Effective as of January 1, 2018 Amended September 8, 2020 Revised July 2024