2017 Summary for Chisago Lakes
Lake Level Monitoring Activities

The goals for the LID lake level monitoring program for the 2017 monitoring season included:

- Monitor lake levels weekly during the open water season,
- Improve the safety and efficiency of the monitoring process whenever possible,
- Evaluate and upgrade worn out gauges and equipment, and
- Evaluate monitoring site locations and revise where appropriate.

The 2017 monitoring season began on March 30, 2017, as ice-out had occurred on area lakes.

1. **Little Lake:** The gauge is located at the Little Lake public boat access and is easily viewed from the dock. In May 2017, the Minnesota Department of Natural Resources (DNR) set a new gauge, as the existing gauge could not be found. The new gauge was moved several feet away from the dock in July 2017, as the new gauge was damaged due to boat traffic. At the end of October and through early November 2017, vegetation blocked the gauge from view and staff could not take a reading.

2. **Pioneer Lake:** In 2015, the DNR established an OHW level of 906.2 for Pioneer Lake. The gauge is located in the southwest corner of the lake. The gauge is in a good location, although it can be difficult to see when tree vegetation is thick.

3. **North and South Center Lakes:** The gauge is located at the South Center Lake public access where it can easily be viewed from the docks. In May 2017, the Minnesota DNR set a new gauge, as the existing gauge could not be found. The new gauge was moved several feet away from the dock in July 2017, as the new gauge was damaged due to boat traffic.

4. **North Lindstrom Lake:** The gauge is located near the Lakeview Motel along Highway 8. In May 2017, the Minnesota DNR set a new gauge, as the existing gauge could not be found. County staff retrieved the lost gauge in June 2017.

5. **South Lindstrom and Chisago Lakes:** The gauge is located at the Chisago Lake public access in the channel between South Lindstrom and Chisago Lakes.

6. **Wallmark Lake:** The gauge is located on private property and is read from the back yard. Readings were taken consistently without major issues.

7. **School Lake:** The gauge is located on private property and is read from the back yard. Readings were taken consistently without major issues.

8. **Swamp Lake:** There are 7 culverts located at Swamp Lake; the 2nd culvert from the east is used for lake level measurements. Water flowed through the culverts all season.

9. **Weir at Ivywood Trail:** A permanent gauge on the weir is used for measurements.

10. **Lofton Avenue Weir:** Located between Chisago and Green Lakes; the permanent gauge is attached to the side of the weir. The gauge can be difficult to read when algae from receding water levels sticks to the gauge.

11. **Little Green, Green, and Ellen Lakes:** The gauge is located on Little Green Lake near a private residence on West Street. In early May 2017, staff could not take readings as the gauge was leaning significantly. In May 2017, the Minnesota DNR reset the gauge.

12. **Kroon Lake:** The gauge is located at the Kroon Lake public access. At times the gauge had been difficult to read due to excessive vegetation growth.

13. **Spider Lake:** The gauge is located at the Spider Lake public access.

14. **Linn Lake:** The gauge is accessed by a dock on private property on Newberry Trail. Staff wears rubber boots to access this gauge most of the season due to high water levels. At the end of May and through the middle of June 2017, staff could not take a reading as vegetation blocked the gauge from view and staff could not walk on the dock as it was damaged.

15. **County Road 19:** The gauge is located in the wetland complex near County Road 19. Staff installed the gauge and began taking readings on July 21, 2017. Readings were taken consistently without major issues.

The 2017 monitoring season concluded on November 15, as cold temperatures had arrived after a warm October.