

# 2014 SUMMARY FOR CHISAGO LAKES LAKE LEVEL MONITORING ACTIVITIES

The goals for the LID lake level monitoring program for the 2014 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 2014 monitoring season began on May 15, 2014, as ice-out had occurred on area lakes.

1. **Little Lake** The gauge at the public boat access was blocked by floating bogs for a couple weeks early in the season when water was high. This gauge is old and getting worn, but still readable with binoculars.
2. **Pioneer Lake** A gauge is monitored here although the Ordinary High Water (OHW) level for this lake has never been established. The gauge is located in the southwest corner of the lake. This gauge is in a good location out of the way, although can be difficult to see when tree vegetation is thick. It is anticipated that the DNR will establish an OHW level for Pioneer Lake in 2015.
3. **North and South Center Lakes** In spring 2014 this gauge was located at the Government Center on North Center Lake. Due to excessive vegetation growth and high water, the gauge was moved on August 1<sup>st</sup> to the South Center Lake public access where it can easily be viewed from the docks.
4. **North Lindstrom Lake** This gauge started out near the Lakeview Motel along Highway 8 during the beginning of the season. During high water it was completely under water so reliable readings could not be taken. It was also in the way of boat traffic coming through the channel. For those reasons it was moved to a previous location near the Highway 20 Bridge on July 24<sup>th</sup>.
5. **South Lindstrom and Chisago Lakes** This gauge is located at the Chisago Lake public access in the channel between South Lindstrom and Chisago Lakes. This gauge was under water for a large portion of the season, but readings were taken with a tape measure while wading in to the water.

6. **Wallmark Lake** This gauge is located on private property and is read from a dock. Readings were taken consistently without major issues until early September when the landowners pulled their dock out of the water for the season.
7. **School Lake** This gauge is viewed from Rotary Park in Chisago City.
8. **Swamp Lake** There are 7 culverts here; the 2<sup>nd</sup> culvert from the east is used for lake level measurements. Water flowed through these culverts all season.
9. **Weir at Ivywood** A permanent gauge on the weir is used for measurements. This site experienced no flow for 2 weeks this season.
10. **Lofton Weir** Located between Chisago and Green Lakes; the permanent gauge is attached to the side of the weir. This gauge can be difficult to read when algae from receding water levels sticks to the gauge.
11. **Little Green, Green, and Ellen Lakes** This gauge is located at the Little Green public access. At the end of the season the gauge was removed due to the relocation of the boat launch. It will more than likely be installed near the same location in the spring of 2015.
12. **Kroon Lake** This gauge is located at the Kroon Lake public access. At times this gauge had been difficult to read due to excessive vegetation growth.
13. **Spider Lake** This gauge is located at the Spider Lake public access. At times this gauge had been difficult to read due to excessive vegetation growth, for that reason some cattails/reeds were trimmed at this location.
14. **Linn Lake** This gauge is located on private property on Newberry Trail by accessing a dock. No issues at this site, except rubber boots were needed to access this gauge most of the season due to high water levels.

The 2014 monitoring season concluded on November 6, as a snow storm and cold temperatures arrived the following week.