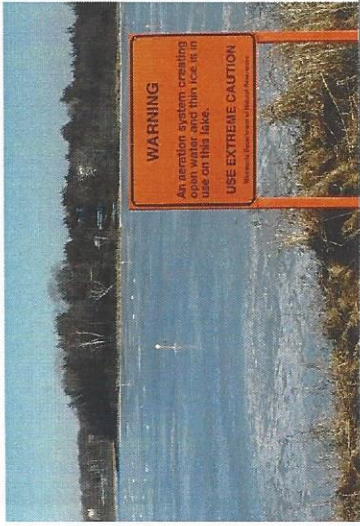


# Comfort Lake – Forest Lake Watershed District Update

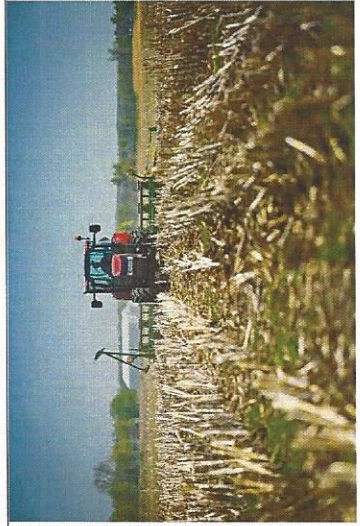
4-19-21

Blayne Eineichner, Project Coordinator - 651-395-5857 - blayne.eineichner@ciflwd.org



**Aeration System** – The District operated the winter aeration system on Moody Lake from January 5<sup>th</sup> until March 29<sup>th</sup>. The purpose of this aerator system is to sustain healthy dissolved oxygen levels for game fish species over the winter months.

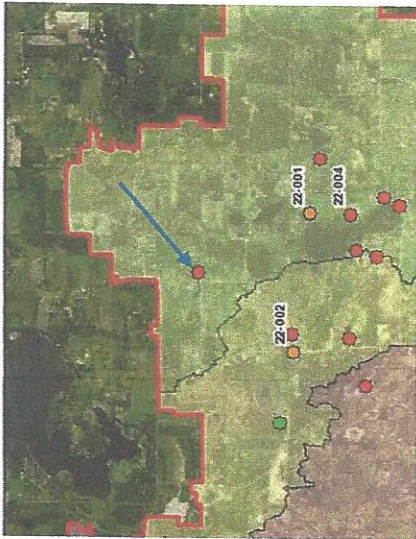
**Curly-leaf Pondweed** – The District will again hire Blue Water Science to perform a delineation survey for CLP this year on Moody Lake. Based upon this survey, the District will decide if a treatment is necessary. For reference, the District treated **0 acres in 2021**, 3.11 acres in 2020, and 7.81 acres in 2019.



**Agriculture Lands Outreach and BMP's** – The District has formed a Farmer-Led Council to assist with agriculture education and outreach. District staff have been meeting with area farmers to go through conservation planning, with a focus on improving water quality, profitability, and farm resiliency. The District also has Clean Water Legacy (CWL) funds available to assist with agriculture best management practices (BMP) implementation.

Permitting – One open permit currently within the Chisago Lake Township

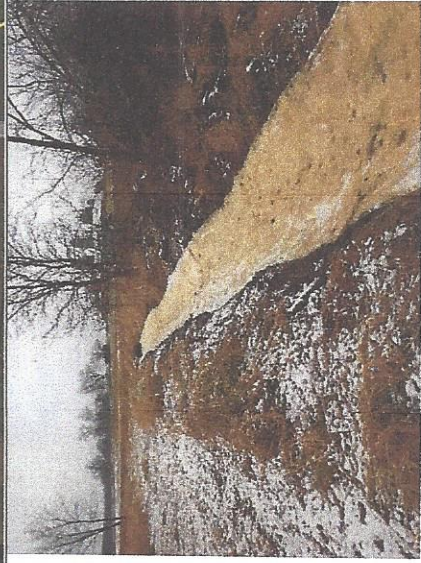
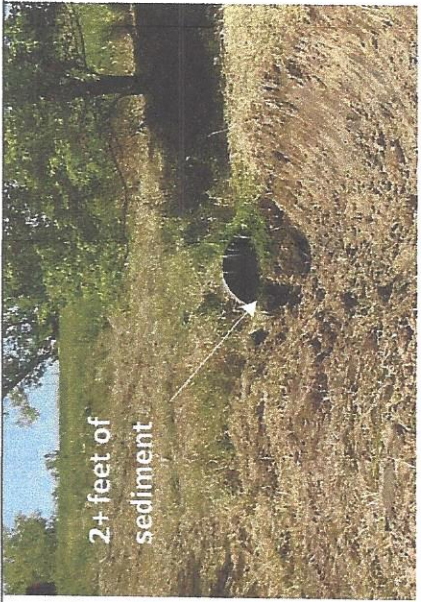
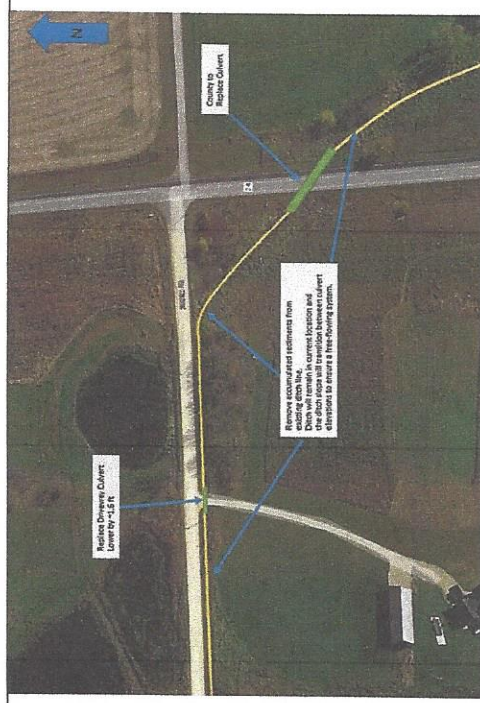
A Single-Family Home



**250<sup>th</sup>/Lofton Ditch Cleanout** – The District completed the 250<sup>th</sup>/Lofton ditch clean-out and culvert replacement on 12-3-21. The project removed ~200 CY of material from ~1,000 lineal ft of ditch and replaced one private driveway culvert. The ditch was excavated along Lofton Avenue downslope into the wetland complex as far as was allowable by WCA permitting.

**Project Benefits:** improve drainage in ditch network, address flooding concerns with wetland ponds north of 250<sup>th</sup> St, and remove accumulations of nutrient rich sediments from ditch

*Chisago County is scheduled to replace the Lofton Avenue culvert (clogged with +2 ft of sediment) this June after school is out.*



**Moody Lake Capstone Project-** The District was recently awarded a \$239,500 Clean Water Fund grant to implement several projects within the Moody Lake Watershed to further improve upon and sustain recent water quality improvements in the lake.

Plan to implement 3-4 of the potential projects indicated in the grant application to achieve and maintain the CLFLWD goals for Moody Lake of a 5-year mean in-lake total phosphorus concentration of 40 µg/L.

Implementation timeline: 2023-2024.

The Capstone Project is estimated to reduce phosphorus loading by 35 lbs/year.

*All projects contingent on landowner cooperation.*



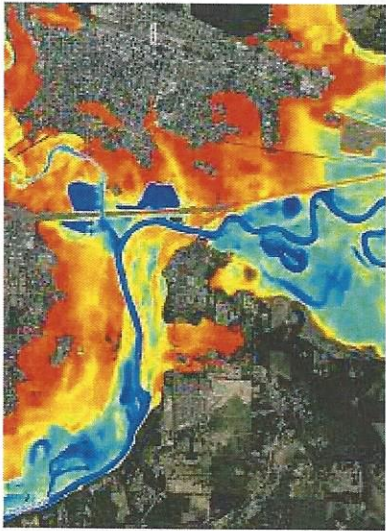
Potential Legacy Load Remediation



Potential wetland enhancement – step pools



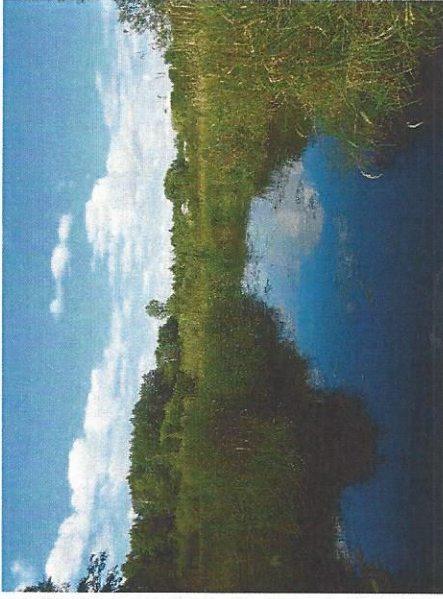
Potential Legacy Load Remediation, Rain Garden/Swales, and Shoreline Buffer Enhancement projects



### Hydrology and Hydraulics Modeling effort

Focus area – Bone Lake outlet channel downstream to Birch, School, and Little Comfort Lakes  
Survey of stormwater infrastructure  
Modeling of conveyance capacity, flood prone areas, etc  
Informs our Diagnostic Monitoring efforts and Water Quality Improvement Project selection

Image courtesy of FEMA.gov



### Natural Resource Inventory

The northern focus area:

–Bone Lake outlet channel downstream to Birch, School, and Little Comfort Lakes

Survey of wetlands, floodplains, vegetation communities, wildlife, unique habitats, etc.  
Will help to set District protection and conservation goals and leverage grant funds