## Thief River Watershed Assessment Project (Watershed Restoration and Protection - WRAP)

- Task 5 Stage and Flow Monitoring
  - o HOBO water level loggers in the Thief River watershed were retrieved from stage monitoring sites for the winter and cleaned.
- Task 9 Data Entry
  - A data review of 2013 monitoring data was completed by checking 10% of the records against field data sheets and lab reports to make sure they are accurate.
- Task 11 Civic Engagement
  - O RMB Environmental Laboratories staff, Red Lake Watershed District staff, MPCA staff, and South Shore Productions created three short videos to help people understand the importance of a few of the water quality parameters that are a staples of many monitoring programs throughout the state. Three individual videos will highlight the following: dissolved oxygen, turbidity, and E.coli bacteria. A lot of the work was done in September and October and the videos were finished in November. The videos can be viewed on You Tube.
    - 1. Dissolved Oxygen in Rivers and Lakes
      - http://youtu.be/qUq7jFdVo3g



#### 2. E. coli Bacteria

• http://youtu.be/vkYUiJXyqLI



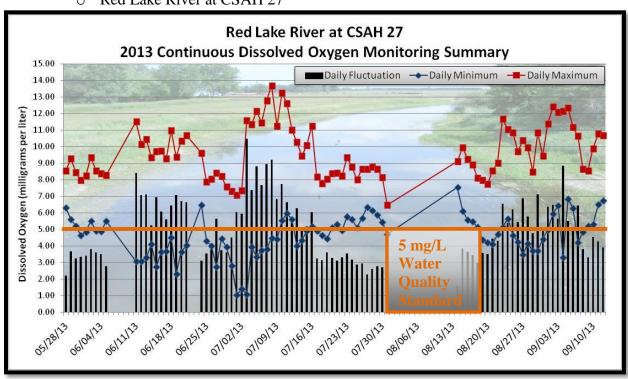
#### 3. Turbidity

• <a href="http://youtu.be/EkH3jZvADTk">http://youtu.be/EkH3jZvADTk</a>

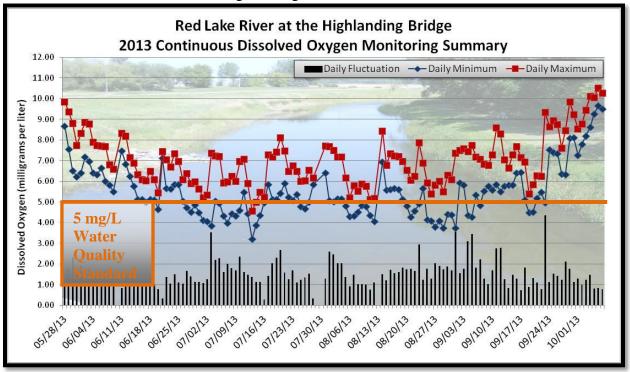


# Red Lake River Watershed Assessment Project (Watershed Restoration and Protection - WRAP)

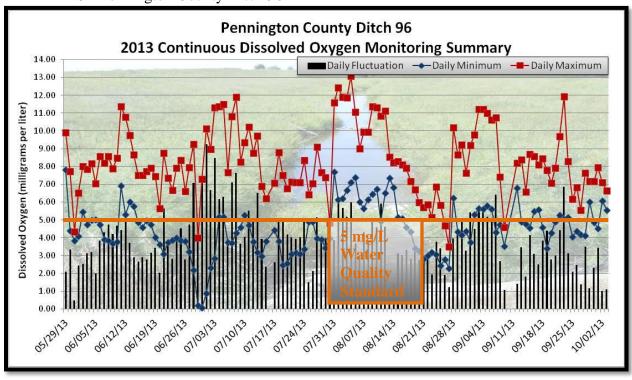
- Task 3 Continuous Water Quality Monitoring
  - Continuous water quality monitoring data from all 6 of the sites that were monitored in the Red Lake River watershed this year was summarized by daily minimum, maximum, and average and submitted to the MPCA.
  - Red Lake River at CSAH 27



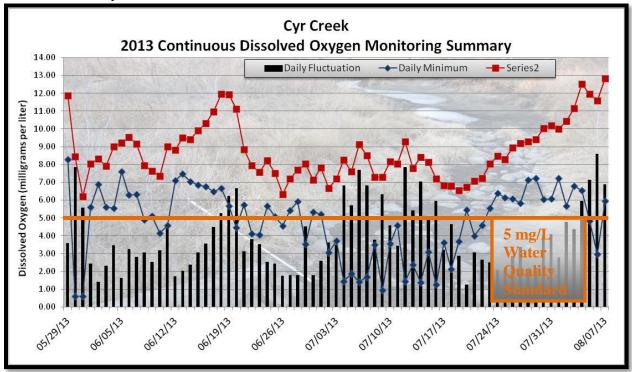
o Red Lake River at Highlanding



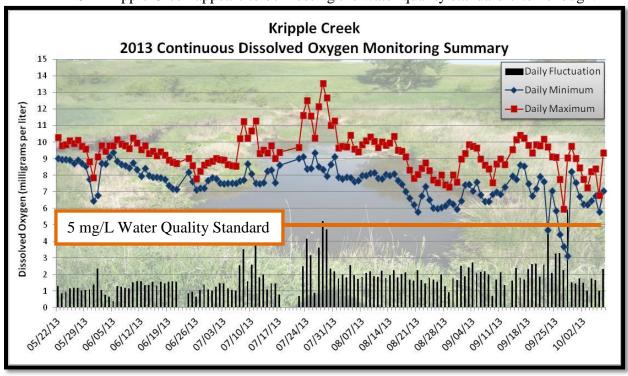
Pennington County Ditch 96



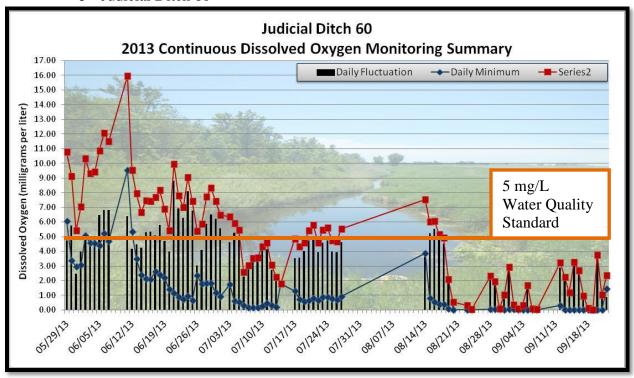
Cyr Creek



o Kripple Creek appears to be meeting the water quality standard often enough.



o Judicial Ditch 60



- Task 5 Stage and Flow Monitoring
  - o HOBO water level loggers in the Red Lake River watershed were retrieved from stage monitoring sites for the winter and cleaned.



- Task 8 Data Entry
  - A data review of 2013 monitoring data was completed by checking 10% of the records against field data sheets and lab reports to make sure they are accurate.
- Task 11 ID Sources and Solutions
  - Work continued in the process of hydro-correcting ("burning-in" flow paths where there are culverts and bridges) the Red Lake River LIDAR surface and development of a Stream Power Index for the Red Lake River. RLWD staff are completing a township-by-township search for culverts that will help with the hydro-correction process. Ground-truthing work continued until snowfall where there were questions about culverts that couldn't be answered using desktop software.

### Red Lake River and Grand Marais Creek Assessment (Surface Water Assessment Grant)

• A data review of 2013 monitoring data was completed by checking 10% of the records against field data sheets and lab reports to make sure they are accurate.

### Red Lake Watershed District Long-Term Monitoring Program

- Finished entry of 2013 monitoring data into the RLWD's water quality database and MPCA EQuIS submission spreadsheets.
- A data review of 2013 monitoring data was completed by checking 10% of the records against field data sheets and lab reports to make sure they are accurate.

#### **Grand Marais Creek Watershed Restoration and Protection Project**

- A data review of 2013 monitoring data was completed by checking 10% of the records against field data sheets and lab reports to make sure they are accurate.
- Grand Marais Creek watershed HOBO water level loggers were retrieved from stage monitoring sites for the winter and cleaned.



#### **Stream Gauging**

• The MPCA installed a flow monitoring station on the Lost River, north of Brooks at CR119. The equipment was moved to this location from the CR118 crossing of the Lost River. It will be used for a pollutant load monitoring project that will begin in 2014 and will also provide data that will be helpful for calculating loads in TMDL reports.



• Clearwater River watershed HOBO water level loggers were retrieved from stage monitoring sites for the winter and cleaned.

### **Other Notes**

- A draft work plan and budget were written for the Clearwater River Watershed Restoration and Protection project.
- The DNR has launched a new LIDAR data viewing website.
  - o <a href="http://arcgis.dnr.state.mn.us/gis/mntopo/">http://arcgis.dnr.state.mn.us/gis/mntopo/</a>

#### **November Meetings/Events**

• **November 18-21** - River Watch Fall Kickoff events at Thief River Falls, Rydell NWR(or Crookston), and Wheaton – Jim Blix attended

#### Plans for December 2013 and January 2014

- Thief River Watershed Restoration and Protection Project.
  - o Creating Stream Power Index maps.
  - o Create a web page dedicated to the Thief River Watershed
  - Flow characterization
  - o Plan public meetings for early 2014.

# RED LAKE WATERSHED DISTRICT MONTHLY WATER QUALITY REPORT

**November 2013** 

- Red Lake River Watershed Assessment Project
  - o Create a webpage dedicated to the Red Lake River
  - o Compile and apply corrections to continuous dissolved oxygen data.
  - Flow characterization
  - o Plan public meetings for early 2014.
- Clearwater WRAP work plan
- Data and other information for RESPEC for the Thief, Red Lake, and Clearwater River modeling.
- Compile 2013 stage and flow data.
- Final report for the Red Lake River and Grand Marais Creek Assessment, Surface Water Assessment Grant Project.
- Apply for the Clearwater River watershed's stream condition monitoring Surface Water Assessment Grant when the request for proposals is released.

### **Upcoming Meetings/Events**

- **December 11, 2013** Public meeting on the draft 2014 List of Impaired Waters Detroit Lakes MPCA Office, 1-2 PM
- **December 5-7, 2013** Minnesota Association of Watershed Districts Conference in Alexandria
- **December 16, 2013** Pennington County Water Resources Advisory Committee
- **December 16, 2013** Marshall County Water Resources Advisory Committee
- **December 20, 2013** Red River Basin Monitoring Committee Meeting @ the Sand Hill Watershed District in Fertile, 9:30 AM.
- **December 31, 2013** Second progress report or the final report for the Red Lake River and Grand Marais Creek Assessment project is due.
- **June 30, 2014** Clearwater River HSPF model should be completely finalized.

#### **Quotes of the Month:**

"The successful man is the average man, focused."

Anonymous

"The daily grind of hard work gets a person polished."

Anonymous

Red Lake Watershed District Monthly Water Quality Reports are available online at: http://www.redlakewatershed.org/monthwq.html.

"Like" the Red Lake Watershed District on <u>Facebook</u> to stay up-to-date on RLWD reports and activities.