

By Corey Hanson, Red Lake Watershed District Water Quality Coordinator. 3/30/2017.

- ✓ Watershed Restoration and Protection project updates – Completed draft Red Lake River Watershed Total Maximum Daily Load and Watershed Restoration and Protection Strategy reports.
- ✓ Annual reporting

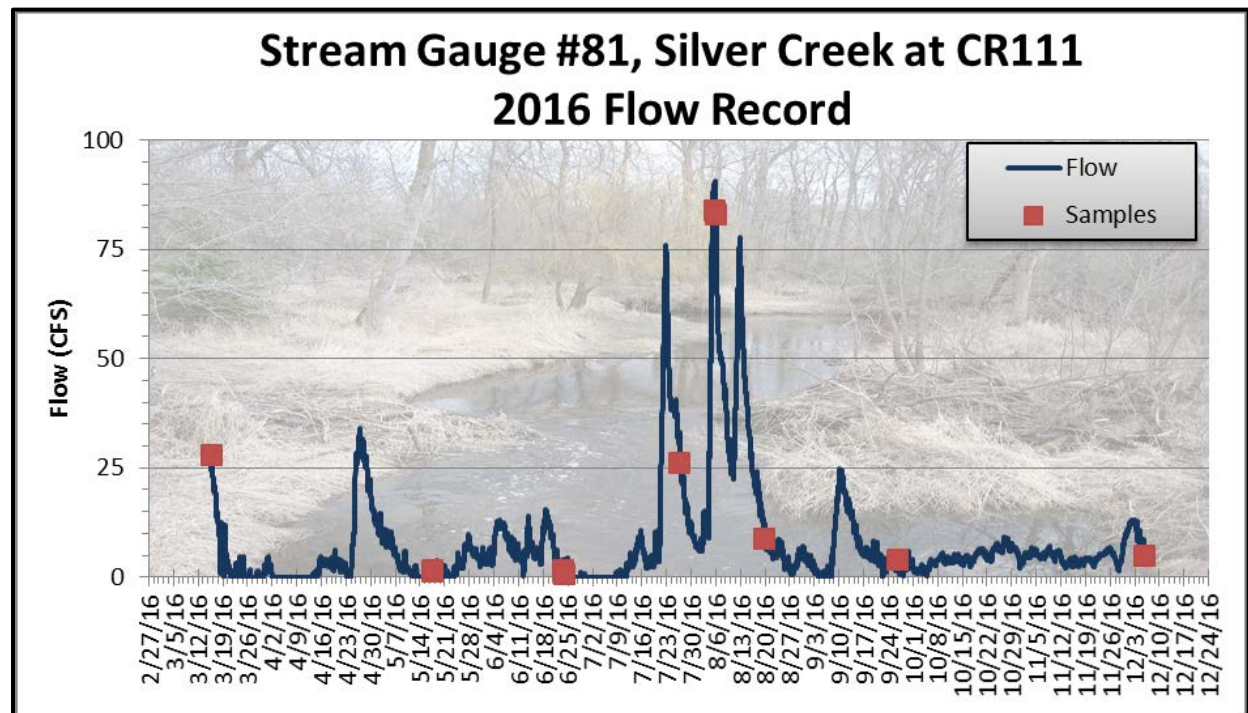
Long-Term Monitoring

The YSI Pro ODO dissolved oxygen meter that was purchased for use by the Pine Lake Sportsmans’ Club was assembled, calibrated, and delivered to the club. The club will use it to monitor dissolved oxygen levels under the ice throughout the winter.

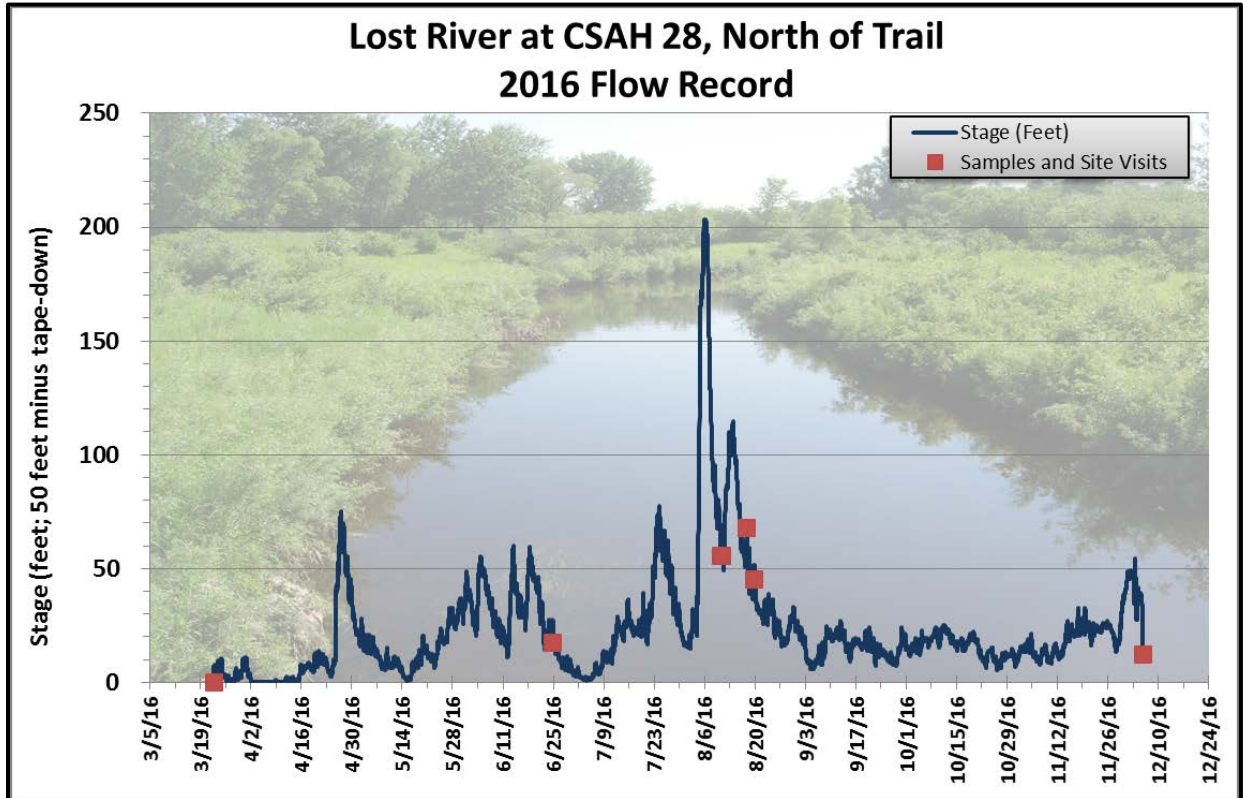


Clearwater River Watershed Restoration and Protection Strategy (WRAPS) Project

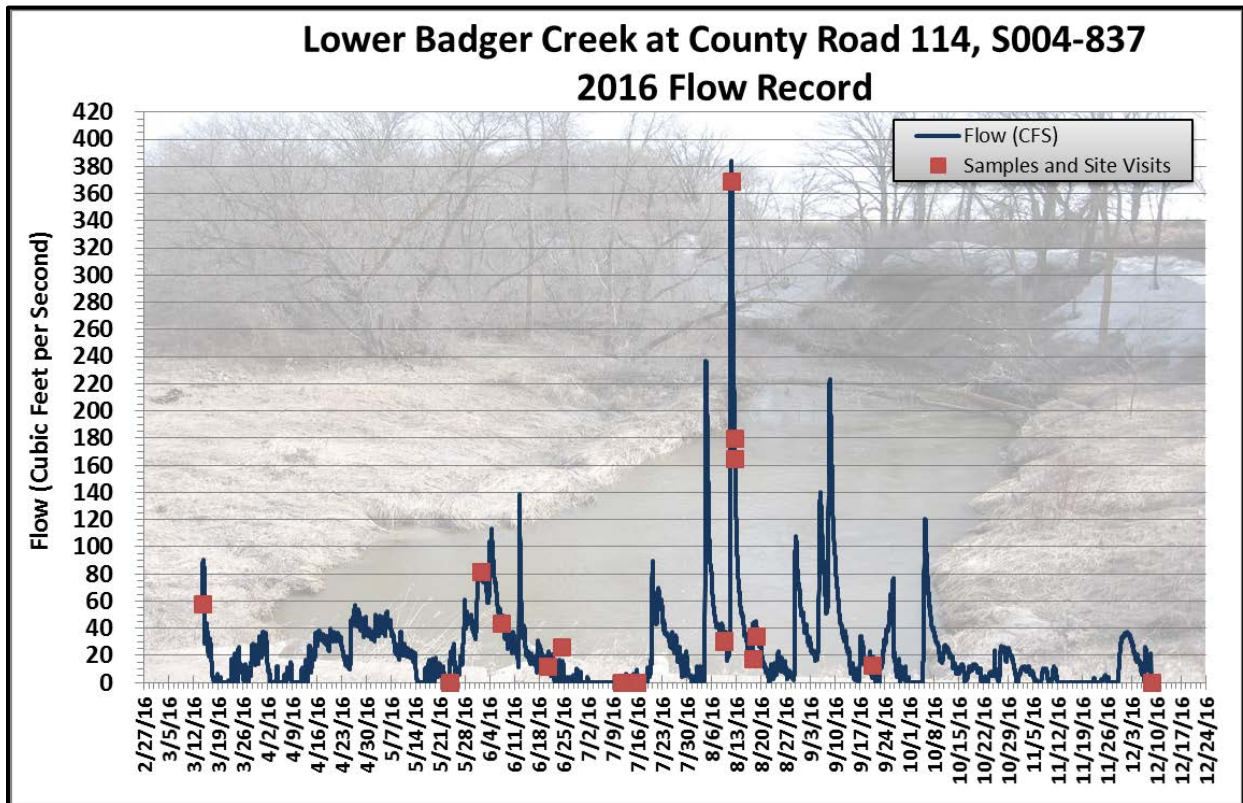
- Objective 3 – Flow Monitoring
 - 2016 flow data from Silver Creek at County Road 111 was compiled and all Silver Creek flow data (2007-16) was shared with MPCA stressor identification staff.



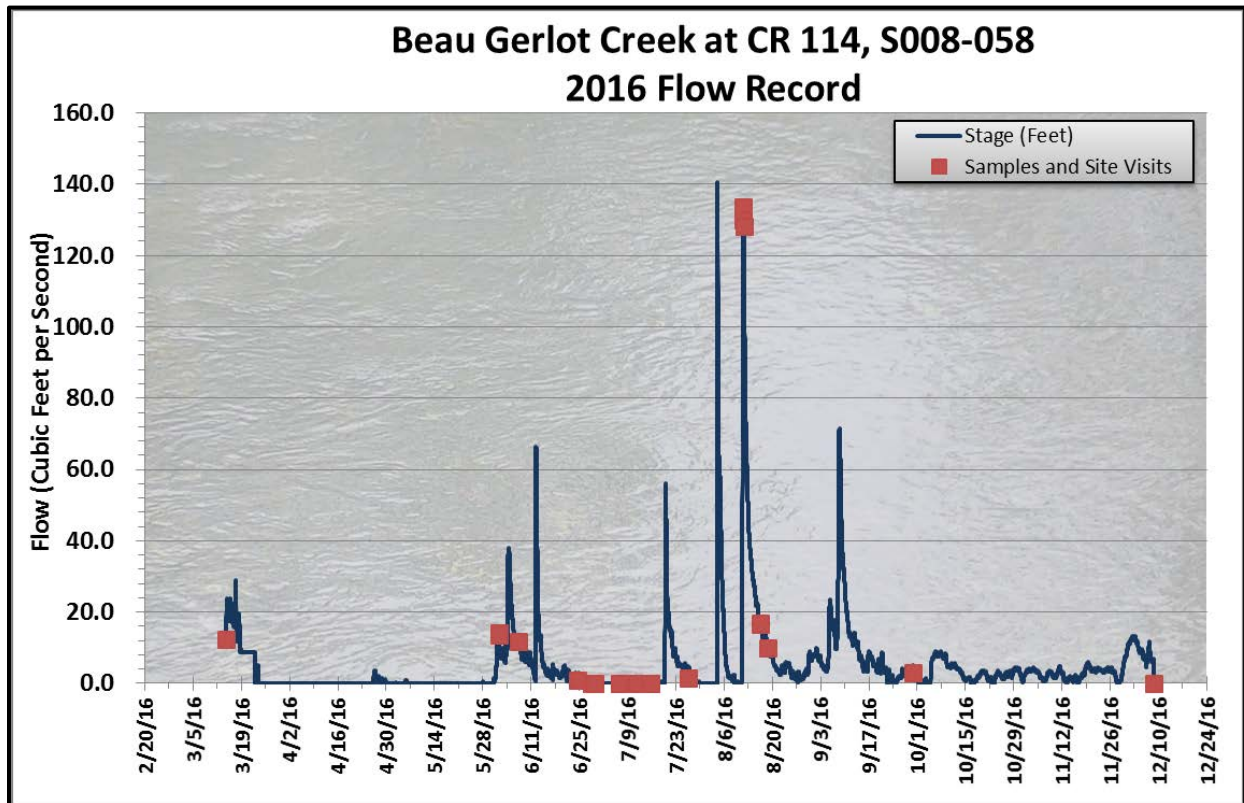
- 2016 flow data from the Lost River at CSAH 28, north of Trail, was compiled and all flow data from the site (2014-16) was shared with MPCA stressor identification staff.



- 2016 flow data from Lower Badger Creek at County Road 114 was compiled and all flow data from the site (2012-16) was shared with MPCA stressor identification staff.

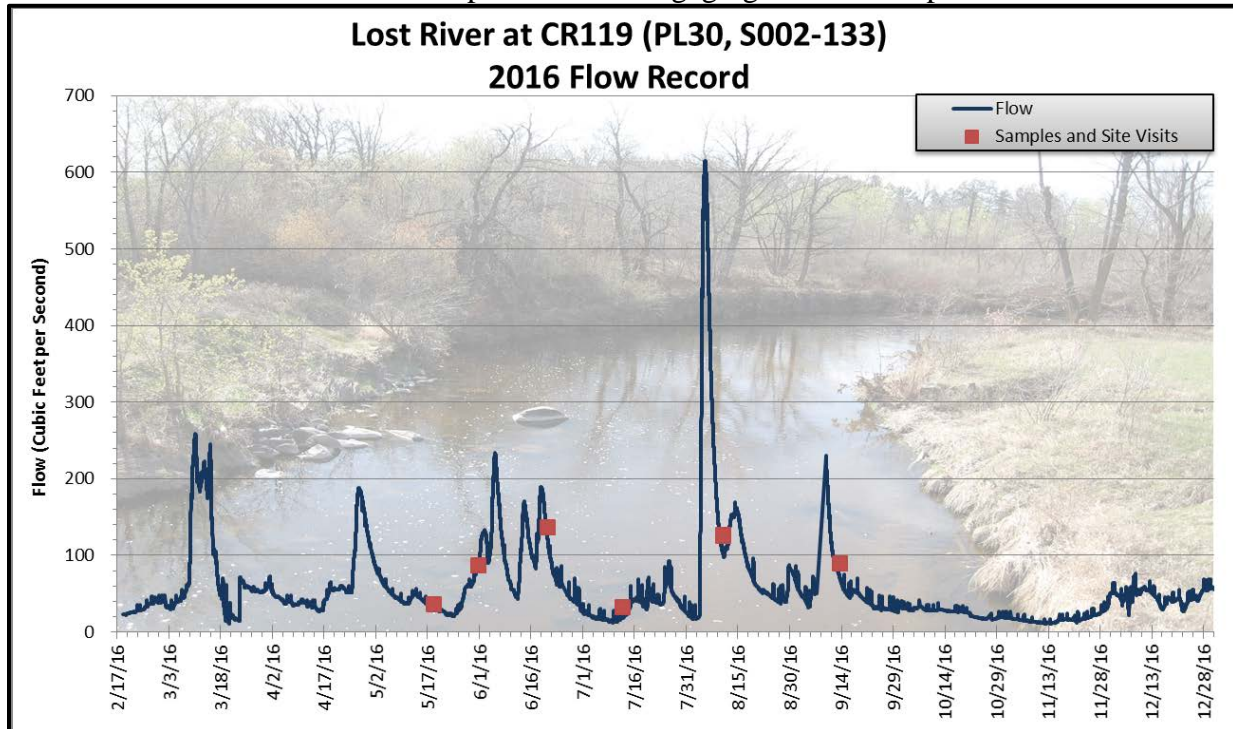


- 2016 flow data from Beau Gerlot Creek at County Road 114 was compiled and all flow data from the site (2014-16) was shared with MPCA stressor identification staff.



- Flow data from the Hill River at County Road 119 (2012-15) was shared with MPCA stressor identification staff.
- Flow data from the Lost River at CSAH 7 (2007-08) was shared with MPCA stressor identification staff.

- Flow data from the Lost River at County Road 119 (2013-16) was shared with MPCA stressor identification staff. Flow data from 2016 was downloaded from the MPCA/DNR cooperative stream gaging website and plotted.



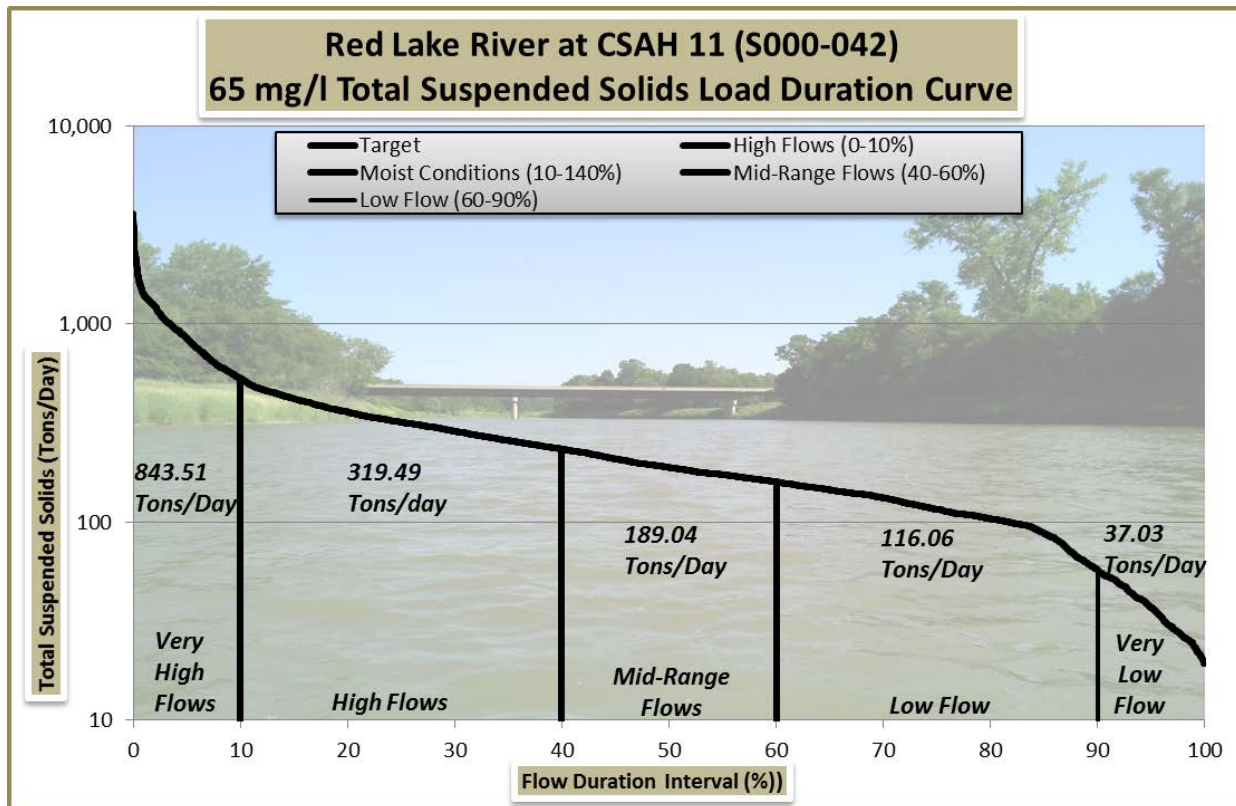
- Objective 6 – Stressor and Pollutant Source Identification
 - RLWD staff reviewed a draft of the Clearwater River Watershed Stressor Identification document. The RLWD review was very in-depth and involved a great deal of data analysis to help confirm/dismiss candidate stressors (low dissolved oxygen, altered hydrology, elevated nutrients, lack of habitat, lack of connectivity, and suspended sediment). RLWD staff began commenting on the document by providing broad-scale observations and comments. RLWD and MPCA staff then met at the MPCA office in Detroit Lakes to discuss the results of the stressor identification process in detail.
 - RLWD staff made sure that MPCA stressor identification staff had flow records that are relevant to biologically impaired reaches.
 - Although continuous dissolved oxygen data collected by the RLWD had previously been sent to MPCA staff (Project Managers and assessment staff), the stressor identification staff did not have all of it. Therefore, RLWD staff provided MPCA stressor identification staff with all of the continuous dissolved oxygen data that has been collected in the Clearwater River watershed.
- Objective 10 – Reports
 - A folder of scenic photos of the Clearwater River was compiled and shared (in a Google Drive folder) with MPCA stressor identification staff for use in the stressor identification report.
 - https://drive.google.com/open?id=0B1wtQ7Lolv_cTFN5N2dlaTIFTGs

- A semi-annual progress report was completed and submitted to the MPCA Project Manager.

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

The end date of the Red Lake River WRAP contract was December 31, 2016.

- Task 12 – Reports
 - Some additional edits were made to the Red Lake River Watershed Total Maximum Daily Load (TMDL) and Watershed Restoration and Protection Strategy (WRAPS) reports based on comments that were received at the end of 2016.
 - An additional TMDL was established for the turbidity (total suspended solids) impairment 09020303-512 assessment unit of the Red Lake River (Gentilly River to County Ditch 99). The MPCA’s response to comments on the Draft 2016 List of Impaired Waters, which included notification of their decision to keep that reach on the list, was received at the end of 2016. The amount of total suspended solids sampling data is limited on this reach. Simulated flow data from the Red Lake River HSPF model were used to calculate the TMDL.



- Nutrient reduction strategies were added to the lists of restoration and protection strategies in the WRAPS document. Other revisions and

improvements were made to the restoration and protection strategy tables of the WRAPS document.

Grand Marais Creek Watershed Restoration and Protection Project

Emmons and Olivier Resources, Inc. (EOR) staff worked on writing a semi-annual progress report for the Grand Marais Creek WRAPS project.

Other Notes

- Proposed MPCA rule changes regarding the adoption and application tiered aquatic life use (TALU) standards were open to public comment in January 2016. RLWD staff reviewed much of the supporting information and worked with Red River Watershed Management Board members and staff to compile a set of comments on the standards.
- The City of Grand Forks has been finding high levels of Giardia in the Red Lake River. Investigation of potential sources (and labs that can do the testing) is a potential task for 2017 water quality monitoring efforts.
- The RLWD was informed that the Mud River *E. coli* impairment would remain on the 303(d) List of Impaired Waters. The river has been meeting the standard as a whole and at the Highway 89 crossing (near the downstream end). However, recent sampling in the Mud River at Grygla (near the mid-point of the subwatershed) has found consistently high *E. coli* concentrations. An *E. coli* TMDL and supporting information was written during the WRAPS, but removed when the Mud River was recommended for delisting. The TMDL and information about sources in the Mud River drainage area will be added back to the TMDL and WRAPS documents during the Thief River WRAPS public review process.
- The Clearwater SWCD and Clearwater Lake Area Association teamed-up to write an Enbridge Ecofootprint grant application for an erosion control along the shore of Clearwater Lake.

January 2017 Meetings and Events

- **January 9, 2017** – RLWD staff had the privilege of participating in science fair judging at Franklin Middle School in Thief River Falls.
- **January 12, 2017** – RLWD Board of Managers meeting. Water quality related items from the agenda and minutes:
 - Manager Torgerson discussed correspondence from the Clearwater Lake Association regarding reinforcement of the shoreline of Clearwater Lake. Torgerson discussed the history of the lake and water quality concerns.
- **January 12, 2017** – Thief River PTMAApp conference call
- **January 26, 2017** – RLWD Board of Managers meeting. Water quality related items from the agenda and minutes:
 - The Board reviewed correspondence from the Beltrami County SWCD for potential partnership with the District about an Enbridge Energy Ecofootprint

Grant Application to restore and protect shoreline areas of Clearwater Lake from further erosion. Proposed project partners would include the Beltrami SWCD, Clearwater SWCD, Clearwater Area Lake Association and the District. The Board voted to support the Enbridge Energy Ecofootprint Grant Application for a potential project on Clearwater Lake.

- Administrator Jesme and staff member Corey Hanson have been asked to participate in drafting comments on behalf of the RRWMB for the MPCA Tiered Aquatic Life Uses (TALU) framework document (due February 2, 2017).
- Bruce Anspach, Beltrami County Environmental Services/Aquatic Invasive Species (AIS) Lake Technician presented information to the Board regarding the Beltrami Count AIS program and results obtained from funding the District provided to the Beltrami County SWCD in 2016 for the AIS program. Anspach stated that the District provided \$35,000 in funding to the SWCD to help educate watercraft users of best management practices and decontamination equipment to help prevent the spread of AIS. Anspach stated that funding from the District was used to help pay for mileage and an hourly wage for inspectors to various sites located within the District area. A balance of \$7,201.46 remains, with plans to use the money towards decontamination equipment and other AIS related projects.
- **January 26, 2017** – RLWD and MPCA staff met at the Detroit Lakes MPCA office to discuss stressor identification for biologically impaired (or threatened) reaches of streams and ditches in the Clearwater River watershed.

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

Learn more about the Red Lake Watershed District at www.redlakewatershed.org.

Learn more about the watershed in which you live (Red Lake River, Thief River, Clearwater River, Grand Marais Creek, or Upper/Lower Red Lakes) at www.rlwdwatersheds.org.

“Like” the Red Lake Watershed District on [Facebook](https://www.facebook.com/redlakewatershed) to stay up-to-date on RLWD reports and activities.