Local Partners continue right on schedule with the Watershed Restoration and Protection Strategies (WRAPS) Project.

A WRAPS project is a process that the state of MN utilizes across the state to determine the health of the rivers, streams and lakes in watersheds like the Minnesota River Headwaters.

It involves collecting biological and chemical data, evaluating the data and developing strategies to either improve or protect water quality.

Intensive watershed quality monitoring was completed in late fall of 2016 and assessments were completed in 2017.

Local Partners will continue with stressor identification this summer by helping the MPCA monitor area streams. Stressor identification is a process of determining what is stressing the fish and bug communities in the watershed.

We will use this information along with models, GIS, ground truth research and other tools to identify areas within the watershed that will benefit from restoration work and areas that will benefit with protection.

Staff at the Upper Minnesota River Watershed are looking forward to working with our Local Partners Group and a variety of stakeholders to review impairment issues within the watershed and develop a plan to increase water quality in the future.

If you have any questions regarding water quality or would like more information on the WRAPS process you can email Amber at amber.doschadis@midconetwork.com

Come and join other members of Citizens for Big Stone Lake at the 2018 Annual Meeting.

Enjoy coffee, juice, rolls and corn bread during the social that begins at 9:00 am.

"WIN" some prizes and wish to help in its preservation and restoration, please attend the Annual Meeting and become a member. Membership dues are $20 for a family and $50 for a business.

9am Social, 10am Meeting @ 13655 Shady St., Corona, South Dakota
The U.S. Army Corps of Engineers and the DNR are working to restore the ecological integrity of Marsh Lake, west of Appleton. The $12.93 million project aims to clear the turbid and largely rough-fish-dominated waters of the 5,000-acre lake in the Upper Minnesota River Valley.

"Weather challenges certainly slowed progress," said Shahin Khazrajafari, project manager with the U.S. Army Corps of Engineers.

High water flows, particularly those that occurred last autumn, delayed construction, which began in March 2017. The project contractors were unable to install a water control structure in the dike last year as planned. That work will begin this month, according to Khazrajafari.

The control structure is a critical part of the project. It will allow the DNR to periodically draw down the lake to mimic what normally would occur in what is a riverine system. Drawing down the water at the onset of winter will allow emergent vegetation to re-establish itself in the spring. It also will help knock down carp populations, said Gessler. Currently, carp represent about two-thirds of the fish biomass in the lake.

One goal of the restoration project is to improve the diversity and number of game fish in the lake, especially walleye and northern pike, said Gessler. Equally important is the goal to restore the aquatic vegetation and return the water body to its role as a feeding and resting area for migrating waterfowl.

Just over two decades ago, sago pondweed grew thick enough in parts of the lake to stop a motorboat. In the last couple of years, however, the DNR has not been able to find any pondweed, according to Gessler. Khazrajafari said workers are hoping to begin work later this year on a fish passage in place of the existing, fixed-crest dam. Sometime next year, Khazrajafari said workers also will breach the dike at the site and allow the Pomme de Terre River to return to its natural outlet below the Marsh Lake dam. That will reduce the sediment load in Marsh Lake and allow greater fish migration.

Overall, this is one of the most cost-effective restoration projects in terms of its ecological benefits. Its cost is about 5 percent of the average cost for habitat restoration, Khazrajafari noted.

The Pomme de Terre River was rerouted and the existing, fixed-crest dam was installed as part of the Lac qui Parle Flood Control and Water Conservation Project launched in the 1930s. It impounded the waters and created Marsh Lake. Until this point, the riverine area was described as an area of potholes and sloughs. Now it's an open expanse of wind-churned waters where nutrients and sediments are kept in suspension and feed summer algal blooms.

It remains an important area for wildlife. Islands and a peninsula on the lake serve as the nesting area for one of the largest colonies of white pelicans in Minnesota.

Along with improving water quality, the project also will provide better access for people. The project includes development of a new access road to the site from the north. The DNR plans to eventually develop a pedestrian/bicycle trail to the site, either along the new road or by using the existing road from the east, according to Jeremy Losinski, parks and trails supervisor with the DNR for the region.

Workers will be installing concrete abutments when the new fish passage is added. The abutments will make it possible to someday construct a pedestrian/bicycle bridge over the fish passage and the spillway at the site.

The existing parking area on the east side will remain, and a new parking area will be added to the west side. Gessler said he believes the project will help make Marsh Lake a very popular destination.

Although the weather has made the project a challenge, Khazrajafari said he remains hopeful of seeing completion in June or July 2019.
Upper Minnesota River Watershed Welcomes, Amber Doschadis

The Upper Minnesota River Watershed (UMRWD) along with the Local Partner Group would like to welcome Amber Doschadis on board.

Amber started with the UMRWD in September of 2017 and jumped right into the WRAPS Project. She completed monitoring for the WRAPS last fall and is currently working on additional stressor identification this summer.

My name is Amber (Athey) Doschadis and I am the Watershed Coordinator for the Upper Minnesota River Watershed. I graduated from Alexandria Technical College in 2010. I have more recently completed the Watershed Specialist Program through the University of Minnesota. I am a Certified Aquatic Invasive Species (AIS) Detector for the watershed district and I have obtained my Watershed Management Certification through the US. Environment Protection Agency.

I grew up on a farm just south of Clinton and am very familiar with the UMRWD area. I now live in Graceville, MN with my husband Craig and our two daughters. Craig is employed at Titan Machinery in Graceville and farms on their family farm near Beardsley, MN.

I look forward to building relationships with landowners in the watershed and working with area stakeholders to achieve our common water quality goals.

In addition to the WRAPS Project, Amber is working on the PTMApp Grant with the Board of Water and Soil Resources. She takes special interest in working with landowners on drainage, flood control and water quality and is excited to become more involved with projects throughout the watershed.

PTM App Grant

The Minnesota Board of Water and Soil Resources (BWSR) describes its vision of 1W1P as an effort to “align local water planning on major watershed boundaries with state strategies towards prioritized, targeted, and measurable implementation plans.” It’s not a simple directive, but it is one that PTMApp was specifically designed to accomplish.

Staff has been working diligently with Houston Engineering Inc. and we look forward to using this application in the very near future.

How PTMApp Works

The Prioritize, Target, and Measure Application (PTMApp) allows the user to make informed decisions to protect and restore the water quality in rivers, streams, and lakes.

Prioritize

Establish the relative importance of resources within the area you manage. Lakes, streams, and wetlands are frequently potential resource concerns included in prioritization processes. Use PTMApp products in conjunction with other models and Zonation to help prioritize resource concerns. PTMApp can help select resources that are a priority and locations where management actions should be taken.

Target

Once possible best management practices (BMPs) locations are identified for feasibility, potential locations must be evaluated for their combined effectiveness. PTMApp can generate data to provide feasible locations for implementing practices that will provide measurable water quality improvements for priority resources. There are a number of factors that might influence preferred practices, including existing practices in place and landowner participation.

Measure

A measurable goal may be the load reduction needed to restore a lake or river reach, or a maximum load to protect a resource. PTMApp can compare the estimated benefits of the Targeted Implementation Plan to water quality goals. Results of this analysis can show the scenarios that will provide the reductions needed to reach your planning goals. This information helps users implement the best possible practices in the most effective locations.
Currently, Big Stone lake, Lac qui Parle Lake, and the Minnesota River are all contaminated with some type of Aquatic Invasive Species (AIS).

**Area AIS Update**

Big Stone Lake has had Curly-leaf pondweed since 2013, and it has quickly been overtaking the lake.

Big Stone County has hired Danny, Tuckett an Environmental Technician who has been diligently working on AIS and options for controlling Curly-leaf Pondweed in Big Stone Lake.

Lac qui Parle Lake has had zebra mussels since 2016. A large population has not yet been found but a few adults have been seen attached to things.

Since Lac qui Parle is now infested with Zebra Mussels the DNR has just listed the Minnesota River as infested as well.

Upper Minnesota is threatened by other AIS nearby. The Red River in Breckenridge/Wahpeton area also has found a large density of zebra mussels.

**What are Zebra Mussels & Why are they a Problem?**

- Zebra mussels are small freshwater mollusks (\(\frac{1}{4}\) to \(1\frac{1}{2}\) inches long) named for the striped pattern of their shells.
- Native to Black and Caspian sea drainages in Eurasia
- Brought to North America in the ballast waters of trans-Atlantic freighters in the late 1980s
- Attach to underwater objects with their byssal threads
- Filter the water to remove plankton that would otherwise provide food for fish and other aquatic life.
Lake Minnewaska in Glenwood has Eurasian Milfoil, Zebra Mussels, and Starry Stonewort. Starry stonewort has become one of the AIS of major concern because of its ability to be spread by very small fragments. It is a macro-algae, meaning each branchlet or stem is a single cell. It creates dense mats at the water’s surface that hinder recreation. It also overtakes habitat and outcompetes native aquatic plants.

The release of pets like goldfish (Koi) and snails (Mystery Snails) are a constant threat to our lakes as well. No other waterbodies that we know of in the Upper Mainnesota have AIS. So, let’s keep it that way by educating people to Clean, Drain, Dry, and Dispose!

Area AIS Update (Continued)

My name is Jared Roiland and I have been hired by Lac qui Parle-Yellow Bank Watershed District as the Drainage Manager and Inspector. I am originally from the area, growing up on crop farm twelve miles north of Madison, just outside of Louisburg. I graduated from Lac Qui Parle Valley High School in 2012. I went on to attend South Dakota State University in Brookings, SD, and majored in Natural Resource Management. I achieved my Bachelor of Science degree in the Spring of 2016. After graduation, my wife Kelsie, son Dean, and I moved back to the area. I first took a job at the Louisburg Farmers Elevator as well as working with my dad on the farm, and my wife became an Insurance agent at Stolpman Insurance Agency in Bellinger, MN. This past spring, I was privileged to take my current position with the watershed district. I will be working on the public drainage systems in Lac qui Parle, and portions of Yellow Medicine and Lincoln Counties. I will be specifically working on the county ditch systems and overseeing the maintenance of these systems. I look forward to working with landowners and natural resource agencies to implement best management practices to help improve water quality throughout the district.
Local Agencies have been working closely for years but have focused on communication and cooperation ardently in recent years with the development of state projects such as WRAPS (Watershed Restoration and Protection Strategies) and the One Watershed, 1 Plan development as well as the Minnesota Buffer Initiative. This newsletter is a collaborative effort of your Local Partner Group for the Minnesota River Headwaters Watershed.

The Minnesota River - Headwaters covers 487,015 acres in the Prairie Parkland ecoregion of southwestern Minnesota. Portions of Traverse, Big Stone, Swift, Lac qui Parle, Stevens, and Chippewa counties drain the watershed. It contains the communities of Browns Valley, Beardsley, Barry, Clinton, Ortonville, Odessa, Louisburg, Bellingham, Correll, Milan, and Nassau. A large portion of the watershed extends into eastern South Dakota & a small tip is located in North Dakota. The Local Partner Group was formed out of a need to work together on a local level on watershed scale versus political boundaries. Read more inside to learn what local partners are working on.