

# 2017 ANNUAL REPORT

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## BOARD

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Term Expiration: 4/26/18

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Term Expiration: 4/26/19

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Term Expiration: 4/26/20

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Term Expiration: 4/26/18

## STAFF

**Margaret Johnson**

Administrator

[margaret@mfcrow.org](mailto:margaret@mfcrow.org)

**Dylan Erickson**

Watershed Specialist

[dylan@mfcrow.org](mailto:dylan@mfcrow.org)

**Jonathan Morales**

Watershed Program Manager

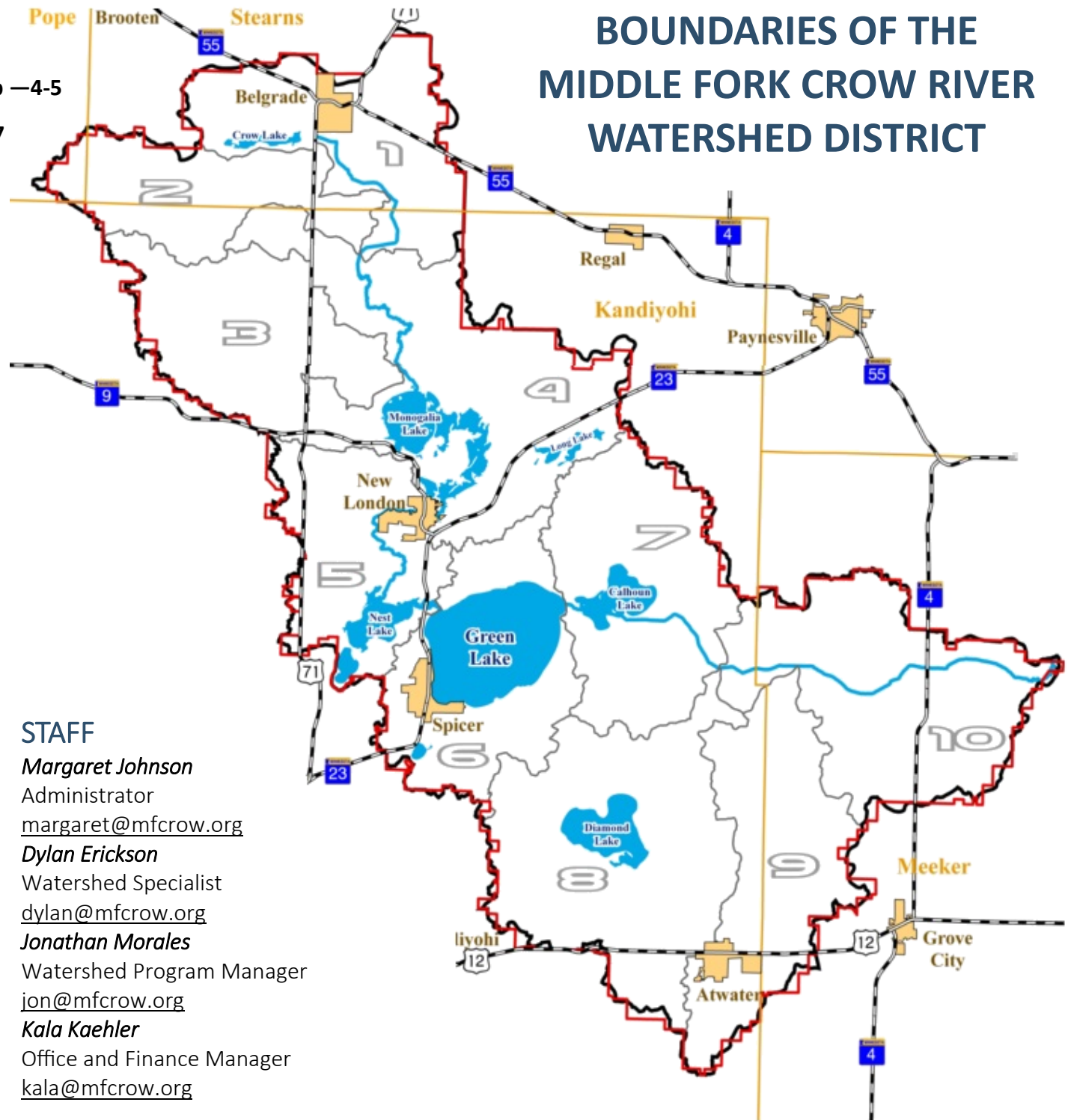
[jon@mfcrow.org](mailto:jon@mfcrow.org)

**Kala Kaehler**

Office and Finance Manager

[kala@mfcrow.org](mailto:kala@mfcrow.org)

## BOUNDARIES OF THE MIDDLE FORK CROW RIVER WATERSHED DISTRICT



## DISTRICT MISSION STATEMENT:

# WE EXIST FOR THE PROTECTION AND PRESERVATION OF WATER QUALITY IN THE MIDDLE FORK CROW RIVER WATERSHED DISTRICT.

### WHAT IS A WATERSHED DISTRICT?

A watershed district is a special-purpose unit of local government that works with the community and organizations through federal and state grant money to restore, protect, and preserve wetlands, streams, rivers, and lakes within the watershed.

Minnesota is the land of 11,842 (10+ acre) lakes, 6,564 natural rivers and streams (69,200 miles), 10.6 million acres of wetlands in 2008 (down from 18.6 million in 1850); water is very important to our way of life. Minnesotans rely on healthy lakes, rivers and ground water for clean drinking water, fishing, swimming, hunting, kayaking, canoeing and water sports; to name a few. Most boundaries are political (i.e. Township or County), watershed district boundaries are not, because water does not follow man made boundaries. Currently there are 45 established watershed districts in Minnesota, all of which work to protect the surface and ground waters that make life in Minnesota wonderful.



### ABOUT MIDDLE FORK CROW RIVER WATERSHED DISTRICT

The Middle Fork Crow River Watershed District was established by citizen petition in April 2005. The District exists for the protection and preservation of water quality in the Middle Fork Crow River Watershed. The District consists of a board of five Managers from three of the four counties in the watershed; watershed boundaries within Pope county are too small to constitute a member from that county. Board members must live in the district and are appointed by County Commissioners to serve three year terms.

The Middle Fork Crow River Watershed drains a 271 square mile area. The river begins in Stearns County near the city of Belgrade and flows southward through north-central Kandiyohi County. As the river flows south it passes through the City of New London and enters Green Lake in the city of Spicer. After the river outlets from Green Lake, it flows eastward. Water from the City of Atwater and Diamond Lake enter the Middle Fork Crow River just before the river crosses the Meeker County line. The Middle Fork of the Crow River joins the North Fork Crow River in Manannah and eventually enters the Mississippi River near the City of Dayton.

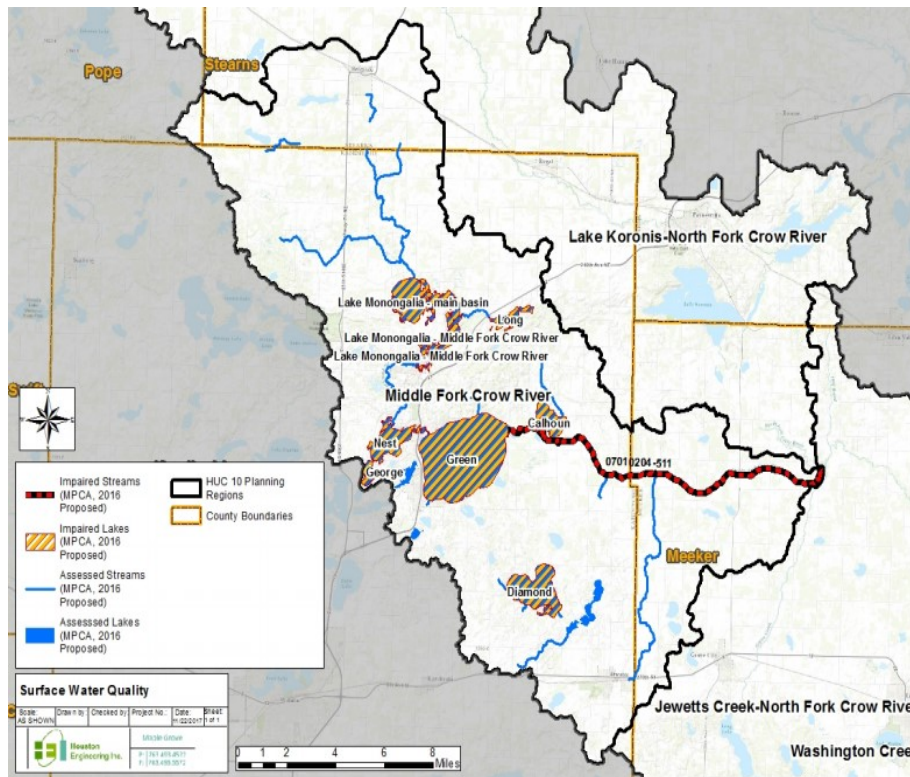
## SURFACE WATER

### What is surface water?

(noun): Water that collects on the surface of the ground. Water on the surface of the planet such as in a stream, river, lake, wetland or ocean.

**Why is it important?** Excess surface water runoff leads to flood damages, accelerated bank erosion, and accelerated stream channel movement, increased movement of sediment, and the loss of aquatic habitat. Excess surface runoff can also lead to the overtopping and washout of roads and damage to land and buildings. The term “altered hydrology” is a term commonly used within Minnesota to describe the changes associated with excess surface runoff.

**Current Conditions:** Within the Middle Fork Crow River Watershed there is one stream reach and seven lakes (Diamond, George, Nest, Green Calhoun, Lake Monongalia, and Long) which do not meet the state water quality standards, and are listed as impaired. The map below shows the current impaired lakes, streams, and rivers.



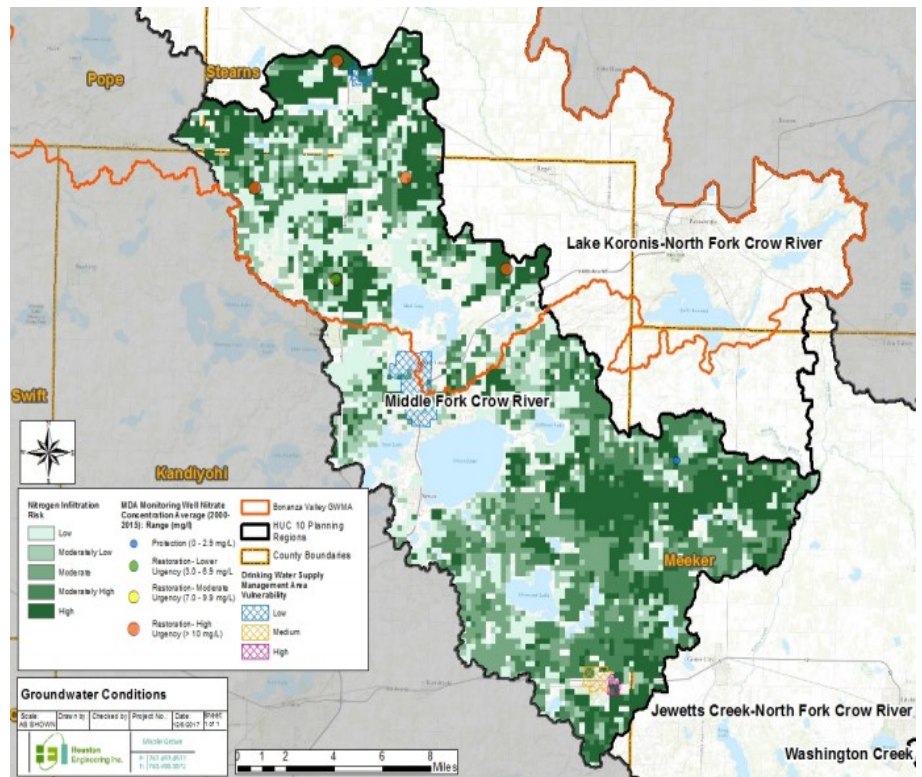
## GROUNDWATER

### What is groundwater?

(noun): Water held underground in soil or in pores and crevices in rock.

**Why is it important?** Drinking water supplies are primarily groundwater. The susceptibility of the drinking water supply of contamination is driven largely by how quickly and easily water can be transported from the surface to the aquifer, and conditions within the primary aquifer recharge areas.

**Current Conditions:** The Middle Fork Crow River Watershed overlays a significant portion of the Bonanza Valley Groundwater Management Area (GWMA—see orange border below), a regionally important resource. Within the Bonanza Valley GWMA, there is growing concern about the sustainability of groundwater supplies and elevated nitrate levels. To address these concerns, recharge structural practices should be encouraged in areas of “low” nitrogen infiltration risk to promote recharge of cleaner water. Storage and filtration practices should be encourage in “high” nitrogen infiltration risk area, to promote trapping and filtering of nitrogen rich surface water to minimize the likelihood of further groundwater contamination, especially in Drinking Water Supply Management Areas (DWSMAS).



# WATERSHED HEALTH THROUGH STEWARDSHIP

## WATERSHED STEWARD

Being a steward of water across all environments, shoreland, urban, and rural is everyone's responsibility. Here are some stewardship questions you can ask yourself: Are you mindful of household chemical and hazardous waste use and disposal (e.g. household cleaners, drain cleaners, and paints)? When purchasing household and personal care products do you consider harmful additives and ingredients (e.g. antibacterial hand soaps, shampoos, and dish soaps with phosphates, toilet bowl cleaners, detergents with chlorine)? Have you considered safe disposal options of pharmaceuticals? Do you practice regular vehicle maintenance avoiding antifreeze and motor oil leaks? When purchasing new appliances, do you consider high-efficiency (e.g. washing machine, dishwasher, and toilet). Are you cognizant of pollinator habitat, water use, pesticides, and fertilizers when caring for your lawn? Do you properly dispose of pet waste?

## SHORELAND STEWARDSHIP

**Definition:** Actions taken by shoreland owners and their communities who understand the importance of the natural environment on both sides of where water and land meet; focusing on management and structural best management practices in this area is a solution to one of our water quality and quantity challenges.

**Importance:** A shoreland steward understands the ecological importance of a healthy shoreline, both in the water and on the land. Native plants and trees on the land by lakes, rivers, and streams filter and absorb water while holding shoreline soils in place; just as bulrush and other plants in the water near the shore, protect water quality and protect the land from eroding away. Shoreland stewardship is the last defense in managing our lakes, river, and streams. Without shoreland stewards protecting our states most cherished resource, Minnesota waters will continuously degrade.

The duty of a steward is action, and in finding solutions to water quality and quantity challenges, you must challenge the status quo, and act. Questions to ask when planning for action as a shoreland steward include: Is there visual evidence of shoreline erosion, bank, or bluff failure? Is there at least 16-feet of established perennial vegetation on the shoreline? Are there cattle with direct access to the water? Is your septic system properly functioning, maintained, and in compliance with current design standards?

## RURAL STEWARDSHIP

**Definition:** Actions taken by agricultural landowners and their communities who understand the importance and associated benefits of soil health: decreased soil and nutrient loss, decreased sediment and nutrient runoff into surface waters, increased

water holding capacity and increased net profits for producers and landowners. Focusing on management and structural best management practices on soil health is a solution to one of our water quality and quantity challenges.

**Importance:** Rural stewardship is the cornerstone of the rural economy and the rural environment, one is equally dependent on the other; the actions of rural stewards dictate whether both will fail or thrive for generations into the future. A rural steward understands the connection between water quality and quantity, as well as the connection between soil health and land productivity.

Top management actions of a rural steward are mindful tillage practices and maintaining live roots in the soil throughout as much of the year as possible. Questions to ask when planning for action as a rural steward include: is there erosion from sheet, rill, and wind? Do you have high input costs to maintain yields? Are you losing valuable fertilizer and manure nutrients due to runoff? What is your soils infiltration rate? Are your soils biologically healthy and diverse? A rural steward must be courageous, because the actions necessary for soil health are counter to modern rural management. Prospective rural stewards can find comfort in that early adopters of such management and structural best management practices are seeing that once their soil is healthy, nature will once again keep balance, maintaining productivity with fewer inputs, rewarding the rural steward with increased yields.

## URBAN STEWARDSHIP

**Definition:** Actions taken by municipalities and their communities who understand the importance of filtering and infiltrating stormwater runoff before it reaches precious surface and ground water. Focusing on structural best management practices that hold and filtrate water that runs over impervious surfaces is a solution to one of our water quality and quantity challenges.

**Importance:** Over fifty percent of the world population now lives in an urban setting, with the percentage projected to increase, the role of the urban steward is now, more than ever, critical to the health of the urban environment and the people who live there. An urban steward understands that the high concentration of people and their built environment found in urban settings creates many diverse water quality and quantity challenges.

The focus of an urban steward is sustainable reuse, infiltration, and filtration of stormwater runoff from impervious surfaces such as parking lots, roads, and roof tops before it reaches lakes, rivers, streams, and sources of drinking water. Questions to ask when planning for action as an urban steward include: Does your municipality have a written stormwater management plan? Is your municipality a participant in FEMA floodplain program? Does your municipality have ordinances in place for the protection of critical areas and local resources? If your municipality community water supply is groundwater, has it delineated a drinking water source management area and wellhead protection area? Have you considered the use of a rain barrel for watering your plants and lawn?

## POLLUTANTS OF CONCERN

We've known about many of the pollutants that we monitor in Minnesota waters for decades. Some, such as nitrogen and phosphorus, have been an issue for a long time, and we know a great deal about how they affect the environment. Other pollutants, such as chloride, have been recognized as problems more recently, and still others we may not know about yet with the development of new products and chemicals. Our knowledge about what contaminants do in water, what affect they have on the environment and human health is constantly evolving, and highlights the challenges we face, may change down the road.

Listed are some known pollutants and their affect in our waters and environment:

### NITROGEN/NITRATE

Nitrogen is a key, high-volume pollutant in state waters and its concentrations in both surface and groundwater have been increasing over time. The Minnesota Pollution Control Agency (MPCA) released a report on nitrogen pollution in 2013, indicating that agricultural fields using artificial subsurface drainage (drain tile) are a key source of nitrogen pollution. Nitrate (a form of nitrogen) in lakes, rivers, and streams is toxic to fish and other aquatic life; in drinking water, it's potentially harmful to humans. Proposed reductions in nitrogen will benefit both Minnesota waters and water downstream from us, particularly the oxygen-depleted "dead zone" in the Gulf of Mexico.

### PHOSPHORUS

Phosphorus is a common element in agricultural fertilizers, manure, and organic wastes in sewage and industrial discharges. Excess phosphorus in lakes, rivers, and streams causes algae to grow. Algae-covered water is less attractive for fishing and swimming — highly valued pastimes in Minnesota and uses that are protected under the federal Clean Water Act. In addition, phosphorus can fuel toxic blue-green algal blooms, which are harmful to humans and animals.

### SEDIMENT

Sediment is composed of loose particles of sand, clay, silt, and other substances. It comes from eroding soil and from decomposing plants and animals. Much of the sediment in Minnesota lakes and rivers is contaminated by pollutants, particularly phosphorus. Sediment contributes to turbidity — cloudy water that is harmful to fish and plant life — and, in large quantities, can fill in bodies of water. For instance, the upper seven miles of Lake Pepin could be completely filled in with sediment deposits over the next 100 years, if nothing is done to remedy the problem.

### BACTERIA

Though there are countless numbers of bacteria, viruses, and other microorganisms in the environment, only about 10 percent — known as pathogens — are harmful. If ingested by humans, they can cause illness or even death. Fecal coliform bacteria,

and its subgroup Escherichia coli bacteria, can indicate the possible presence of pathogens. Bacterial contamination in lakes and streams typically comes from human, pet, livestock, and wildlife waste. Concentrations in water tends to be lower in the forested and wetland-rich areas of northern Minnesota, and higher in agricultural and more heavily populated areas.

### CHLORIDE, SULFATE, AND OTHER "SALTS"

Chlorides, sulfates, salinity, and dissolved minerals are forms of "salts" that can harm fish and plant life at high concentrations. For example, the salt applied to roads, parking lots, and sidewalks during our icy winters contains chloride, a water pollutant. When snow and ice melts and runs into lakes and waterways, the salt goes with it. **It takes only one teaspoon of road salt to permanently pollute five gallons of water.** Elevated concentrations of sulfate are a concern for wild rice. Sources include discharges from mining operations, wastewater treatment plants, and other industrial facilities. Options for treating "salty discharges" are limited and expensive, making pollution prevention and source reduction very important tools in reducing the threats posed by these pollutants.

### AMMONIA

Ammonia is a form of nitrogen that is directly toxic to aquatic life. It comes from wastewater treatment plants and animal waste or air pollution and runoff from agricultural land. Water with high concentrations of ammonia allow the chemical to build up in the tissues and blood of fish, and can kill them. Environmental factors, such as pH and temperature, can affect ammonia toxicity to aquatic animals.

### CONTAMINANTS OF EMERGING CONCERN

Recent studies of Minnesota's waters show that a wide variety of unregulated chemicals, such as pharmaceuticals, fragrances, fire retardants, and insecticides, are ending up in lakes and rivers. Many of these substances have properties that can interfere with the functioning of hormones in animals and people. Some mimic the effects of hormones in animals and negatively impact growth and development. These endocrine-active compounds are not acutely toxic at the levels normally found in the environment, but over time can impact organisms at very low concentrations. Sources of these chemicals found in waters include wastewater discharges, runoff from animal agriculture, and air pollution.

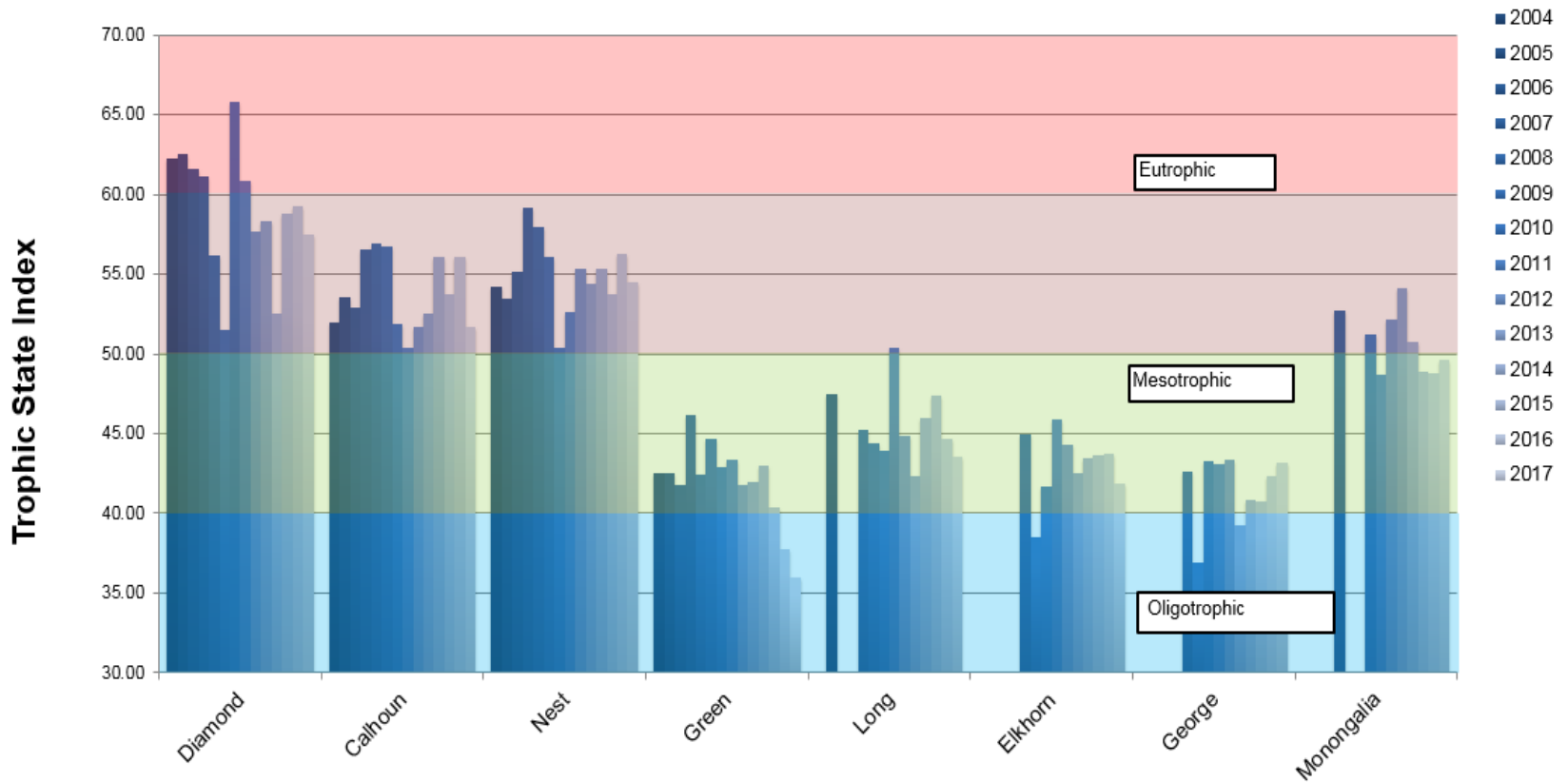
Please review the Stewardship activities on page 5 to see how you can help change our land use practices and become stewards of the land.

Source: MPCA

## Annual TSI Values (2004-2017)

### MONITORING IN THE MIDDLE FORK

Monitoring helps us fulfill our mission of protecting and preserving water quality in the Middle Fork Crow River Watershed. The information we gather from monitoring helps us assess water quality trends and provides insight as to where to implement projects. We have a number of historic sites that allow the District to track long-term changes.



**TSI 30-40 Oligotrophic** – clear water, hypolimnion (Lower layer of water in a stratified lake) is oxygenated throughout the year (except in shallow lakes).

**TSI 40-50 Mesotrophic** – Water moderately clear, but anoxia becoming more likely in hypolimnion during the summer.

**TSI 50-70 Eutrophic:** Decreased transparency, anoxic hypolimnion during the summer, dominance of blue-green algae, algal scums probable, extensive aquatic plant problems possible.



## NORTH FORK CROW RIVER (NFCR) ONE WATERSHED ONE PLAN (1W1P)

The North Fork Crow River Watershed Planning Partnership (NFCRWPP) is an organization of counties, soil and water conservation districts, watershed districts, and a joint powers board within south-central Minnesota. The formation of the coalition signifies an important step in local efforts to manage, restore, and protect water and natural resources in south-central Minnesota. The NFCRWPP prepared a plan to develop implementation strategies that are prioritized and targeted resulting in measurable resource improvements. The development of this plan provides a framework for the NFCRWPP to be an effective local organization comprised of local governments engaged in the management, restoration, and protection of resources within the North Fork Crow River One Watershed, One Plan (1W1P) area.

The North Fork Crow River (NFCR) Watershed area drains 1,483 square miles of predominately agricultural land. The watershed encompasses parts of Pope (3.7%), Stearns (16.0%), Kandiyohi (16.0%), Meeker (28.4%), Wright (31.7%), Hennepin (3.0%), Carver (0.1%), and McLeod (1.0%) counties (see map on page 9).

Land use in the NFCR Watershed is mostly agricultural, except for the eastern portion that accounts for metro fringe urban and commercial land uses. The total population of the watershed is 96,990 with an estimated 2,864 farms. Surface waters within the watershed are abundant with 679 lakes and 233 streams segments, or assessment units throughout the plan area. From its source at Grove Lake in Pope County, the North Fork Crow River runs east-southeast for a total length of 157 miles, flowing through Rice Lake and Lake Koronis until it meets the South Fork Crow River, where the confluence of the two rivers (North Fork and South Fork) at Rockford forms the

Crow River. The Crow River flows northeast until it meets the Mississippi River near Otsego and Dayton (MPCA, 2014). The watershed elevation ranges from approximately 1,400 to 800 feet above sea level, decreasing from west to east. A “Land and Water Resources Inventory”<sup>\*\*</sup> provides more detailed information about the characteristics of the watershed within the NFCR 1W1P area.

There are many environmental issues and resources to be managed within the large and diverse NFCR Watershed. In recognition of staff, time, and resource limitations, the NFCRWPP needed to prioritize the focus of implementation efforts during the 10-year lifespan of this plan.

The NFCRWPP developed a comprehensive list of potential resource concerns (i.e. potential concerns) and issues impacting the watershed using a combination of existing reports, data, and stakeholder input. This comprehensive list of potential concerns and issues was then prioritized through an online survey. A total of 21 potential concerns were identified and considered during the prioritization process. From this initial list, 13 concerns emerged as “priority” (see the table below). These priority concerns and their associated issues became the focus of initial implementation efforts within the NFCR Watershed.

Next, the NFCRWPP established watershed-wide measurable goals for each priority concern.

These goals are designed to:

- concentrate implementation activities where they are most likely to fix the issues impacting locally-prioritized resources
- track progress towards a desired outcome

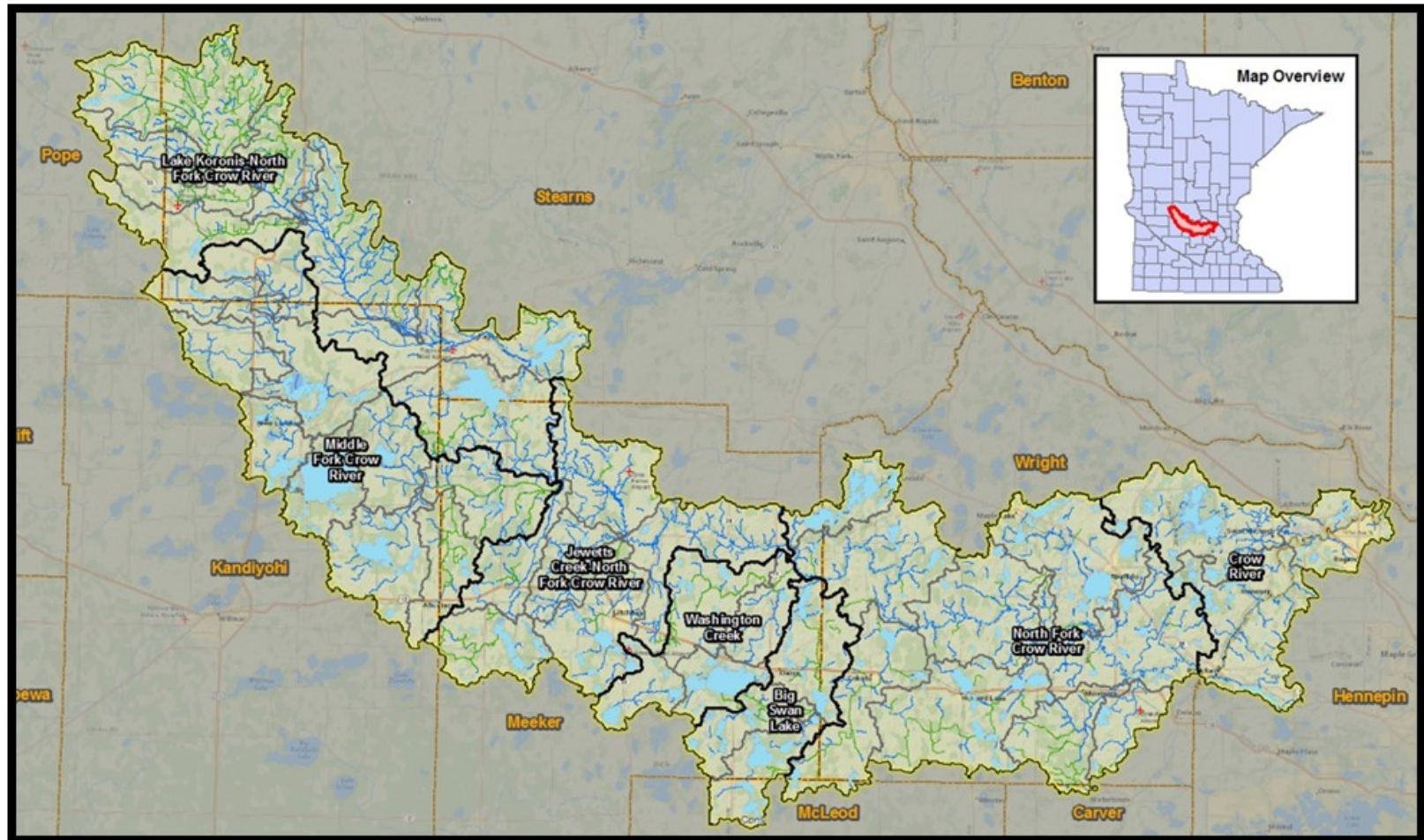
<sup>\*\*</sup>For more information and to view the plan, visit our website.

“A” LEVEL PRIORITY CONCERNS DEEMED <i>MOST</i> IMPORTANT	“B” LEVEL PRIORITY CONCERNS DEEMED IMPORTANT	“C” LEVEL PRIORITY CONCERNS DEEMED SOMEWHAT IMPORTANT
<ul style="list-style-type: none"> <li>• Drinking Water (Groundwater)</li> <li>• Lakes</li> <li>• Agricultural Drainage Systems</li> <li>• Surface Runoff</li> </ul>	<ul style="list-style-type: none"> <li>• Streams and Rivers</li> <li>• Groundwater Supplies</li> <li>• Wetlands</li> <li>• Rural Development and Sustainability</li> </ul>	<ul style="list-style-type: none"> <li>• Lake, Shoreland, and Stream Riparian Corridors</li> <li>• Public Knowledge and Behavior</li> <li>• Terrestrial Habitat for Wildlife</li> <li>• Landowner, Producer and Lake Shore Owner Engagement</li> <li>• Urban Stormwater</li> </ul>





## BOUNDARIES OF THE NORTH FORK CROW RIVER ONE WATERSHED ONE PLAN MAJOR WATERSHED: PLANNING PARTNERSHIP



## THE YEAR IN NUMBERS

- 150 pounds of garbage picked out of the Middle Fork Crow River in New London on Clean Up The Crow Day
- 800 of pounds of garbage picked out of the Crow River on the Annual Clean Up the Crow Day
- 16 participants for Clean Up the Crow Day
- 45 different species of macroinvertebrates identified by NL-S students
- 56 paddlers for Paddle the Crow event
- 5 pizzas consumed after Clean Up the Crow Day in New London
- 130 students to restore Neer Park Shoreline
- 120 native plants used for a student shoreline project
- 28 native species in the Neer Park Shoreline
- 26 drains adopted for the Adopt-a-Drain Program
- 95 pounds of sediment removed through the Adopt-a-Drain Program
- 210 known drains to Green Lake
- 154 city storm drains in New London
- 650 people at Earth Day celebration at Prairie Woods Environmental Learning Center
- 91 students at local Conservation Day



The MFCRWD continues monitoring, education, and implementation projects with grants expended in 2017. All ongoing grants are listed below.

#### **Watershed Pollutant Load Monitoring Network:**

The purpose of this monitoring project is to maintain water quality data collection and develop a better understanding of land use impacts on rivers. This project will collect water samples at seven locations in the Crow River watershed.

Completion date: December 31, 2018.

Total grant: \$22,980

#### **Diamond Lake TMDL Implementation Projects grant:**

The degradation of Diamond Lake's water quality resulted in the placement of the lake on the MPCA's List of Impaired Waters in 2006. The MFCRWD and its partners are making significant progress towards reducing phosphorus loading to Diamond Lake by completing implementation activities outlined in the Diamond Lake TMDL Report.

Completion date: December 31, 2018.

Total grant: \$176,000 Total match: \$59,434 Total: \$235,434

#### **Middle Fork Crow Watershed Restoration Loan Program:**

This allows the District to provide financial assistance to District residents interested in septic upgrades as well as BMPs through low interest loans.

Completion date: June 30, 2018.

Total low interest loans available: \$100,000

#### **Developed Partners Expanded Resources Accomplishment:**

Many of the organizations partnering with the District have a vested interest in the quality of local and regional water resources. The District has the unique ability, because of these strong aged partnerships, to provide financial assistance in the format of sub-grants to those in need of implementing their waiting Best Management Practices (BMPs).

Completion date: December 31, 2018.

Total grant: \$125,000 Total match: \$37,500 Total: \$162,500

#### **Integrated Water Quality Analysis for Targeted Priority Practices:**

The river assessment will target two reaches of the Middle Fork, 13.75 miles. This project will also analyze impervious surfaces in the New London and Spicer area. This project will drive annual budgetary decisions and project

planning, give District constituents a view of the watershed's health, and provide an implementation strategy for water quality efforts for effective "on-the-ground" and "shovel-ready" projects.

Completion date: December 31, 2018.

Total grant: \$97,500 Total match: \$26,364 Total: \$123,864

#### **Intensive Watershed Monitoring: Surface Water Assessment:**

Phase II of the Intensive Watershed Management including the Surface Water Assessment grant (SWAG). SWAG will cover all sampling for CD28, MFC4, Green, and Hubbard, Schultz, Wheeler. We will also be sampling on Grove Creek and Jewitts Creek for this grant. Along with additional water quality parameters the grant also covers the purchase of one YSI Sonde multiparameter water quality probe. This was a great addition to our monitoring equipment thus lessening our dependence on the state for this equipment.

Completion Date: December 31, 2018

Total SWAG: \$152,700

#### **Watershed Restoration and Protection Strategy:**

This project activity will develop collaboration between the major watershed partners to develop the watershed public participation plan that identifies specific potential activities, results, timelines, and measurable goals for the North Fork Crow River Watershed Public Participation Plan. The watershed public participation plan will set a framework for the public to play a more active role in building public capital for natural resource restoration and protection; in deliberating the choices and tradeoffs involved in restoration and protection actions; and in executing and adopting a public participation plan.

Completion Date: June 30, 2019.

Total grant WRAPS: \$50,000



## How to Adopt-a-drain

Storm drains in the area drain to local lakes and rivers. Neighborhood commitment in clearing storm drains of debris helps to reduce water pollution!

- 1. Sign up online!**  
To adopt a drain go to: [www.adopt-a-drain.org](http://www.adopt-a-drain.org)
- 2. Keep your storm drain clear.** Sweep and rake leaves and other debris off the drain surface year-round.
- 3. Post a small sign in your yard.** To let your neighbors know you're protecting clean water. And if they ask, let them know how they can do their part!

# HUBBARD, WHEELER, & SHUTTLZ LAKE PROJECT KANDIYOHI COUNTY

Over the past several years the Diamond Lake Area Recreational Association has been working with the Middle Fork Crow River Watershed District, Ducks Unlimited, and the Minnesota Department of Natural Resources to develop a lakes area enhancement project which includes managing water levels on the Hubbard, Schultz, and Wheeler Lake Chain. Improving water quality and wildlife habitat conditions on this chain of shallow prairie lakes will benefit the entire area, including direct benefits to Diamond Lake which is currently listed by MPCA as an impaired water.

Temporary water level management (i.e. drawdown) is a tool used on shallow lakes to improve water quality and wildlife habitat conditions by restoring the natural balance of the aquatic ecology of a lake. Shallow lakes and wetlands require periods of low water or droughts to stay healthy and productive. This is especially true today given the various landscape and watershed challenges we face. Drawdown can be used to help control undesirable fish such as carp as well as help promote the growth of rooted aquatic plants which buffer nutrients from the water column and provide valuable habitat for aquatic animals and invertebrates. Aquatic plants are vital to a healthy lake or wetland system. Temporary drawdown is used to promote plant growth and a healthy lake condition. Absence of rooted aquatic plants leads to a deteriorated turbid water condition that provides little benefit to wildlife or people.

Following a public hearing held consistent with M.S. 103G.408 a management plan was adopted for the Hubbard, Wheeler, and Schultz Lake project. Schultz Lake (167 acres), Wheeler Lake (238 acres), and Hubbard Lake (57 acres) are all located in Kandiyohi County, Harrison Township, directly upstream of Diamond Lake which is a popular recreational lake in the area. As of March 2018, phase #1 of the project has been completed which includes improvements at Site #1 and



Site #4. DNR Section of Wildlife began drawing down Schultz Lake on July 20, 2017 in preparation for phase #2 which includes construction of the remaining infrastructure (Site #2 and Site #3). Phase #2 of the project is currently underway with construction nearly complete. Contractors plan on moving to Site #3 in early March 2018. The plan is to maintain Hubbard Lake and South Wheeler Lake at normal water levels next spring (2018), which will restore a large portion of the Diamond Lake watershed. North Wheeler Lake and Schultz Lake will remain in drawdown through the growing season. The entire system will then be drawn down next winter with gradual refill planned in the spring of 2019.

This is a large cooperative project that included private landowners and lake residents. A broad collaboration was developed in pursuit of water quality and wildlife lake habitat improvements. The lakes will continue to be monitored following drawdown and a project team will meet periodically to discuss future management actions and assess project accomplishments. The Hubbard, Wheeler, and Schultz Area Lakes Project has been a great demonstration of partnerships and we anticipate many good things moving forward!

By: Josh Kavanagh, MN DNR

Pictures from left to right:

Site #1: Schultz water control structure construction (Fall 2017)

Site #2: new channel on south side of Schultz to facilitate drawdown (Fall 2017)

Site #1: Birds eye view of Schultz Lake in draw down (Fall 2017)



# 2017 CONSTRUCTION AND 2018 PROGRESS

Site #1 - A water control structure was built on Schultz Lake fall 2016 which includes +/- 2,100 feet of 24" pipe and a concrete in-line water control structure. This structure will be used for drawdown management only. The structure outlets directly into County Ditch 28, branch 6. This structure will allow drawdown from its current depth of approximately 8 feet to within 1 foot of the lake bottom.

Site #2 - A water control structure was built on North Wheeler Lake, under 180<sup>th</sup> street. This structure will allow managers the ability to draw down North Wheeler Lake to within approximately 2 feet of the lake bottom.

Site #3 - A water control structure was built between North and South Wheeler Lakes. This structure will allow managers to completely dewater South Wheeler Lake as well as drawdown Hubbard Lake.

Site #4 - Modifications to a box culvert underneath Hwy #137 will allow managers to place stop-logs in the culvert to prevent any back flow of water from Diamond Lake.

The Minnesota Department of Natural Resources, in cooperation with the Middle Fork Crow River Watershed District installed a fish barrier between Diamond Lake and Hubbard Lake in 2012.

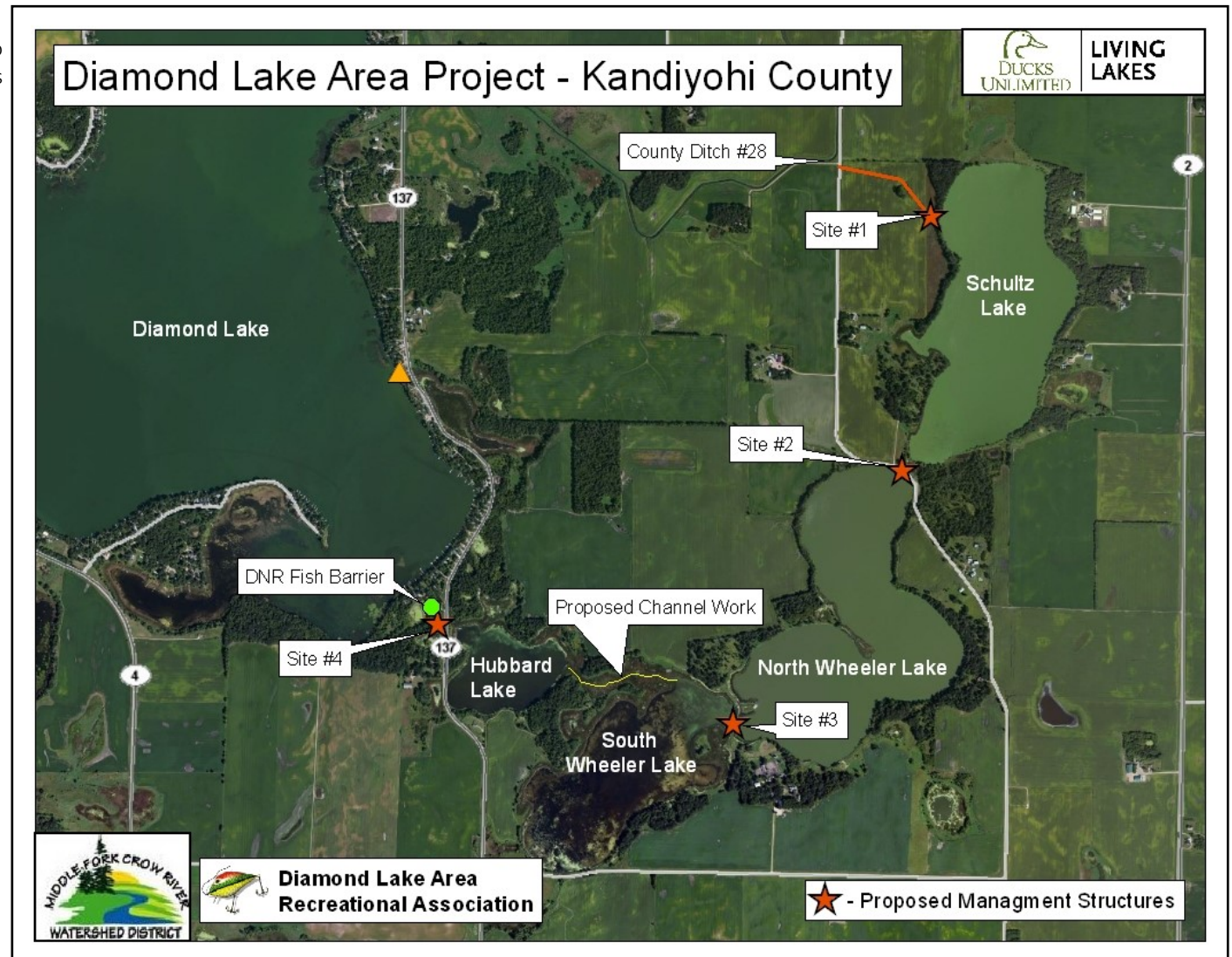
**No further drawdown can be achieved this 2017/2018 winter. Drawdown on Schultz and North Wheeler Lakes will commence 2018 spring/summer.**

Any questions:

Joshua: [joshua.kavanagh@state.mn.us](mailto:joshua.kavanagh@state.mn.us)

Cory: [cory.netland@state.mn.us](mailto:cory.netland@state.mn.us)

A full comprehensive management plan can be requested from the DNR Wildlife Office in New London, 398 Sibley Park Road NE.



# 2017 FINANCIAL STATEMENT

## 2017 Revenue

General Income	\$	281,136.31
Basic Water Management	\$	71,646.82
Survey and Data Acquisition	\$	1,018.04
Clean Water Fund	\$	21,705.59
Grants	\$	226,473.76
Diamond Lake Special Assessment	\$	19,894.12
Nest Lake Special Assessment	\$	56,357.75
Debt Service/ Loan program	\$	28,335.00
<b>Revenue Total</b>	<b>\$</b>	<b>706,567.39</b>

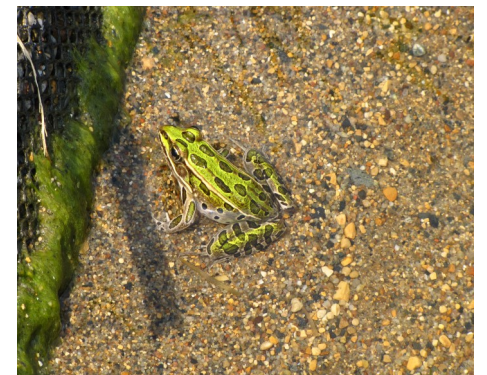
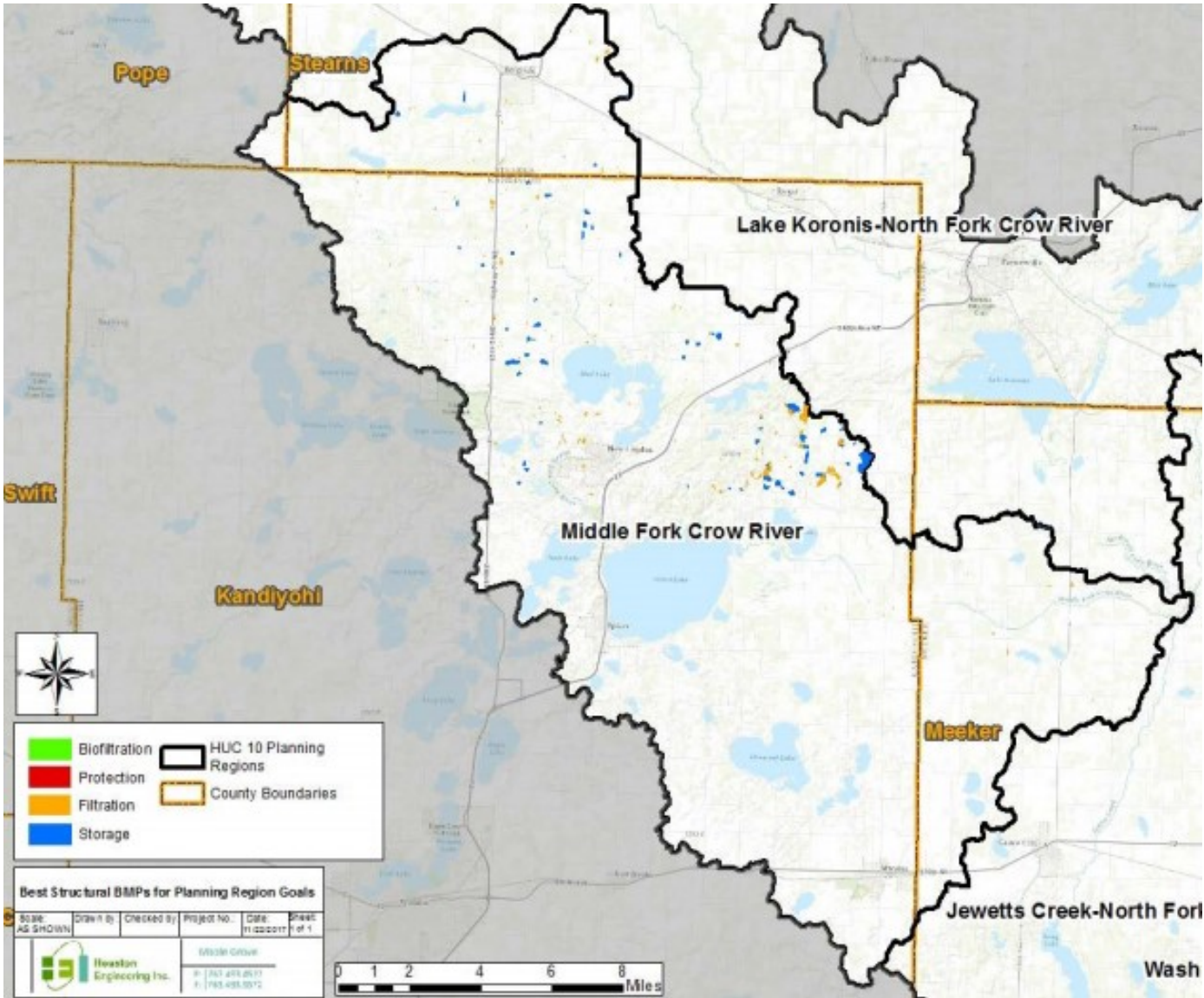
**Net Financial Position December 31, 2017: \$542,213.55**



## 2017 Expenditures

General Operating expenses	\$	27,401.06
Manager Expense	\$	7,594.66
Employee Mileage	\$	2,734.98
Health Insurance	\$	11,668.60
Audit/Accounting Services	\$	15,312.10
Legal	\$	8,761.77
Staff/Manager Education	\$	7,090.92
Public Education	\$	3,515.78
Vehicle Operating & Maintenance	\$	2,356.46
Insurance	\$	11,437.00
Dues	\$	2,365.65
Monitoring Expenses	\$	88,161.30
BMP/ Project Development	\$	20,535.95
Payroll; Payroll Expenses	\$	273,870.65
Bond Repayment	\$	44,025.00
Special Assessment Expenses: Diamond Lake and Nest Lake	\$	45,716.60
Debt Service: Loan repayment	\$	29,166.98
<b>Expenditure Total</b>	<b>\$</b>	<b>601,715.46</b>

Shown in the map below are the 250 “best” structural Best Management Practices (biofiltration, protection, filtration, infiltration, and storage treatment groups) which make up the targeted implementation approach for the Middle Fork Crow River planning region. These structural Best Management Practices are the most cost effective based upon the estimated annualized dollars per unit of total phosphorus and total nitrogen reduced for the practice at the planning region outlet, and local water quality benefits from reducing sediment. The Middle Fork Crow River Watershed District Board and staff place focus on improving the water quality by prioritizing the resource, targeting the projects, implementing the Best Management Practices to provide measurable outcomes of increased water quality.



# 2018 EVENTS

## WATERSHED DISTRICT OPEN HOUSE!

Tuesday, June 5th, 2018

4:30 PM - 6:30 PM

189 County Road 8 NE Spicer, MN 56288

Complimentary Refreshments

*Free for the whole family!*



## 2018 CLEAN UP THE CROW!

Saturday, September 15th, 2018

9:00 AM - 12:00 PM

Downtown New London

Complimentary lunch to follow!

## 2018 PADDLE THE CROW!

Saturday, June 2nd, 2018

9:00 AM - 12:00 PM

Meeting downtown New London

Fun for the whole family! Please RSVP to

[kory@pwelc](mailto:kory@pwelc) 320-354-5894



Questions?

Contact the District Office

320.796.0888

[kala@mfcrow.org](mailto:kala@mfcrow.org)