

# Two Rivers Watershed District

## In Roseau, Kittson, & Marshall Counties



*Providing Flood Control,  
Drainage, & Water Quality  
Solutions Since 1957*

**Board of Managers:** *President-Paul Olsonawski, Vice President-Roger Anderson, Secretary-Daryl Klegstad, Treasurer-Joel Muir, Manager-Bruce Anderson, Manager-Rick Sikorski, Manager-Scott Klein*

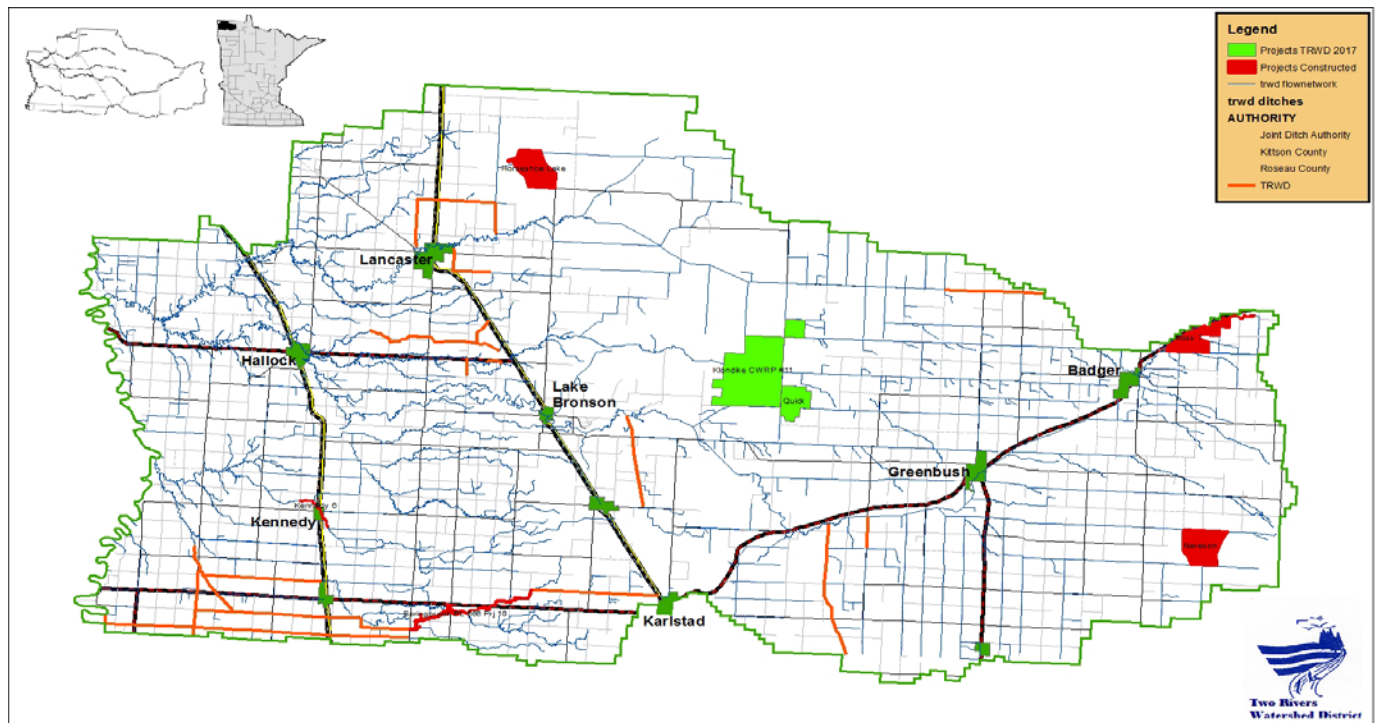
**Staff:** *Dan Money, District Administrator; Matt Thompson, Head Technician*

410 5<sup>th</sup> Street S., Suite 112, Hallock, MN 56728 - Phone (218) 843-3333 - Email: [dan.money@tworiverswd.com](mailto:dan.money@tworiverswd.com) - Website: [www.tworiverswd.com](http://www.tworiverswd.com)

February 26, 2020  
News Release

### Two Rivers Watershed District Impoundments Utilized in 2019 Fall Flood Ready to Go For Spring 2020

Flooding and flood control once again came to the forefront in the fall of 2019 and it is looking like the 2020 spring runoff will be significant. Over the years, the Two Rivers Watershed District has constructed 3 impoundment projects, 24 farmstead ring dikes, and 6 channel projects. The District also manages 8 legal ditch systems which help to convey floodwaters. Other projects have been undertaken to help slow runoff, prevent erosion, and provide natural resources benefits. Each of these projects is designed to reduce the damages from flooding to public and private infrastructure and cropland. The map below shows the impoundments in red, a proposed impoundment in green, and channel projects in either orange or red.



Two Rivers Watershed District  
Impoundments & Ditch Projects

Two impoundment projects located in Roseau County are extremely helpful in alleviating flooding, and these are listed below. These were both utilized in 2019 both during the spring runoff, the mid summer large rains, and the historic fall flooding.

Nereson and Nereson Sub-Impoundment:

- Main Impoundment Constructed in 1980's
- Sub-Impoundment Constructed in 1990's
- Combined storage of 3,500 acre feet (gated & ungated)
- On 10/16/19 was storing 3328 acre feet
- Drained after the flood to operating pool elevation and fully available for spring 2020



Ross Impoundment

- Construction completed in 2008
- Operated during both the July 2019 summer rainfall and the fall 2019 record flooding
- Total storage of up to 3,600 acre feet
- Stored 3,120 acre feet during fall 2019
- Drained dry and is fully available for spring 2020
- Interior cells are rented out for farmland



## Reminder to Close Tile Outlets During Times of Flooding

The Two Rivers Watershed District would like to remind anyone that has received a permit from the District to install tile drainage must comply with the terms and conditions of the permit. During recent flooding events it was noted that some tile systems were discharging water which typically made the flooding worse directly downstream from the tile. All tile permits issued by the Two Rivers Watershed District have the condition that no water can be discharged during times of downstream flooding. “Downstream Flooding” is defined as when the immediate outlet channel of the tile is full of water to the point that it is spilling out of the channel onto adjacent lands.

The reason for this condition is to ensure the tile system does not add to flooding that is happening downstream from the tile. If you own a tile system please take the necessary measures to prevent outflows from the tile during this spring’s imminent flooding. If you see a tile system discharging during flooding, please contact the District office.

## Klondike Clean Water Retention Project Update

The KCWRP has been in the planning stages from about 10 years. Many different project alternatives have been considered and the planning and design are very near complete. The next stages of the project will be to obtain various environmental permits and seek construction funding. Some of the project details are listed below.

**Description/Location:** The 7,600 acre multi-purpose resource project is located 10 miles east of the City of Lake Bronson, MN and 4 miles north, covering nearly 12 square miles on the Kittson and Roseau County line. It is planned to have gated flood storage of up to **37,250 acre feet** from a 191.5 square mile upstream drainage area, include 8 miles of diked inlet channel, up to 6 miles of diversion channels, a 17 mile long dike, and an average dike height of 6 feet.

**Problem:** Large scale overland flooding is a common occurrence from the City of Badger and west to the Kittson & Roseau County line along 18 linear miles of Lateral 1 of State Ditch 95. Undersized channel capacity and the slope of the landscape contributes to out of bank flows and overland flooding on a large scale. In large flood events, water overflows out of the Roseau River and enters the Two Rivers Watershed District via State Ditch #72, exacerbating the problems. Impacts occur to public roads and infrastructure, loss of agricultural crops, and farmsteads. Roads can be closed for several weeks at a time.

### **Project Benefits:**

- **Flood Damage Reduction (Primary Objective):** Store up to 30,000 acre feet of floodwater and reduce downstream duration of flooding and peak flows; Provide an adequate outlet for Lateral 1 of State Ditch #95; Prevent flooding on over 25 square miles of agricultural land; Reduce damages to County & Township roads and bridges, Reduce Two Rivers contribution to the Red River flood by 15-20%; Reduce peak flows to Lake Bronson by 13%
- **Water Quality:** Water quality impairments are listed for the North, Middle, and South Branches of the Two Rivers for biota, E-coli and turbidity. Large algal blooms currently occur downstream at Lake Bronson State Park, and low dissolved oxygen levels have been documented. By impounding water, this project will be designed to reduce sediment and nutrient loading to the South Branch Two Rivers, thereby reducing the occurrence of algal blooms in the lake. Rock riffles will be constructed to add oxygen to downstream water bodies.
- **Stream Flow Augmentation:** The South, Middle, and North Branches of the Two Rivers typically experience late summer and fall extreme low flows, and sometimes they even go dry. This has a detrimental stressor effect on the fish and other organisms. This project could be implemented to provide a source of stream flow during the times of low flow.

- Habitat Enhancement:** The project area encompasses over 7,600 acres, most of which used to be farmland. Normal operation of the impoundment will be to flood the area during spring snowmelt and summer rains and slowly drain it down after flood peaks have passed. This will provide a large habitat block to **enhance nesting areas and habitat for waterfowl**. The site is adjacent to a **'prairie rich fen'**, and therefore cessation of farming practices and land retirement will help to **protect and enhance the integrity of the nearby fen**. A fen plan has been written jointly with the MN DNR to guide management of the prairie rich fen. **Wetland restorations, fish habitat**, and other project components are currently being studied to provide additional ecological benefits.

**Cost Estimate: \$32 million**

State: Between 50% (\$13,000,000) and 75% (\$19,500,000)

Non-State: Red River Watershed Management Board \$7,200,000 (\$5M awarded to date)

Two Rivers Watershed District \$5.2M

USDA: \$ 500,000 grant awarded

Enbridge: \$ 100,000 grant awarded

FDRWG: \$ 30,000 grant awarded

Other Possible Sources: LSOHC; Clean Water Funds; Federal Grants; etc.

**Timeline If Funded**

Final Plans and Specifications 90% complete by March 1, 2020

Permitting complete by December 31, 2020 (EAW, USCOE, WCA, SHPO, 103E ditches)

March – May 2021 let bids

Phase 1 Construction 2021-2022

Phase 2 Construction 2022-2023

