Two Rivers Watershed District

In Roseau, Kittson, & Marshall Counties

2022 Annual Report



The Two River Watershed District was established by order of the Minnesota Water Resources Board on October 30, 1957. It was the second watershed district to be organized within the State of Minnesota, and the first to write and approve an overall plan. The District is located in much of Kittson County, the western 1/3 of Roseau County, and extreme northwestern Marshall County, all in northwest Minnesota.

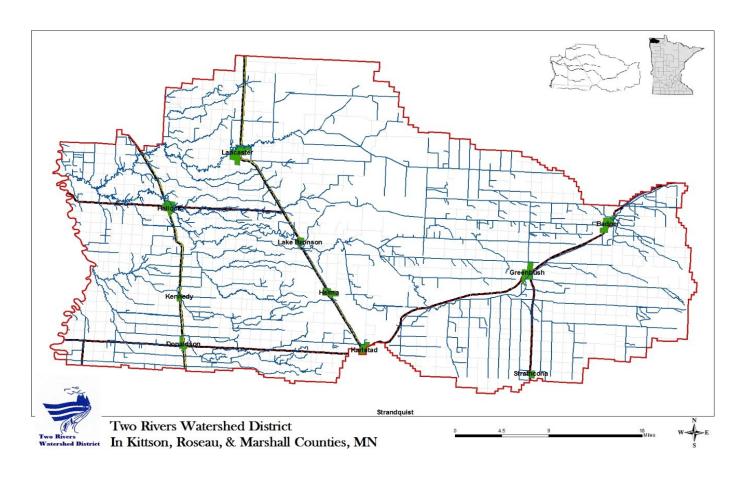
The land area of the District encompasses 1,454 square miles. The boundary does not follow political boundaries, rather it follows drainage boundaries. The District stretches 65 miles from the Red River on the western boundary to the eastern boundary located between the cities of Badger & Roseau. At its widest north-south point, the District stretches 33 miles. It is bordered to the north-west by the Joe River Watershed District; the north by the Province of Manitoba, Canada; the east by the Roseau River Watershed District; the south by the Middle-Snake-Tamarac Rivers Watershed District; and to the west by the Red River of the North, which is also the boundary with North Dakota.

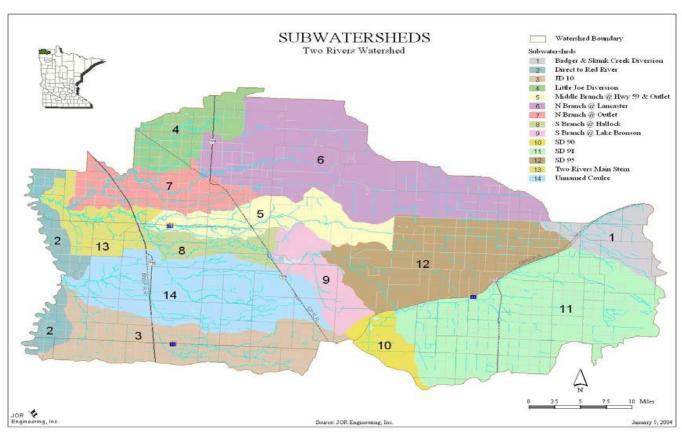
The Two Rivers actually consists of three branches – the North, Middle and South Branch. The South Branch arises southeast of Badger, Minnesota and flows in a westerly direction along the south side of Badger and through the cities of Greenbush, Lake Bronson, and Hallock. The Middle Branch drainage area begins east of the Kittson & Roseau County line, travels through the central portion of Kittson County, and outlets into the South Branch just east of the city of Hallock. The North Branch drainage area begins in northwestern Roseau County, travels through Lancaster and Northcote, and joins the South Branch to form the main stem three miles east of its outlet into the Red River.

The southwest portion of the District is a 360 square mile stand alone drainage system that was added to the District in the mid 1980's. This drainage system is comprised of a series of coulees which outlet into legal drainage systems. These legal drainage systems in turn outlet into a series of coulee systems, and in turn they outlet into the Red River. This drainage system flows into the Red River at a point 10 miles south of the outlet of the Two Rivers.

The economy of the District is largely driven by agriculture. Of the approximately 931,150 acres of land in the District, 67% is pasture and crop land, 14% forested, 13% grassland, 5% wetland, and 1% roads, ditches, and urban. The primary crops grown are small grains, soy beans, sugar beets, and other crops such as seed potatoes, corn, canola and sunflowers.

Cities within the District include Badger, Greenbush, Strathcona, Karlstad, Halma, Lake Bronson, Lancaster, Donaldson, Kennedy, and Hallock. In addition, the unincorporated villages of Fox, Haug, Leo, Orleans, Pelan, Northcote, and Robbin are within the area of the District. Industry in the area is limited. The mining of gravel is prevalent in the beach ridge areas of glacial Lake Agassiz. A few manufacturing and assembly companies exist in the area, including a wood stove company, metal works, canola processing plant, powder coating, and a vehicle track company. Other major employers are healthcare centers in Greenbush, Karlstad & Hallock, several school districts, and a county courthouse. Area population trends show a steady decline over the past 3 decades.





GOVERNANCE

The TRWD was established in October of 1957 and is currently made up of 7 board members including 2 from Roseau County and 5 from Kittson County. Board members are appointed to a 3 year term by their respective County Commission. The Board of Managers meets once per month to conduct the regular business of the District, and special meetings are occasionally held.

The TRWD established By-Laws and follows them accordingly for meetings and day to day activities. In addition, the Board prescribed their first 'Overall Plan' in 1958, which was the first overall plan of any watershed district in the state of Minnesota. This plan has been updated several times over the years, and was last extensively updated in 2004. The TRWD will be updating this plan and when completed, this plan will guide and direct the daily, monthly, and yearly operations of the District.

The District operates under Minnesota Statute, 103D, also known as the 'Watershed Law'. This statute gives watershed districts authority to work on flood control, drainage, water quality, water supply, and other issues that affect water natural resources within rivers, lakes, streams and groundwater. Eleven projects have been constructed and another is in the works to help with drainage and alleviate flooding. Nine projects including 3 impoundments and 40 miles of watercourse channels have been constructed. In addition, the District utilizes Minnesota Statute 103E (the Drainage Code) to maintain 73 miles of legal drainage ditches.

The District Technical and Citizen's Advisory Committees are made up of concerned citizens, appointed officials, and representatives of governmental agencies that in some way work with or affect the water resources of the District. These committees meet at least once per year to provide input and guidance to the Board of Managers regarding District programs and activities.

The District is a member district of the Red River Watershed Management Board, which was established in 1976 by the MN Legislature. The RRWMB is made up of 7 watershed districts within the Minnesota side of the Red River basin. Its mission is to "institute, coordinate, and finance projects and programs to alleviate flooding and assure the beneficial use of water in the watershed of the Red River of the North and its tributaries". Through the RRWMB, the TRWD is affiliated with the Red River Retention Authority and the Red River Basin Commission. The District is also a member of MN Watersheds, which is the statewide association of watershed districts.

Since its inception, the Board of Managers have established numerous policies regarding various management issues. Many of these relate to permits issued under the *Rules of the Two Rivers Watershed District*, and others relate to general activities of the District. The District follows its stated policies whenever possible and uses discretion when applying these policies.

Manager & Staff Roster 2022

Board Members	Title	Phone	Email	Address	County	Term Ends
Rick Sikorski	President	218-782-2783		30825 110th Ave, Lancaster, MN 56735	Roseau	10/31/2024
Roger Anderson	Vice President	218-455-6269		1561 110th Street, Drayton, ND 58225	Kittson	10/31/2024
Daryl Klegstad	Secretary	218-265-2073		4151 210th Street, Halma, MN 56729	Kittson	10/31/2025
Gerald Olsonawski	Treasurer	218-843-8094		P.O. Box 293, Hallock, MN 56728	Kittson	10/31/2025
Bruce Anderson	Manager	218-782-3147		18960 170th Ave, Greenbush, MN 56726	Roseau	10/31/2023
Scott Klein	Manager	218-843-2752		1946 200th Street, Hallock, MN 56728	Kittson	10/31/2023
Paul Johnson	Manager	218-843-3791		2464 250th Street, Hallock, MN 56728	Kittson	10/31/2024
Staff Members						
Dan Money	Administrator	218-843-3333	dan.money@tworiverswd.com	410 S. 5th Street, Suite 112, Hallock, MN 56728		
Tyler Coffield	Technician	218-843-3333	tyler.coffield@tworiverswd.com	410 S. 5th Street, Suite 112, Hallock, MN 56728		
Consultants				-		

Jeff Hane	Attorney	218-843-3686	Brink Lawyers - Hallock, MN 56728
Blake Carlson	Engineer	218-277-7409	Widseth - Crookston, MN
Jacob Huwe	Engineer	218-681-6100	HDR Engineering -Thief River Falls

Meetings

The Board of Managers of the Two Rivers Watershed District held meetings on the first Thursday of each month in 2022, except that the October meeting was cancelled due to a lack of a quorum. The Annual meeting was held on January 7, 2022, a Special Meeting was held on January 12, 2022 and public hearings were held on May 5, 2022 (KCD 7) and July 7, 2022 (KCD 10 and JD 10). All meetings of the TRWD are held in accordance with the MN Open Meeting Law.

Existing & Completed Projects

The following are established and proposed projects of the Two Rivers Watershed District. They were built under Minnesota Statute 103D for various purposes including flood control, erosion control, water quality benefits, wildlife enhancement, and drainage for cropland. Each is inspected annually and operated and maintained by the District.

Detailed information regarding each project is on file at the TRWD office. Interested individuals can obtain copies of all project information upon request.

Project Name	Description	Location	Established	Status
Middle Branch Project	9.0 mile channel	Thompson & Hazelton	1968; PL 566	Yearly Inspection &
#1	improvement	Townships, Kittson Co		Maintenance
North Branch Project	11.8 mile channel	Richardville, St. Joseph,	1969; PL 566	Yearly Inspection &
#2	improvement	Granville, & Poppleton		Maintenance
		Townships, Kittson Co.		
Soler	5 mile extension of	Soler & Moose Townships,	1979; Petition	Yearly Inspection &
Project #4	State Ditch #72	Roseau Co.	Project	Maintenance
Dewey	1.8 mile lateral to	Sections 26 & 35 Dewey	1980; Petition	Yearly Inspection &
Project #5	State Ditch #91	Township, Roseau Co.	Project	Maintenance
Nereson Impound	Flood Control	Sections 27-28 Nereson	1981; Board	Yearly Inspection &
Project	Impoundment	Township, Roseau Co	Initiated	Maintenance
Nereson Modification	Flood Control	Sections 33-34 Nereson	2005; Board	Yearly Inspection &
Project	Impoundment	Township, Roseau Co	Initiated	Maintenance
Dewey 5 Improvement	Improvement of	Sections 26 & 35 Dewey	2002; Petition	Yearly Inspection &
Project	Dewey #5 Ditch	Township, Roseau Co	Project	Maintenance
	System			
Horseshoe Lake	Drawdown Structure	Section 14, St. Joseph Township,	2006; Jointly by	Yearly Inspection &
Project		Kittson Co	Kittson Co –	Maintenance; Gate Operation
			DNR- TRWD	
Kennedy Project	2.6 mile ditch to	City of Kennedy, MN	November 2009;	Yearly Inspection &
#6	connect Kittson CD4		Petition Project	Maintenance
	& CD27			
Ross	Flood Control	Sections 26, 27, 28, 32, 33,34,	November 2007;	Yearly Inspection &
Project #7	Impoundment	Ross Township, Roseau Co	Board Initiated	Maintenance; Gate Operation
Springbrook PL566	Set back dikes and Side	Springbrook Township sections	December 2013;	Yearly Inspection &
Project #10	water inlets along 8.65	22,23,28,29,30; Davis	Petition Project	Maintenance
	miles of waterway	Township sections 25,36		

Legal Ditches	Length	Township(s); County	2022 Levy
Statute 103E	(Miles)		
State Ditch #49	5.25	Norway; Kittson Co	\$ 0
State Ditch #50	4.5	Klondike; Kittson Co.	\$ 0
State Ditch #85			
Improvement	0.75	Poppleton; Kittson Co	\$ 0
Judicial Ditch #3	5.5	Teien; Kittson Co	\$ 0
Judicial Ditch #10	31	Davis, Svea, Teien, Kittson	
		Co	\$ 9,500
Kittson CD #7	6.5	Svea; Kittson Co	\$ 0
Kittson CD #10	7.0	Deerwood; Kittson Co	\$ 14,000
Roseau CD #4	7.5	Lind, Dewey; Roseau Co	\$ 5,000
Kittson CD #21	6.5	Hallock, Kittson Co	\$ 50,000

These systems are inspected annually and each system is surveyed a minimum of once every 5 years to assess any changes from erosion or sedimentation. Maintenance activities are undertaken if deemed necessary. These activities include beaver dam removal and beaver trapping, spraying of cattail and other nuisance vegetation, removal of silt and sediment, repair of sloughed side slopes or eroded culverts, and other items as needed. Detailed maintenance reports are kept and filed each year in the ditch file.

The District, as the ditch authority for these ditches, is also responsible for maintaining a ditch fund to pay for maintenance expenses. Each year the District assesses the needs of each ditch and a tax is levied against the "benefited area" of each ditch, if necessary and if the funding is needed. Each year the District certifies this levy to the County Auditor of the County where the ditch is located.

OTHER PROJECTS

The project listed below was a project that utilized federal, state, and local funding. It was coordinated by the District but is not an official project of the District and therefore future maintenance is the responsibility of the landowners along its course.

Springbrook / CR 61	3.75 mile meandering	Sections 3,5,6 Springbrook &	August, 2008	Maintenance responsibility of
	channel & set back	Sect. 1 Davis Twp, Kittson Co		landowners
	dikes – flood control			

FARMSTEAD RING DIKES

After the historic flood of 1997, the District participated in a cost share program with the State of Minnesota and the Red River Watershed Management Board to design and install farmstead ring dikes. The dikes were designed and engineered by the TRWD and installed by local contractors. The landowner generally paid 12.5% of the cost, the state paid 75%, and 12.5% was paid by the RRWMB/TRWD. Using this program, 25 farmstead ring dikes were built.

Programs

PERMITS

The Rules of the Two Rivers Watershed District were enacted in 1981, and under these Rules, a permit from the District is required for the following activities. Fourty-Six permit applications were processed during 2022.

- Any sanitary sewer system which discharges to surface water, storm sewer, or other major utility project which affects surface water within the district.
- Any street, road, or highway construction project which by means of its construction has any effect on the quality or quantity of water runoff.
- Any construction or alteration of any drain tile or drainage ditch that drains an area in excess of 20 acres.
- Any works which include draining, filling, excavating, or dredging of any type 3, 4, 5, or 8 wetland as defined by the U.S. Fish & Wildlife Service Circular 39.
- Any construction or alteration of any bridge, dike, culvert, or drain across any drainageway, lake, wetland, or other water body.
- Any artificial or mechanical transfer of water from a water source including but not limited to gravel pits, ponds, rivers, wetlands, and other reservoirs consistent with the general purposes of the District.
- Any artificial drainageway cut across a subwatershed to thereby deliver water into another subwatershed.
- Any drainage of water by any artificial means into any legal drainage system from any land not assessed to that drainage system.
- Construction, alteration, or removal of any dike or reservoir.

Stream Flow Monitoring:

Stream flow and velocities will be monitored and recorded for selected sites on the rivers, coulees, and ditches. The District will continue to recruit volunteers to read and record staff gage information for each site. Stream flows and velocities will be measured by District staff at each site during runoff events and data will be reported to interested agencies and persons, including the National Weather Service, DNR, and various other state and local agencies. The long range goal is to record data not only for the high flow events but for summer low flows as well.

Water Quality Monitoring:

The District will continue water quality monitoring at 10 selected locations. These sites have been monitored by the District off and on since 1991. The MPCA and others will not be monitoring because they are between 10 year cycles in their watershed assessments, and therefore the District will monitor to keep a yearly record of baseline information.

Geographic Information Systems:

Data will continue to be collected and input into the District's Geographic Information System. Data sets will continue to be developed, including culvert inventory, LiDar, drainage areas, water quality, stream flow, and information regarding the ditch systems administered by the District. This is an ongoing project that will be continued from year to year.

Newsletters:

The District newsletter will continue to be published quarterly in cooperation with the Kittson Soil & Water Conservation District. This is an excellent way to communicate to the public the various programs, projects, and water management initiatives being contemplated by the District.

Education:

The District will continue to support and participate in activities for students, specifically the Envirothon and River Watch. These are outdoor, hands on, real world water quality and environmental experiences for high school students.

Two Rivers Watershed District 2022 Monitoring - Data Collection - Staff Activities

Surveys:

- ✓ Completed 21 miles of project and ditch surveys
- ✓ Completed 4 surveys for private individuals

Stream Flow - Flood Fighting:

- ✓ Snow Survey at 12 sites to collect snow depth and water equivalent
- ✓ Erect staff gages & maintenance of existing
- ✓ Monitored several sites for high flow occurrences daily during runoff events (March through October) - Surveyed water elevations at Roseau crossover flooding
- ✓ Analyze results & prepare annual stream flow report for distribution
- ✓ Establish rating curves for all stations @ high flow
- ✓ Prepare and distribute daily reports during flooding events report to NWS, DNR, Others; collaborate with LB dam operators

Operations & Maintenance:

- ✓ Annual Inspection & Tour of Nereson Impoundment with DNR & Roseau Co.; Coordinate operation with DNR during flood events
- ✓ Annual Inspection of Ross 7 Impoundment; operation during flood events
- ✓ Annual Inspection of Skull/Horseshoe Lake with DNR & Kittson Co.; operation during flood events; coordination of structure repair/replacement

Permits:

- ✓ Process & inspect all permit applications as necessary 46 in 2022
- ✓ Respond to and follow up on permit inquiries, violations and complaints
- ✓ Worked on tile policies and issues and permit procedures

Education & Information:

- ✓ Participate in Envirothon event for high school students & Waterfest for grade school students
- ✓ Continue to coordinate **Northland Conservation News** newsletter with Kittson SWCD 2 editions per year
- ✓ Booth @ Crop Improvement Day, Speak @ Association of Twps
- ✓ News releases, fact sheets, and informational meetings as necessary

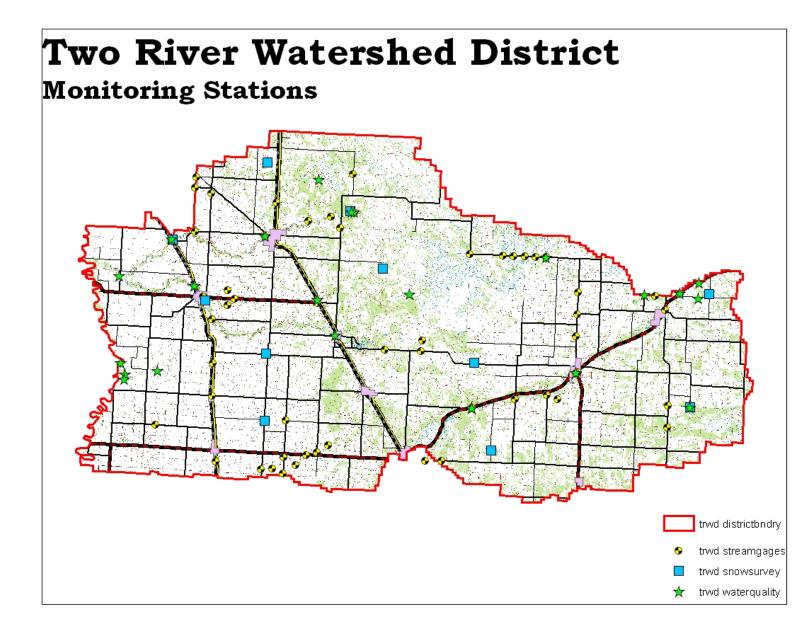
Miscellaneous Administrative:

- ✓ Prepare & distribute Annual Report & Audit as required by law
- ✓ Enter & track all financial data using Quickbooks computer program
- ✓ Prepare meeting notices, record & distribute meeting minutes, prepare agendas, etc.
- ✓ Daily office duties including handling phone calls & walk ins, preparing & sending letters, soliciting & administering program funding, grant writing, program coordination, plan writing, and attending RRWMB, FDRWG & MSTC meetings
- ✓ Coordinate staff activities between District Administrator & District Technician
- ✓ Farm Lease Agreements & administration of District owned land
- ✓ Seek funding through legislature, state and federal agencies for projects and programs

Other Activities as Determined by TRWD Board of Managers

Income Sources Used for Staff / Administration

- 2022 TRWD Levy
 2022 RRWMB Levey
 FDRWG grants
 RRWMB Water Quality Grant
 DNR FHM grant
 State of MN Riparian Aid(buffers)
- Ditch Levy - Bill to Projects



Two Rivers Watershed District

2022 Flood Control & Ditch Projects

<u>Ditch Projects & Legal Ditches</u>: The following systems under TRWD jurisdiction are annually inspected for blockages, damages, beavers, etc. and maintenance is scheduled accordingly



- 112 miles of ditch are under TRWD authority / jurisdiction as listed below.
- **North Branch #1 11.8 mi:** Visual inspection & regular maintenance; sprayed vegetation; beavers trapped & beaver dams removed; Surveyed; installed bracing on drop structure
- *Middle Branch #2 9.0 mi:* Visual inspection & regular maintenance; sprayed vegetation; Surveyed
- **Soler #4 5.0 mi:** Visual inspection & regular maintenance;
- **Dewey #5 & Improvement 1.8 mi:** Visual inspection & regular maintenance;
- **Kennedy #6 2.6 mi:** Visual inspection & regular maintenance
- **Springbrook** #10 PL566 8.65 mi: Visual inspection and regular maintenance; sprayed vegetation; beavers trapped and beaver dams removed;
- Roseau CD #4 7.8 mi: Visual inspection & regular maintenance; sprayed vegetation
- **Kittson CD #7 6.2 mi:** Visual inspection and regular maintenance; Surveyed gas pipeline elevations; vegetation sprayed; various info meetings on the petition for improvement
- **Kittson CD #10 6.5 mi:** Visual inspection and regular maintenance; vegetation sprayed; Public hearing held to re-establish ditch grade
- **Kittson CD 21 & Diversion 1 Improvement 6.4 mi:** Visual inspection and regular maintenance; Surveyed 2 miles disaster repair 1 mile cleaned out & gullies repaired
- **Judicial Ditch #3-5.3 mi:** Visual inspection and regular maintenance; surveyed township center line road crossing
- **Judicial Ditch #10 30.1 mi:** Visual inspections & regular maintenance; sprayed vegetation; Installed one side water inlet; held hearing to add lands to benefit area
- State Ditch #49 5.1 mi: Visual inspection & regular maintenance; sprayed vegetation
- State Ditch #50 4.5 mi: Visual inspection & regular maintenance; sprayed vegetation
- State Ditch #85 Improvement 0.7 mi: Visual inspection & regular maintenance

Impoundment PROJECTS: The following flood control projects, under the TRWD jurisdiction, were worked on as listed below.

Nereson:

- ✓ Work with DNR to operate as necessary as per Operating Plan
- ✓ Annual Inspection & maintenance
- ✓ Surveyed all structures and held meetings with township officials, County & DNR

Ross #7:

- ✓ Operation as necessary as per Operating Plan during flooding
- ✓ Annual Inspection & Maintenance
- ✓ Management of Farm Lease Agreements
- ✓ Areas of dike sprayed for thistle mowed other areas of dike

Skull / Horseshoe Lake:

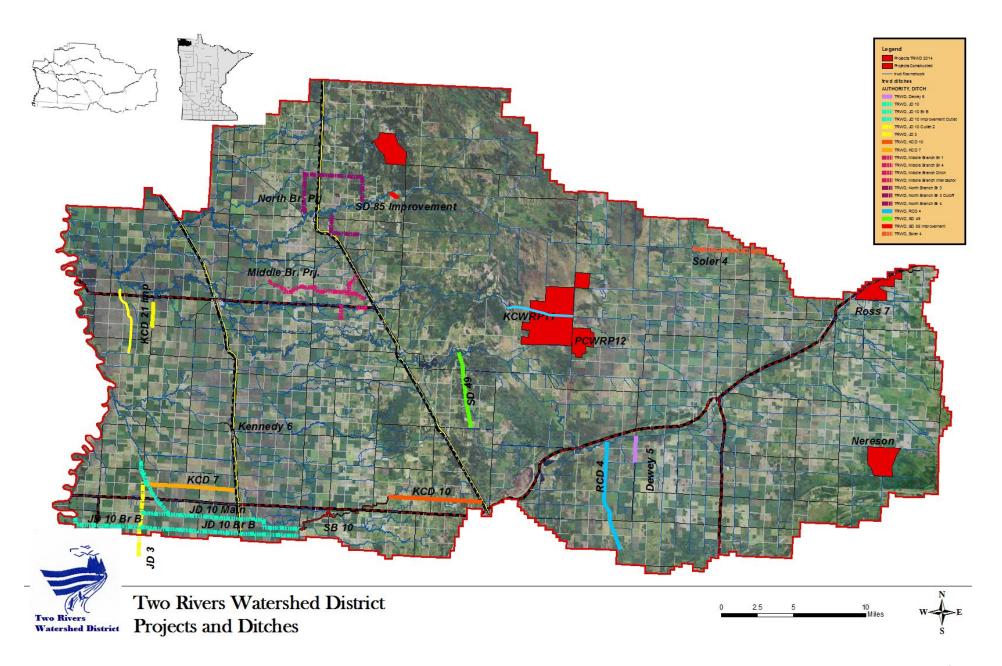
- ✓ Annual inspection and maintenance
- ✓ Operated stop logs during spring flood
- ✓ FEMA disaster inspected and submitted for funding to repair the structure
- ✓ Held meetings with DNR / Kittson County / Township

KCWRP#11:

- ✓ Design
- ✓ Permits (USACE, WCA, EAW, SHPO, DNR, etc)
- ✓ Several meetings with DNR regarding EAW
- ✓ Solicit Funding LSOHC, Legislature, RRWMB, other
- ✓ Land management maintenance

Other Items As Needed and Directed!!!

- Survey and data collection during the spring flooding for Roseau River overflows
- Performed numerous private surveys for landownersl



Ditch	2018	2019	2020	2021	2022	2023
RCD 4	inspection	inspection	inspection	survey	inspection	inspection
					spray	
KCD 7	inspection	survey	inspection	inspection	inspection	inspection
KCD 10	inspection	inspection	inspection	survey	inspection	inspection
					spray	
KCD 21 & Imp.	survey	inspection	clean 1.5 mi	clean 3 mi	inspection	survey
	inspection		inspection	inspection	flood repair	inspection
JD 3	inspection	inspection	survey	7 SWI's	inspection	inspection
				inspection		
JD 10 main	inspection	inspection	survey	survey	SWI	inspection
					Inspection	
JD 10 Br B	inspection	survey	inspection	inspection	inspection	inspection
	slough repai	r				
SD 49	survey	inspection	inspection	inspection	inspection	survey
					spray	inspection
SD 85 imp	inspection	inspection	inspection	inspection	inspection	survey
		1		'		inspection
Soler 4	inspection	inspection	inspection	survey	inspection	inspection
Dewey 5 Imp	survey	inspection	inspection	inspection	inspection	survey
						inspection
Kennedy 6	survey	inspection	inspection	inspection	inspection	survey
, .	slough repai				1, 222	inspection
Middle Branch	inspection	inspection	inspection	inspection	survey	inspection
	·	·	·	·	spray	·
North Branch	inspection	inspection	inspection	inspection	survey	inspection
			·	brace structure	brace structure	·
				5.000 0.000	spray	
SB 10 PL 566	inspection	survey	inspection	inspection	inspection	inspection
					spray	
SD 50					inspection	survey
					spray	inspection
Pending survey in	ifo cleanout to c	nriginal grade &	cross section m	av he needed	υ μ. ω <i>j</i>	
Afterinspections				•		I

2022 Budget Two Rivers Watershed District

The Two Rivers Watershed District held a budget hearing pursuant to Minnesota Statute 103D to consider and approve its 2022 budget on Thursday, September 2, 2021 beginning at 8:00 am in the District offices located at the Kittson County Courthouse, 410 S 5th Street, Hallock, Minnesota. The following is the budget for 2022.

Administrative Budget	2022 Budget
Administrative	94,000
Auto Expense	3,000
-	7,500
Capital Outlay	
Conferences & Meetings	9,000
Dues & Subscriptions	4,000
Engineering	15,000
Information & Education	3,000
Insurance	5,500
Manager's Per Diem & Expense	18,000
Office Supplies & Miscellaneous	2,000
Payroll Expense	32,000
Postage & Delivery	750
Printing & Advertising	2,000
Professional & Legal	21,500
Rent	12,000
Stream Gage	3,000
Telephone	2,000
Water Quality	5,000
Totals	239,250

The Board of Managers set the 2022 general fund ad valorem tax levy at \$240,000 to be levied over the taxable market value within the boundaries of the District.

An additional ad valorem tax set under law by the Red River Watershed Management Board was certified at 75% of the maximum amount which equals \$562,357 within the Two Rivers Watershed District.

The following diagram shows how the tax levies were collected for 2022 and where they were distributed.

