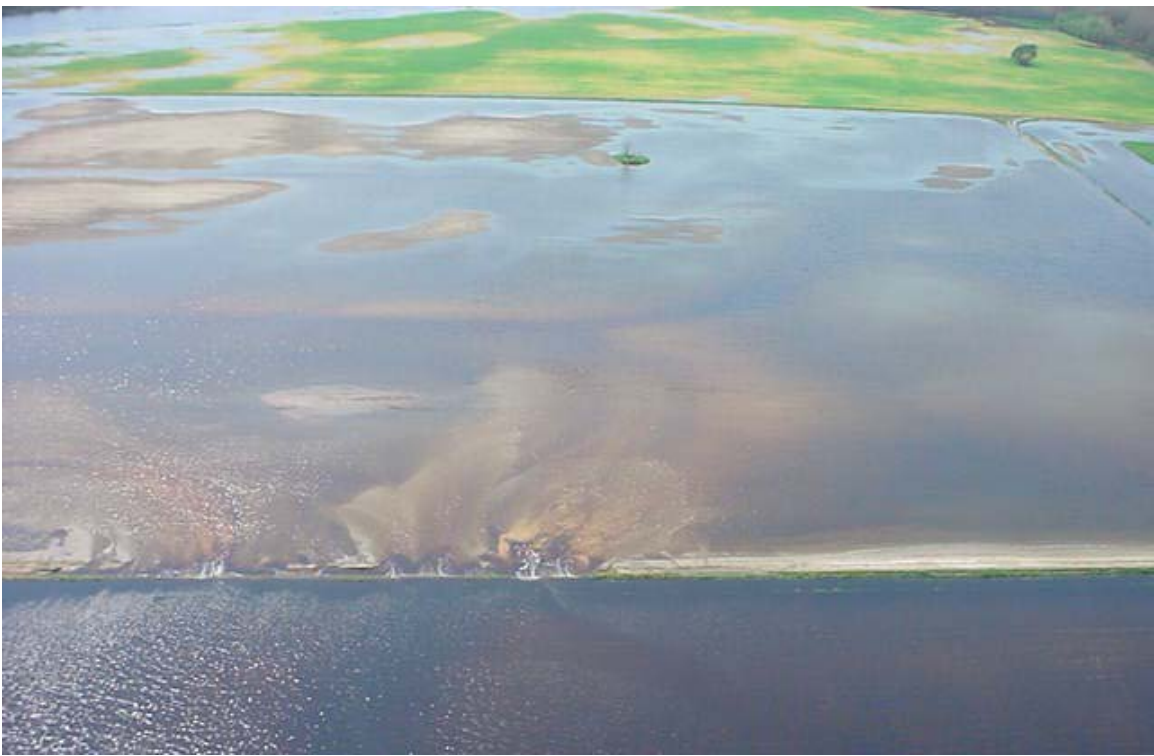


TWO RIVERS WATERSHED DISTRICT

IN ROSEAU, KITTSOON, & MARSHALL COUNTIES



2014 ANNUAL REPORT

**410 South 5th Street, Suite 112, Kittson County Courthouse,
Hallock, MN 56728**

INTRODUCTION

The Board of Managers of the Two Rivers Watershed District would like to present this 2014 Annual Report. It contains information about the District's projects, programs, and initiatives through the year.

The Two Rivers Watershed District is a local unit of government and operates under Minnesota Statutes 103E – the drainage law – and 103D – the Watershed law. These statutes assign the duties of water management relative to lakes, rivers, streams, groundwater and other water related parameters. The District focuses on flood control, drainage, water quantity, and water quality.

The District, organized in 1958, was the second watershed district in the State of Minnesota to be established, and is governed by a 7 member Board of Managers, each of who are appointed by either the Roseau County or Kittson County Commissions to serve a 3 year term. The District employs 2 full time staff. The duties of the District are to carry out activities set forth in statute. To do this, the District manages over 92 miles of legal ditch systems, has constructed 3 impoundments which store over 9,000 acre feet of flood water, and has constructed 10 projects. The District is also involved with water quality and flow monitoring, and has adopted rules which require permits for certain water related activities.

High on the list of course is flood control, and the District has undertaken a new project, the “Klondike Clean Water Retention Project #11”. This project will focus on flood control and providing an adequate drainage outlet for Lateral 1 of State Ditch #95. It will also provide a means to handle overflow flooding that comes from State Ditch 72 and the Roseau River. In addition, water quality benefits and natural resource enhancements will be accomplished. Plans are in the works which will give the project the ability to store approximately 37,000 acre feet of water.

For 2015 the District will continue with maintenance of existing projects and infrastructure, monitoring of stream flows and water quality, and planning for future projects. We strive to work with landowners to solve water related problems to ensure that drainage, flood control, and water quality concerns are addressed.

2014 LIST OF MANAGERS

Roger Anderson, **President**
1561 110th Street
Drayton, ND 58225
(218) 455-6269
Term Expires: October, 2015

Jon Vold, **Secretary**
2418 310th Street
Hallock, MN 56728
(218) 843-2556
Term Expires: October 2015

Jim Kukowski, **Vice President**
17485 County Road 6
Strathcona, MN 56759
(218) 781-2478
Term Expires: October, 2017

Daryl Klegstad
4151 210th St,
Halma, MN 56729

(218) 265-2073
Term Expires: October 2016

Allen Brazier
20463 230th St
Greenbush, MN 56726
(218) 782-2456
Term Expires: October 2015

Paul Olsonawski
3762 285th Ave
Lancaster, MN 56735
(218) 762-1911
Term Expires: October 2016

Darrel Johnson, **Treasurer**
2224 190th Ave
Hallock, MN 56728
(218) 843-2496
Term Expires: October, 2017



2014 Board of Managers

Paul Olsonawski, Darrel Johnson, Allen Brazier, Jim Kukowski, Roger Anderson, Jon Vold, Daryl Klegstad

Office Staff

Dan Money
District Administrator
daniel.money@mn.nacdnet.net

Matt Thompson
District Technician
matthew.thompson@mn.nacdnet.net

Office Information:

Two Rivers Watershed District
410 South 5th Street, Suite 112
Hallock, MN 56728

Location: Lower Level, Kittson County Courthouse
Office Hours: 8:00 am – 4:30 pm, M-F

Phone (218) 843-3333
Cellular (218) 689-2023

Fax (218) 843-2020
Internet: www.rwmb.org/html/watersheds.cfm?ID=7

Office Administration

OFFICE STAFF

The District employs 2 full time staff persons. Their titles and duties are listed below.

- *District Administrator:* The Administrator carries out all administrative and technical duties as determined by the Board of Managers. Specific duties include long range plans, coordinating meetings, financial management, coordinating projects, processing permit applications, handling requests from the public, water quality sampling, managing a geographic information system, data analysis, and performing investigations relating to District projects.
- *District Technician:* The District Technician is responsible for field work relative to District programs, ditches, projects, and inventories. This includes survey work, stream flow monitoring, culvert inventory, reporting, permit review, modeling, geographic information systems, data analysis, and all other technical duties.

CONSULTANTS

Engineering services for 2014 were performed on a project specific basis by Widseth, Smith, & Nolting – Crookston, MN, Houston Engineering – Fargo, ND, and HDR Engineering, - Thief River Falls, MN. Consulting engineers are used on an as needed basis at the discretion of the Board of Managers.

Legal services are provided by the law firm of Brink, Sobolik, Severson, Malm, & Albrecht, P.A. of Hallock.

Payroll services are provided by the accounting firm of Dahl, Hatton, Muir, & Reese, Ltd. of Hallock.

Auditing services are provided by the firm of Drees, Risky & Vallager, Ltd. of Crookston.

MEETINGS

The Board of Managers meets the first Wednesday of each month in the District office in Hallock, MN beginning at 8:00 a.m. Special meetings are held from time to time at the discretion of the Board. Advisory meetings are held at least once per year as required by law and otherwise as determined by the Board. All meetings are properly posted as required by law.

ADVISORY COMMITTEE

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 Advisory Committee members for the year 2012 are listed below.

Citizen’s Advisory Committee

Name	Location	Representing		Name	Location	Representing
Keith Cummins	Karlstad	Rural		Luke Novacek	Greenbush	Rural
Sue Dufalt	Karlstad	City		Jim Pederson	Karlstad	Township
Don Craigmile	Hallock	Rural		Bob Boychuck	Hallock	Rural
Rick Sikorski	Lancaster	Rural		Vern Langaas	Karlstad	Rural
Mike Jensen	Drayton	Township		Leon Olson	Lancaster	Kittson County
Mark Foldesi	Greenbush	Roseau Co		Todd Truedson	Kennedy	City
				Mike Docken	Hallock	City
Heather Peterson	Hallock	Rural/SWCD		Terry Osowski	Hallock	Rural
Harold Moose	Donaldson	Township		Brach Svoboda	Greenbush	Rural
Ed Walsh	Badger	Rural		John Gaukerud	Badger	Rural
Shayne Isane	Greenbush	Rural		Ron Jacobson	Greenbush	Rural
Mayor	Greenbush	City		Mayor	Badger	City

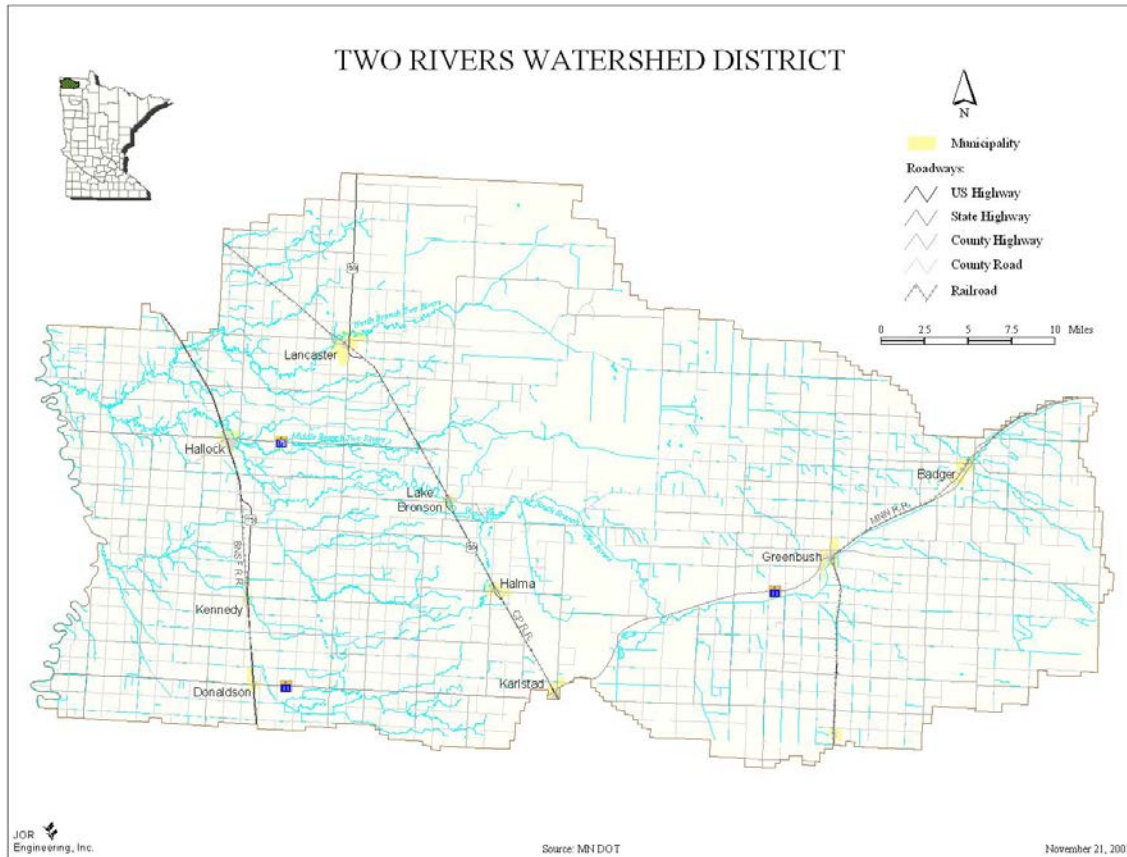
Technical Advisory Committee

Name	Location	Representing		Name	Location	Representing
Kelly Bengtson	Hallock	Kittson Hwy Dept		Brian Kettring	Roseau	Roseau Hwy Dept
Darren Carlson	Hallock	Kittson SWCD		open	Karlstad	TNC
Laurie Fairchild	Middle River	US Fish & Wildlife Srv		Jim Schwab	Hallock	NRCS
Cary Hernandez	Detroit Lakes	MN Pollution Control Agency		Matt Fischer	Bemidji	BWSR
Dennis Topp	Baudette	DNR Fisheries		Joel Huener	Middle River	DNR Wildlife
Stephanie Klamm	Thief River Falls	DNR Waters		Blake Carlson	Crookston	Widseth, Smith, & Nolting
Janine Lovold	Roseau	Roseau SWCD		Danni Halvorson	Viking	International Water Institute
Barb O’Hara	Hallock	Kittson DEM				

BACKGROUND INFORMATION

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 District operates under Minnesota Statutes 103D (the Watershed Law) and 103E (the Drainage Code).

The land area of the District encompasses 1,454 square miles. The District stretches 65 miles from the Red River on the western boundary to the eastern boundary just west of the City of 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.



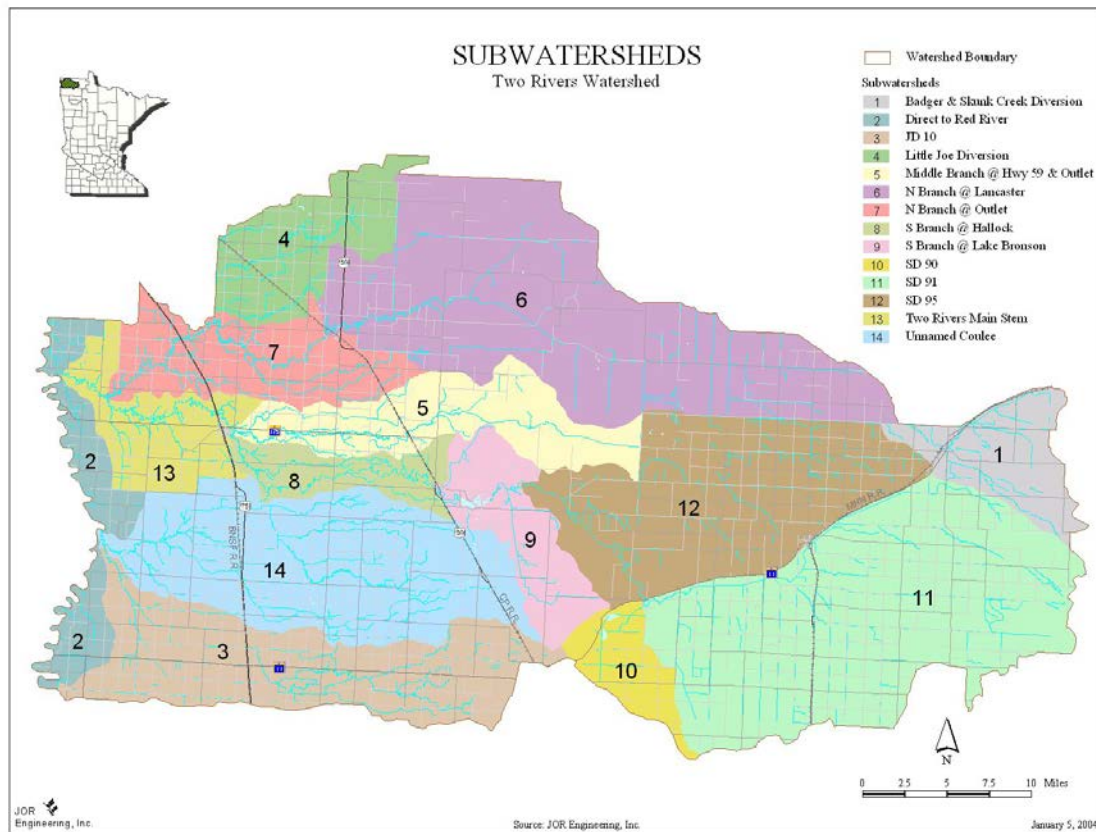
The Two Rivers actually consists of three branches – the North, Middle and South Branch. The South Branch arises southeast of Badger, Minnesota and flows in a westerly direction along the south side of Badger and through the cities of Greenbush, Lake Bronson, and Hallock. The Middle Branch drainage area begins east of the Kittson & Roseau County line and travels through the central portion of Kittson County, outletting 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 where it outlets 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, and a vehicle track company. Also, a bus assembly plant is located in Pembina, North Dakota, just across the Red River. Area population trends show a steady decline.



PROJECT STATUS

EXISTING AND 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.

<i>Project Name</i>	<i>Description</i>	<i>Location</i>	<i>Established</i>	<i>Status</i>
Middle Branch Project #1	9.62 mile channel improvement	Thompson & Hazelton Townships, Kittson Co	1968; PL 566	Yearly Inspection & Maintenance
North Branch Project #2	11.13 mile channel improvement	Richardville, St. Joseph, Granville, & Poppleton Townships, Kittson Co.	1969; PL 566	Yearly Inspection & Maintenance
Soler Project #4	5 mile extension of State Ditch #72	Soler & Moose Townships, Roseau Co.	1979; Petition Project	Yearly Inspection & Maintenance
Dewey Project #5	1.8 mile lateral to State Ditch #91	Sections 26 & 35 Dewey Township, Roseau Co.	1980; Petition Project	Yearly Inspection & Maintenance
Nereson Impound Project	Flood Control Impoundment	Sections 27-28 Nereson Township, Roseau Co	1981; Board Initiated	Yearly Inspection & Maintenance
Nereson Modification Project	Flood Control Impoundment	Sections 33-34 Nereson Township, Roseau Co	2005; Board Initiated	Yearly Inspection & Maintenance
Dewey 5 Improvement Project	Improvement of Dewey #5 Ditch System	Sections 26 & 35 Dewey Township, Roseau Co	2002; Petition Project	Yearly Inspection & Maintenance
Horseshoe Lake Project	Drawdown Structure	Section 14, St. Joseph Township, Kittson Co	2006; Jointly by Kittson Co – DNR- TRWD	Yearly Inspection & Maintenance; Gate Operation
Kennedy Project #6	1.5 mile ditch to connect Kittson CD4 & CD27	City of Kennedy, MN	November 2009; Petition Project	Yearly Inspection & Maintenance
Ross Project #7	Flood Control Impoundment	Sections 26, 27, 28, 32, 33,34, Ross Township, Roseau Co	November 2007; Board Initiated	Yearly Inspection & Maintenance; Gate Operation
Springbrook PL566 Project #10	Set back dikes and Side water inlets along existing waterway	Springbrook Township sections 22,23,28,29,30; Davis Township sections 25,36	December 2013; Petition Project	Yearly Inspection & Maintenance

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 channel & set back dikes – flood control	Sections 3,5,6 Springbrook & Sect. 1 Davis Twp, Kittson Co	August, 2008	Maintenance responsibility of landowners
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PROJECTS NOT CONSTRUCTED

Stokes #3	Offtake drainage ditch	Stokes Twp – 4 miles long	Dropped 1970's	Local opposition
Karlstad Project	Impoundment	Deerwood Twp sect. 8,9,16,17	Dropped 1988	Local opposition
Nereson #8	Impoundment	Nereson Twp, sect.2,3,11	Dropped 2007	Local opposition
Svea #9	Drainage Ditch	Svea Twp, sect. 1 - 12	Dropped 2006	High cost, inadequate outlet
Polonia – Barto	Drainage Ditch	12 miles sections 1-12 in 2 townships	Dropped in favor of Ross Impoundment	Inadequate outlet

POTENTIAL PROJECTS / PROJECTS UNDER INVESTIGATION

Klondike Clean Water Retention Project #11:

A “Project Work Team” was assembled in 2008 to discuss potential flood control projects and activities in the vicinity of Juneberry, Polonia & Barto Townships in Roseau County and Peatland and Klondike Townships in Kittson County. The State Ditch 72 and State Ditch 95 systems have become overburdened with high and excessive water flows from upstream areas, and do not seem to have adequate capacity. In addition, the outlet for this water is limited. The PWT was appointed by the Board of Managers to look into the problems and identify a range of alternatives that could be implemented to help alleviate the flooding conditions.

The recommendation of this project team was that impoundments should be investigated in the upstream areas of Badger Creek. A secondary recommendation was that if a satisfactory upstream impoundment could not be located, then a location at a downstream area should be investigated. It was noted that around 6,000 to 8,000 acre feet should be the target for storing water for the Badger Creek area. The Board of Managers is currently looking for a suitable site for this project.

In 2012 it became apparent that a feasible upstream impoundment site may not be found, and the Board of Managers began to look at 3 sites in the downstream area that the land is currently owned by the District. These areas are listed below, and studies were undertaken for project design at each site.

Klondike 1	Impoundment	Klondike Twp sect 27	Tabled 1991	
Klondike 2	Impoundment	Klondike Twp sect 1-2-11-12	Tabled 1991	
Quick	Impoundment	Polonia Twp sect 30	Tabled 1991	Activated under WRP 2012

The Quick site has been enrolled in the federal Wetland Reserve Program for a 30 year easement, and the Natural Resources Conservation Service is currently working with the TRWD to plan and implement a wetland restoration project which could attain 1,100 acre feet of flood storage.

The TRWD performed engineering, research and analysis regarding the Klondike 1 and 2 sites. It became known that adjacent lands were available, and the potential project footprint was broadened. It was soon apparent that a large scale project could be built within an area 12 to 14 square miles. The District proceeded with an impoundment project under MN Statute 103D, and the new project was named “Klondike Clean Water Retention Project #11”. It is planned to store up to 37,000 acre feet of water from an upstream drainage area of 143 square miles, and will achieve flood damage reduction goals, water quality improvements, habitat improvements, and numerous natural resources enhancements.

A preliminary hearing was held according to statute and the project was established by the Board of Managers. Purchase agreements have been signed to obtain the land needed and project design is underway. The Big Swamp Project Work Team is meeting to discuss and collaborate on the various components of project design and permitting. Sources of funding are being sought, and it is hopeful that by the end of 2015 a work plan will be completed and environmental review will be well underway.

DITCH SYSTEMS

In addition to the above projects, the District operates and maintains several legal ditch systems (See map & table below), which have either been turned over by the County Boards of the County in which each ditch is located or they have been petitioned to the Watershed District by landowners under Minnesota Statute 103E.

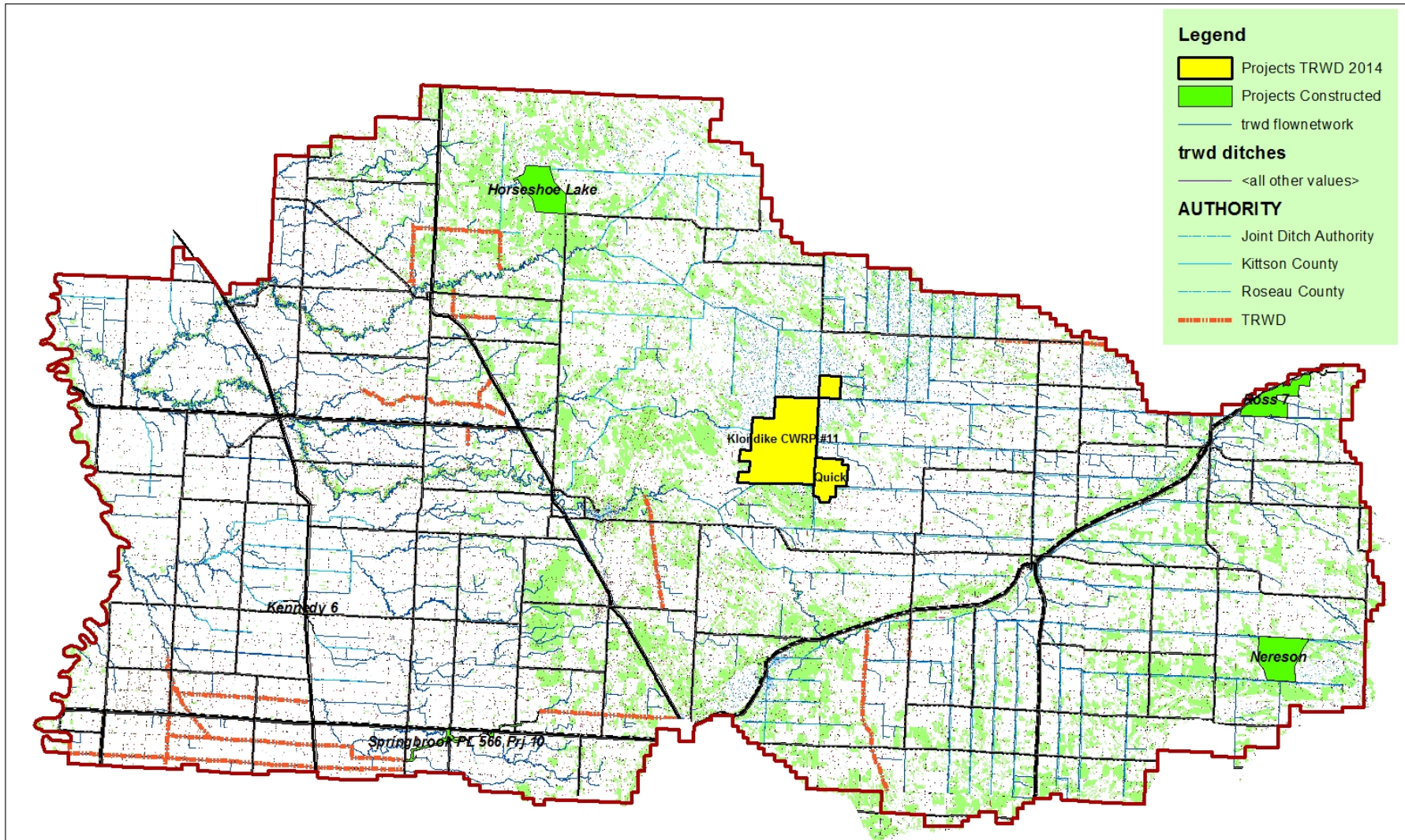
The table below lists both the ditch systems and the drainage projects that the District administers.

Ditches	Length (Miles)	Township(s); County	Fund Balance 12-31-14	2015 Levy
State Ditch #49	5.25	Norway; Kittson Co	\$ (1,265)	\$ 10,000
State Ditch #85 Improvement	0.75	Poppleton; Kittson Co	\$ 11,905	\$ 6,000
Judicial Ditch #3	5.5	Teien; Kittson Co	\$ 9,096	\$ 11,000
Judicial Ditch #10	31	Davis, Svea, Teien, Kittson Co	\$ (53,774)	\$ 42,000
Kittson CD #7	6.5	Svea; Kittson Co	\$ 501	\$ 15,000
Kittson CD #10	7.0	Deerwood; Kittson Co	\$ 14,884	\$ 5,000
Roseau CD #4	7.5	Lind, Dewey; Roseau Co	\$(32,961)	\$ 15,000
Projects				
Middle Branch 1	9.6	Hazelton, Thompson; Kittson Co.	\$ 20,565	\$ 10,000
North Branch 2	11.1	Granville, Hampden; Kittson Co.	\$ 21,044	\$ 10,000
Soler 4	5.0	Soler; Roseau Co	\$ 20,088	\$ 0
Dewey 5	1.8	Dewey; Roseau Co	\$ (14,303)	\$ 4,000
Kennedy 6	1.5	Tegner, Skane; Kittson Co.	\$ (95,097)	drainage lien
Ross 7	impoundment	Ross; Roseau Co	\$ 21,428	N/A
Springbrook 10 / PL566	9.0	Springbrook & Davis Townships, Kittson Co	\$ (226,336)	Drainage lien

These systems are inspected annually and maintenance activities are undertaken if deemed necessary. These activities range from beaver dam removal and beaver trapping to spraying of cattail and other nuisance vegetation to removal of silt and sediment to repair of sloughed side slopes or eroded culverts. 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.

A map showing the locations of each ditch system and each project of the Two Rivers Watershed District is shown on the following page.



Two Rivers Watershed District
Projects & Ditches



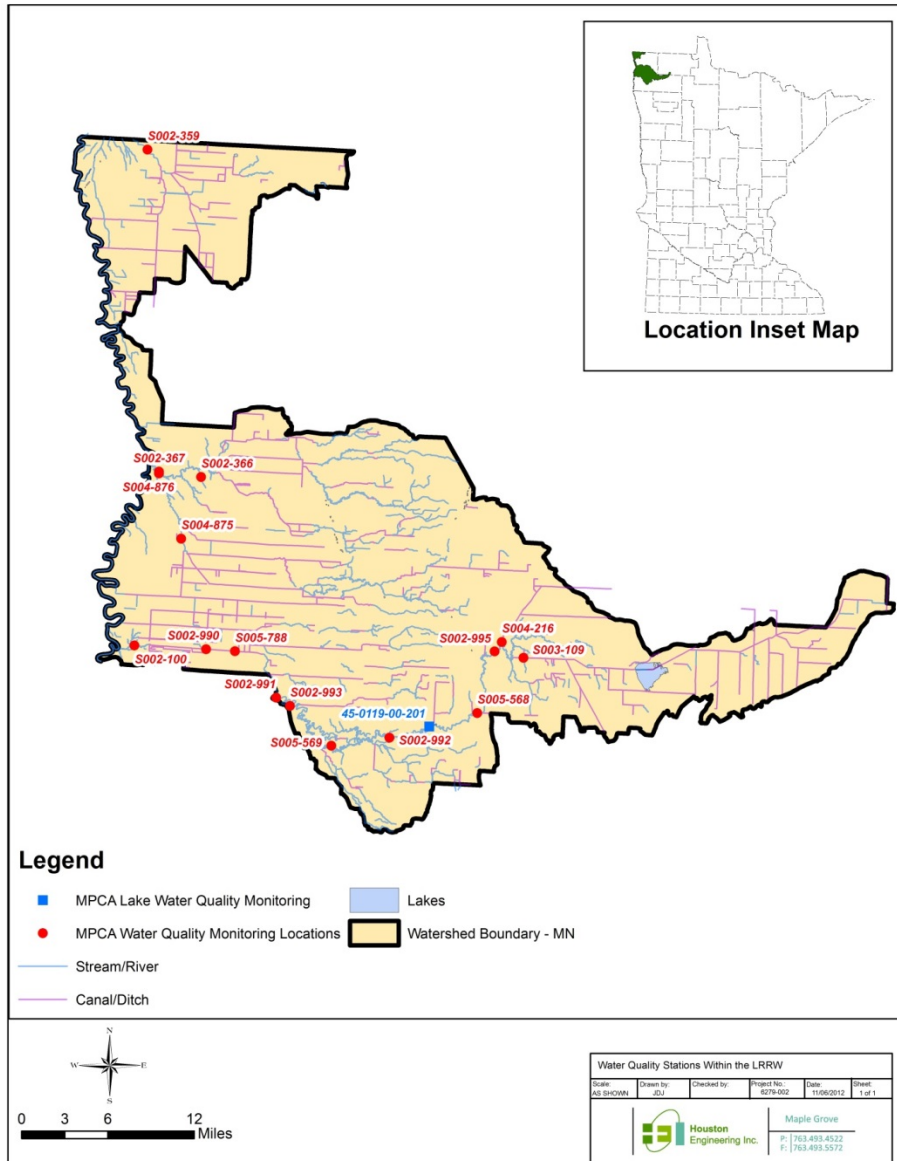
PROGRAM STATUS

WATER QUALITY – “WRAPS”

Lower Red River WRAP

The District partnered with the Joe River Watershed District and the Middle Snake Tamarac Watershed District to undertake the “Lower Red River Watershed Restoration and Protection Project”. This encompasses all of the Joe River, the Tamarac River watershed, and an unnamed coulee within the Two Rivers Watershed District (see map below).

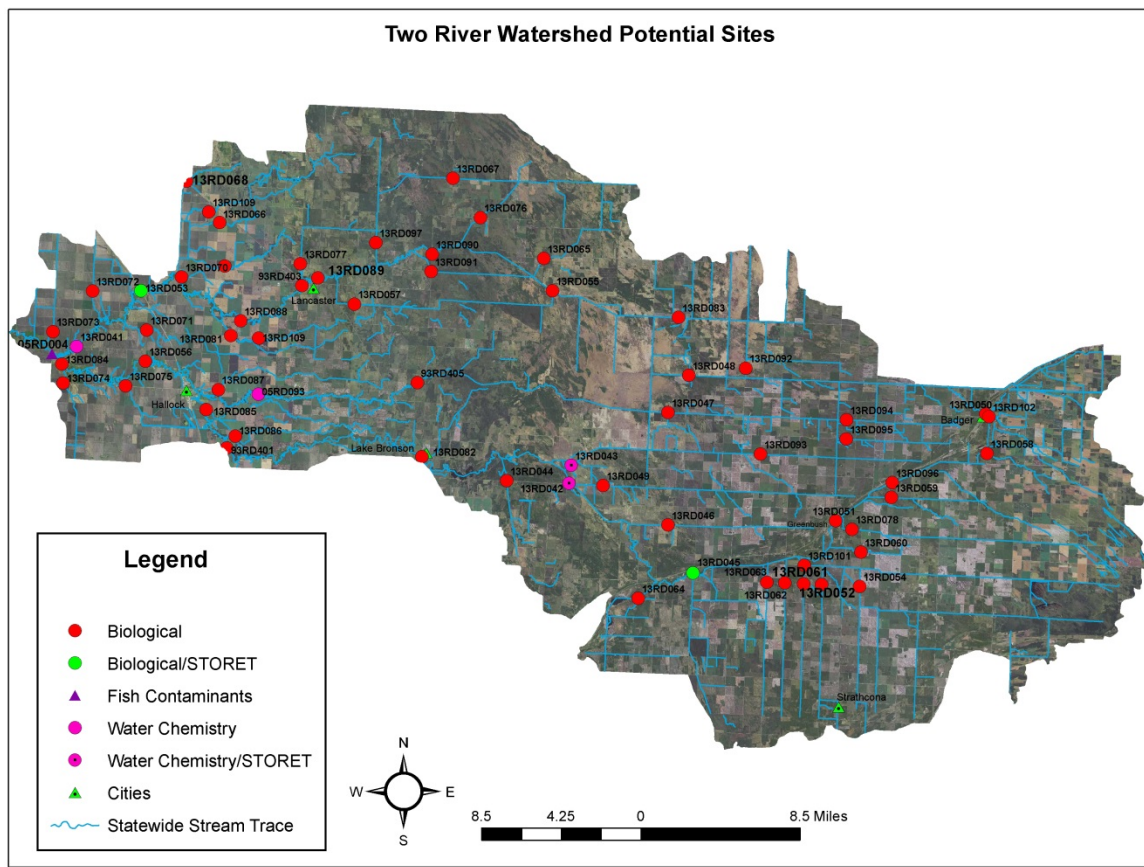
Together the 3 watershed districts receive grant funding from the MN Pollution Control Agency. The project is aimed first at researching all of the water quality data available for a given watercourse, then if necessary additional water quality and stream flow data is collected to produce a ‘conditions report’ to get a full picture of the quality of the resource. The data is then analyzed to determine if any portions of the sub-watershed are impaired or polluted in any way. Then, if there are impairments, the project will do further investigation and research to determine the source of impairment and how best to address the problems, if possible. The process will take up to four years to complete.



The WRAP will enter its fourth year in 2015. A conditions report was written, however it was apparent that there was not enough data available. Therefore, additional data was gathered in 2013 and 2014. Once sufficient data is available the conditions report will be modified and the WRAP process will continue. In addition geomorphology will be studied and the next steps will also include a stressor identification process. Once all of the reports have been completed public hearings will be held to gather input and strategies will be developed to restore and protect water quality within the watershed.

Two Rivers WRAP

This WRAP was in its second year in 2014, and as such intensive monitoring is taking place for everything from water chemistry to fish assessments to macro invertebrates. The information gathered will be used to prepare a conditions report and begin to identify impairments that may exist. Future work for 2015 will be to determine specific reaches of river that are impaired, identification of stressors, and identification of potential practices to reduce pollution sources. Technical data collected will be analyzed by a professional judgement team and stressors will be inventoried and quantified. The WRAP will take up to 2 more years to complete.



Grants

Buffer Strips (Lake Bronson Upstream) – The TRWD is working with the Kittson Soil & Water Conservation District to address water quality concerns on Lake Bronson. The lake is subject to sediment and nutrient loading from a large upstream drainage area. Several legal drainage ditches are tributary to the lake, some are buffered and some are not. The SWCD received a grant from the BWSR to identify and buffer drainage ditches upstream of Lake Bronson to help reduce the sediment load. The TRWD is contributing funding to the grant.

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:

- 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.

Seventy Nine permit applications were processed during 2014.

2014 DISTRICT ACTIVITIES

BOARD MEETINGS

Twelve regular monthly board meetings were held during the course of 2014, each on the first Wednesday of each month. The Annual Meeting was held on January 2, 2014. Two special meetings and three public hearings of the Board were held during the year.

NON-DISTRICT MEETINGS

The District Managers and District staff attended several non-District meetings during the course of 2014 that were related to information and ongoing education. Twelve meetings of the Red River Watershed Management Board were attended regularly, various committees of the RRWMB, the Minnesota Association of Watershed District's Annual Meeting, NRCS – MN State Technical Committee meetings, and other meetings as needed.

TRAINING

Managers and staff attended, as necessary, various training sessions and meetings that were pertinent to the operation of the District.

ADMINISTRATIVE ACTIONS

The District employed a full time District Administrator and a full time Technician during 2013.

Excerpts From 2014 District Newsletter

May 1, 2014 - Newsletter

Impoundment Projects are Key Element to Flood Control

The Two Rivers Watershed District's general purpose under Minnesota Statutes is "to conserve the natural resources of the state by land use planning, flood control, and other conservation projects by using sound scientific principles for the protection of the public health and welfare and the provident use of the natural resources". One method the District has been successful in utilizing to reduce flood impacts is the construction of impoundments. These consist of dikes and structures to impound, or hold floodwaters for extended periods during the spring runoff and during summer floods. These impoundments not only reduce flooding, but at the same time provide an array of natural resource benefits.

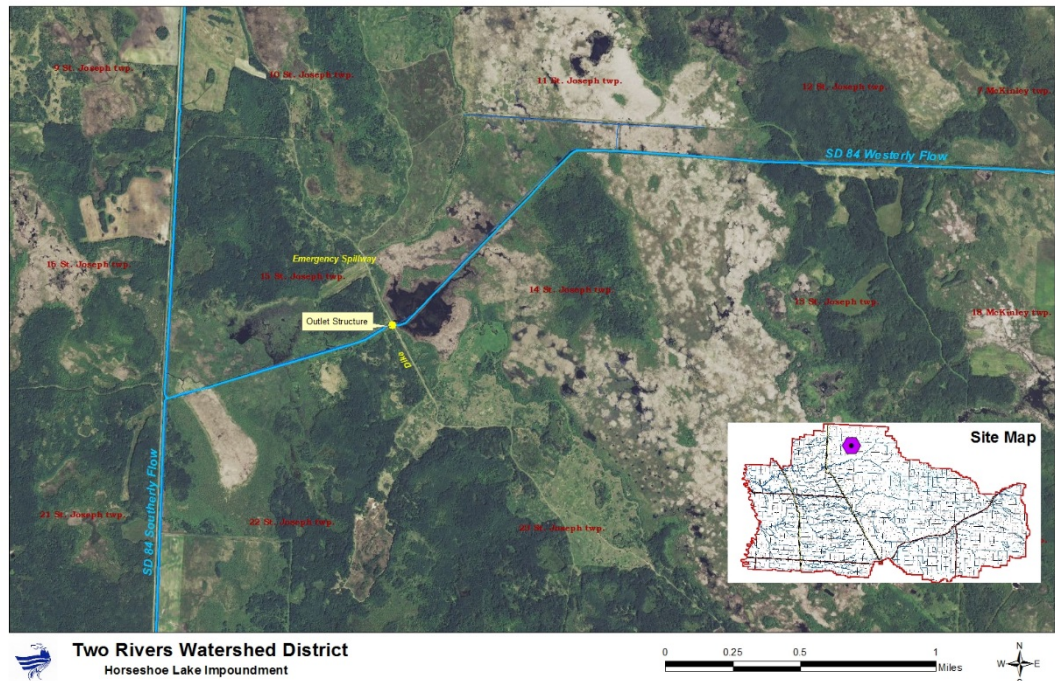
Below are three of the impoundments built and operated by the District, all of which are used on a regular basis. Together, these projects impound over 9,200 acre feet of water. That's a lot of water, considering that one acre foot equals 325,829 gallons. Therefore, if all three impoundments were full, the total water being stored would equal 2,997,626,800 gallons of water!

Horseshoe Lake

The original wildlife structure, located north and east of the City of Lancaster in the SW ¼, section 15, T163N, R47W, was installed in 1968 under the Federal PL-566 program and is referred to as the Horseshoe Lake Wildlife Structure. The project consisted of diking, an emergency spillway, and a 54" diameter x 68' long pipe with an 8' x 16' x 7' concrete box inlet associated with the main outlet, and also a north dike to contain flows from State Ditch #84. Engineering and technical assistance was provided by the Natural Resources Conservation Service (previously known as the Soil Conservation Service) and funding and other resources were provided by both the Minnesota DNR (previously known as the Department of Conservation) and the Two Rivers Watershed District.

This structure was constructed for the purpose of waterfowl production, and it was envisioned that a 351 acre impoundment with an average 2' depth would be created at the normal pool elevation of 974.2 feet. A flood pool of 590 acres would occur at an elevation of 977.1 feet.

The impoundment did not attain its expected wildlife or flood control benefits, and in 2007 the DNR, TRWD, and Kittson County agreed to modify the structure by cutting a 4'x6' notch in the face of the cement box and inserting stoplogs to be able to manipulate the water levels. The new project has a capacity of



storing a total of 2,130 acre feet from a drainage area of 29.4 square miles. This has local benefits to the North Branch Two Rivers and also smaller benefits to the Red River.

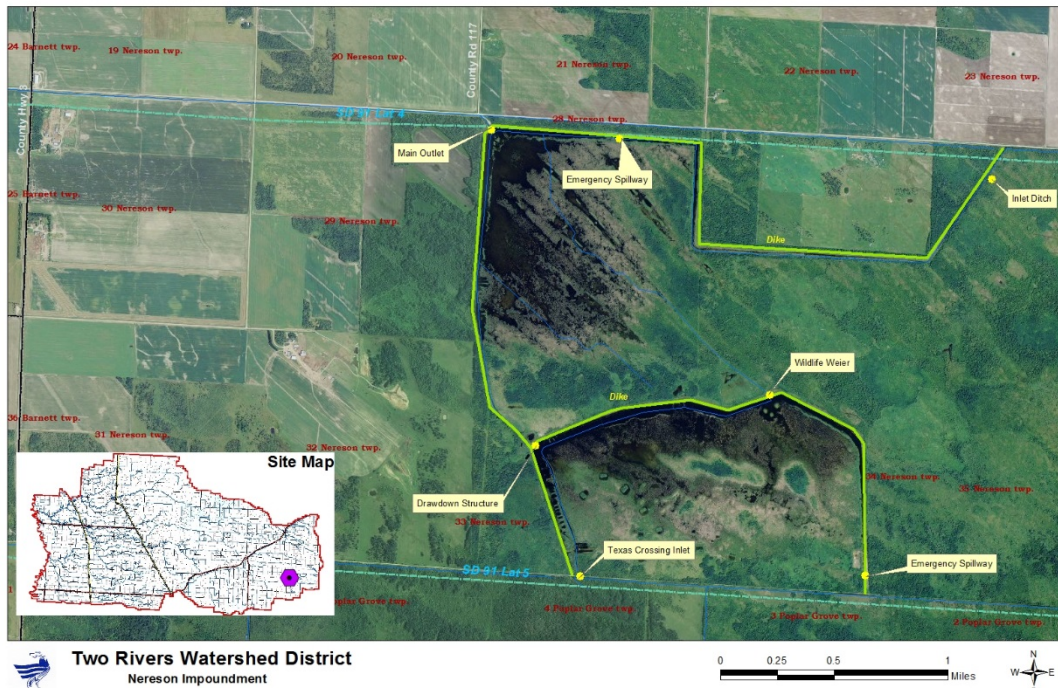
Nereson Impoundment

This impoundment consists of a main impoundment, constructed in the 1980s, and a sub impoundment, constructed in the 1990's. It is located approximately 10 miles southeast of the City of Greenbush on the Nereson Wildlife Management Area, on land owned by the MN DNR. Construction was funded by the State of Minnesota, the Red

River Watershed Management Board, and the Two Rivers Watershed District. Project sponsors are the TRWD, DNR, and Roseau County.

The impoundment includes three water control structures, two emergency spillways, over 5 miles of dikes, and various inlet structures. The total surface water area when full to the emergency spillway covers over 1,500 acres. The impoundment will store 3,500 acre feet when full, and controls up to 4.1” of runoff from an upstream drainage area of over 16 square miles.

Local benefits include flood reduction on state ditch #91, the South Branch Two Rivers, Lake Bronson, and further downstream on the Red River. The control



structures are operated by the MN DNR in close consultation with the TRWD. The impoundment is a dual purpose, with a wildlife conservation pool maintained year around, with a flood pool able to be used during times of flooding.

Ross Impoundment

The Ross Impoundment project was implemented by the Two Rivers Watershed District to achieve the purpose of flood control along Lateral 1 of State Ditch #95 in the upstream areas known as “Skunk Creek”. The project is located south of Minnesota State Highway 11, approximately 2 miles northeast of the City of Badger, MN, in the vicinity of sections 32 & 33 of Ross Township, Roseau County. Major construction was completed in 2007 and 2008, and the project was totally operational during the flood of 2009. It proved its worth the first year of operation and has been used several times since.

Land within the impoundment is controlled by the TRWD either through ownership or flood easements. The land that is owned by the TRWD is either in the federal Conservation Reserve Program or is rented out to producers who either hay it or grow crops such as wheat or soybeans. So far operation of the gate has not impeded the

use of the land for agriculture. This has provided a win-win situation as both flood control and agricultural production has been achieved.

The impoundment has a detailed operating plan and is operated such that whenever there is downstream flooding on the landscape to the point that water is spilling out of downstream ditches or waterways, the gate will be closed. It will remain closed until such time that there is no more downstream flooding, and then the gate is opened to drain down the impoundment dry to allow for agricultural and storage for any additional follow on flood events. Benefits to downstream lands are achieved all the way to the Red River of the North. The impoundment will control up to 3.7” of runoff from an upstream drainage area of 18.2 square miles.

Project Details:

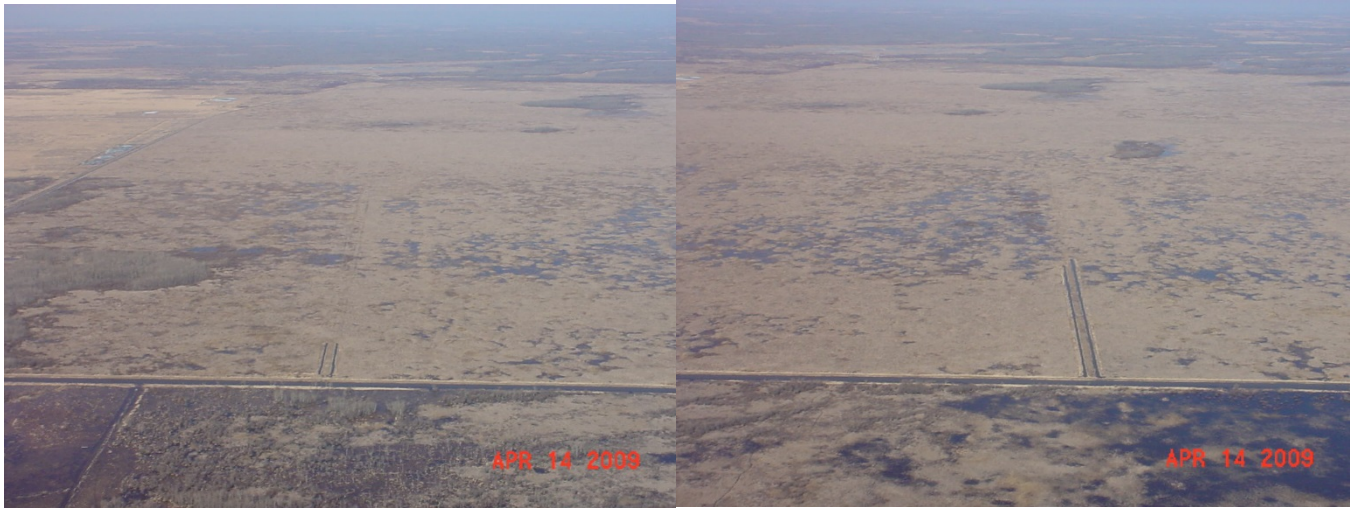
- Upstream Drainage Area - 18.2 Square miles
- Ungated Storage - 1,141 Acre Feet
- Gated Storage - 2,470 Acre Feet
- Total Storage to Emergency Spillway - 3,611 Acre Feet
- Water Surface Area to Emergency Spillway - 1,312 Acres



October 15, 2014 - Newsletter

Two Rivers WD Begins Next Impoundment Project “Klondike Clean Water Retention Project #11”

The Two Rivers Watershed District has begun work on its next impoundment project to help solve flooding problems. A “Preliminary Resolution Hearing” was held on September 12th, 2014, to hear and discuss a potential impoundment located near the Roseau & Kittson County line primarily in Klondike Township, Kittson County. The District formally initiated the “Klondike Clean Water Retention Project #11”.



Potential Impoundment Area – Klondike Township, Kittson County

The project is a culmination of many years of planning, including problem identification, creation of a goal statement, implementation strategies, and selection of a preferred site. The project will have benefits for flood control in the State Ditch #95 watershed, Two Rivers, the Red River, water quality on Lake Bronson, improvement of drainage, prevention of crop damages, reduction of overland flooding, protection of public infrastructure, and protection of farmsteads. It is targeted to provide these benefits mainly for Lateral 1 of State Ditch #95, and will also benefit the North, Middle, and South branches of the Two Rivers, including Lake Bronson and the Red River of the North. The ditch systems currently in place do not have the capacity to carry the water that enters them, and consequently water breaks out of the ditches and creates large scale overland flooding. This results in crop losses, damage to roads, culverts, and bridges, causes erosion and sedimentation, and causes flooding in farmsteads.

Preliminary engineering and a feasibility study contemplates that the project will store about 30,500 acre feet of water (1 acre foot = 325,829 gallons = 1 acre of land covered with water 1 foot deep). A 5 mile long diked inlet channel will be constructed to funnel water from an upstream drainage area of 135 square miles, taking in Badger Creek, Lateral 1 of State Ditch #95, and parts of State Ditch #72. The footprint of the project is expected to cover over 11 square miles. This project concept will be entering the actual engineering and design stage over the coming year. It is anticipated that besides providing flood control this project will provide numerous environmental benefits. Among these include wildlife habitat, water quality improvements, and recreational opportunities for hunting and bird watching.

A project work team was convened from 2009 to 2011 to discuss the problems and potential solutions in the State Ditch #95 system, and come up with a range of solutions to address both flood damage reduction (FDR) and natural resources enhancement (NRE). The team was made up of watershed district managers, county commissioners, soil & water conservation districts, watershed district and county engineers, township officials, local



landowners, state agencies (MN Pollution Control Agency, DNR, Board of Water & Soil Resources), federal agencies (US Fish & Wildlife Service, Natural Resources Conservation Service, US Army Corps Of Engineers), and conservation groups (Nature Conservancy, MN Center for Environmental Advocacy). Once that work was completed, the Watershed District began looking at various alternatives and site locations, and finally settled on the current location. The project work team will be meeting on a monthly basis over the next several months in order to refine the design and to discuss and come up with appropriate natural resource enhancements.

The Two Rivers Watershed District will be continuing to work on this project over the coming months. Anyone with questions regarding the project or any other activities of the District should contact the office at 218-843-3333.

TRWD Sets Tax Levies for 2015

The Two Rivers Watershed District held its Budget Hearing on September 3, 2014 and set its tax and ditch levies for 2015. The District's proposed budget for the coming year shows estimated expenses of \$214,650. This includes all office, administrative, operational, and general expenses. The Board of Managers approved a tax levy in the amount of \$212,500 across the District, which is 85% of the maximum allowable under Minnesota law. The Red River Watershed Management Board previously had set their tax levy for the Two Rivers Watershed District for 2015 at \$443,255 (75% of the maximum), which is a reduction from 2014 in the amount of \$57,213. The RRWMB utilizes this levy to construct flood control projects on a regional basis within the Minnesota portion of the Red River of the North.

The Board of Managers also set tax levies for the various ditches under their jurisdiction as follows: Middle Branch Project - \$10,000; North Branch Project - \$10,000; KCD 7 - \$15,000; KCD 10 - \$ 5,000; SD 49 - \$10,000; SD 85 Improvement - \$6,000; JD 3 - \$11,000; JD 10 - \$42,000; RCD 4 - \$15,000; Dewey 5 Improvement - \$ 4,000. These funds will be used to carry out ditch maintenance, beaver removal, cattail and brush management, and sediment removal on these various ditch systems. The TRWD has established a maintenance program for each ditch, and performs annual inspections and conducts surveys every 5 years.

Ditch maintenance in 2014 included projects on State Ditch #49, the Springbrook PL566 Project #10, Dewey 5 Improvement, and Branch B of Judicial Ditch #10. In addition, detailed surveys were completed on Kittson County Ditch #7 and the main branch of Judicial Ditch #10. For detailed information on these activities please contact the District office.

2014 Water Year Summary

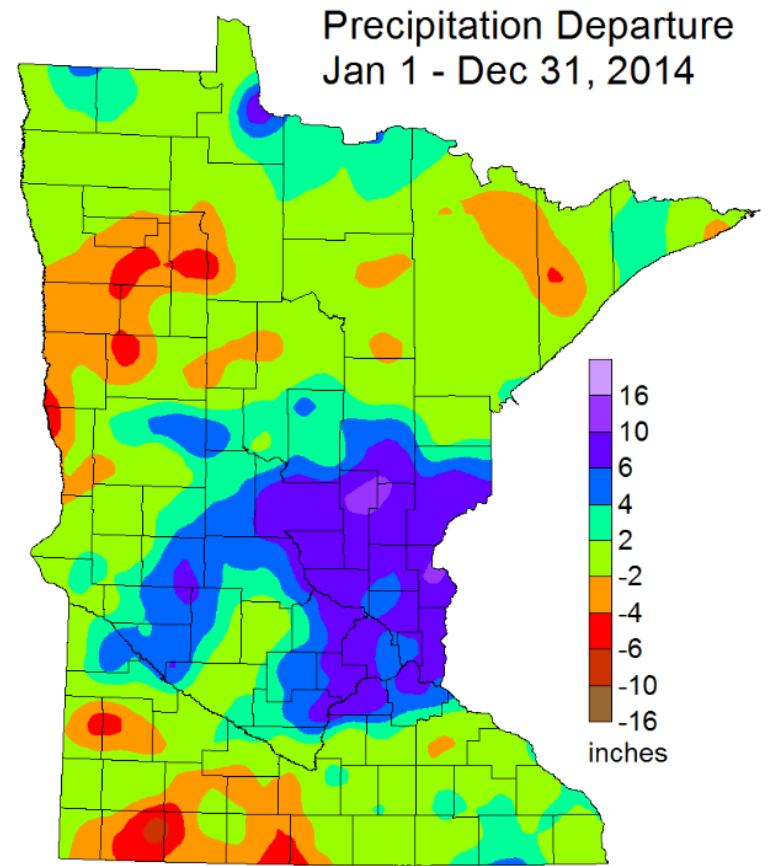
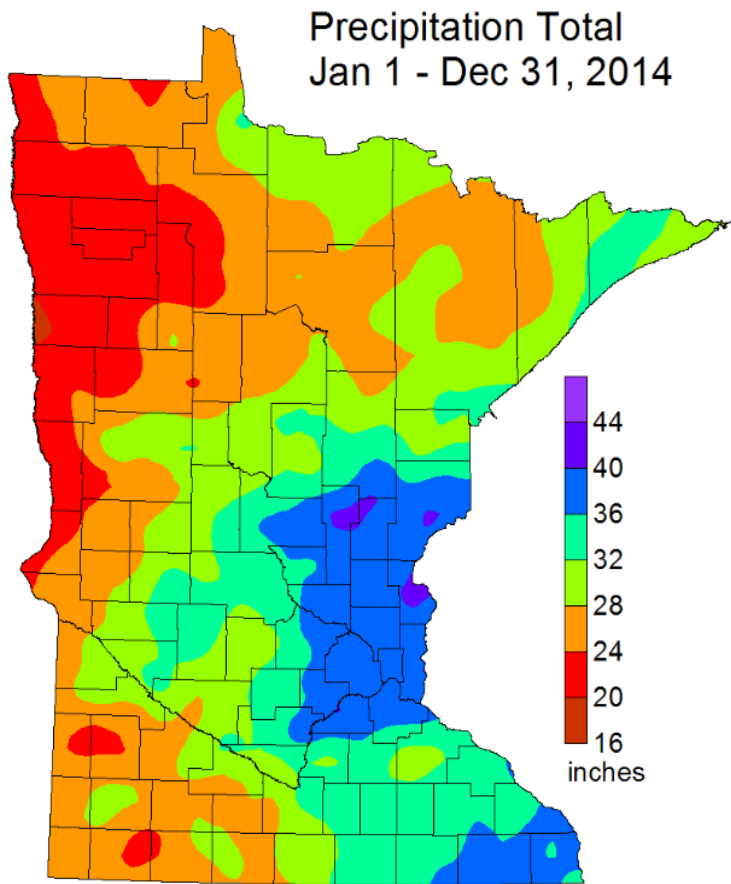
2014 PRECIPITATION

The year was characterized as having a very wet spring through early June, and thereafter fairly dry. Yearly average precipitation was near normal. The following maps, tables, and associated graphics show the snow conditions, snow water equivalents, selected rainfall amounts, and departures from normal conditions.

Kittson County Rainfall 2014

Township & Section	January	February	March	April	May	June	July	August	September	October	November	December	Total
Davis 3-	NR	NR	NR	1.66	3.65	8.27	4.47	2.83	1.77	0.88	0.10	NR	23.63
Spring Brook 25	NR	NR	NR	2.50	3.21	8.23	4.08	2.08	1.20	NR	NR	NR	21.30
Norway 21-	NR	NR	NR	1.45	3.92	5.30	3.04	2.89	2.38	1.18	NR	NR	20.16
Teien 12 -	NR	NR	NR	1.81	3.41	5.35	2.82	NR	NR	NR	NR	NR	13.39
Teien 28 -	0.39	0.24	0.39	2.33	3.71	6.65	0.80	2.01	1.50	0.66	0.14	0.34	19.16
Pelan 34 -	NR	NR	NR	0.60	2.70	6.51	NR	NR	NR	NR	NR	NR	9.81
Jupiter 18	NR	NR	NR	1.71	4.31	6.56	3.83	2.60	1.63	1.09	NR	NR	21.73
Tegner 31 -	0.61	0.25	0.28	2.06	4.39	4.30	5.07	2.30	1.68	NR	NR	NR	20.94
Skane 5 - M	NR	NR	NR	1.59	3.75	6.27	4.26	2.54	1.42	NR	NR	NR	19.83
Svea 23-	0.64	0.26	1.57	2.15	3.67	6.32	2.22	2.18	1.36	0.68	0.30	0.51	21.86
Percy 14 -	NR	NR	NR	NR	4.23	6.08	2.88	4.04	2.64	NR	NR	NR	19.87
Thompson 12	NR	NR	NR	1.39	4.15	4.96	4.40	3.56	1.88	0.87	NR	NR	21.21
Thompson 35 -	0.85	0.33	0.26	2.18	4.79	4.80	NR	NR	NR	NR	NR	NR	13.21
Hallock 13 -	0.89	0.43	0.26	1.94	3.61	5.82	4.84	1.03	2.79	0.95	0.13	.32	23.01
N Red River 9 -	0.55	0.14	1.4	1.55	3.50	5.65	4.03	2.22	1.51	1.23	0.15	0.44	22.37
Caribou 30-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.53	0.31	0.84
Granville 13 -	1.00	0.34	1.39	1.79	4.15	6.38	3.40	3.33	2.48	1.05	0.25	0.33	25.89
Hampden 13 -	2.39	0.67	1.01	1.20	3.46	5.59	3.01	3.09	1.74	0.91	0.18	NR	23.25
Hill 5 -	1.13	0.86	1.15	1.43	4.00	6.38	2.61	2.29	1.44	0.58	0.25	0.34	22.46
St. Joseph 4 -.	NR	NR	NR	2.01	4.23	7.43	3.43	2.75	3.63	NR	NR	NR	23.48
Richardville 10 -	1.50	0.51	0.35	1.62	3.69	7.60	3.28	3.23	1.92	0.72	0.35	0.32	25.09
St. Vincent 24 -	NR	NR	NR	1.32	3.31	4.76	3.56	2.30	1.99	0.79	0.05	NR	18.08
St Vincent 2 -	NR	NR	NR	1.76	2.81	6.96	2.79	1.71	1.79	0.60	NR	NR	18.42
Avg Rainfall Monitors	1.00	0.40	0.81	1.72	3.76	6.19	3.44	2.58	1.89	0.87	0.23	0.37	23.24
NR = No Report													

Source – Kittson Soil & Water Conservation District



DNR State Climatology Office - April 10, 2015

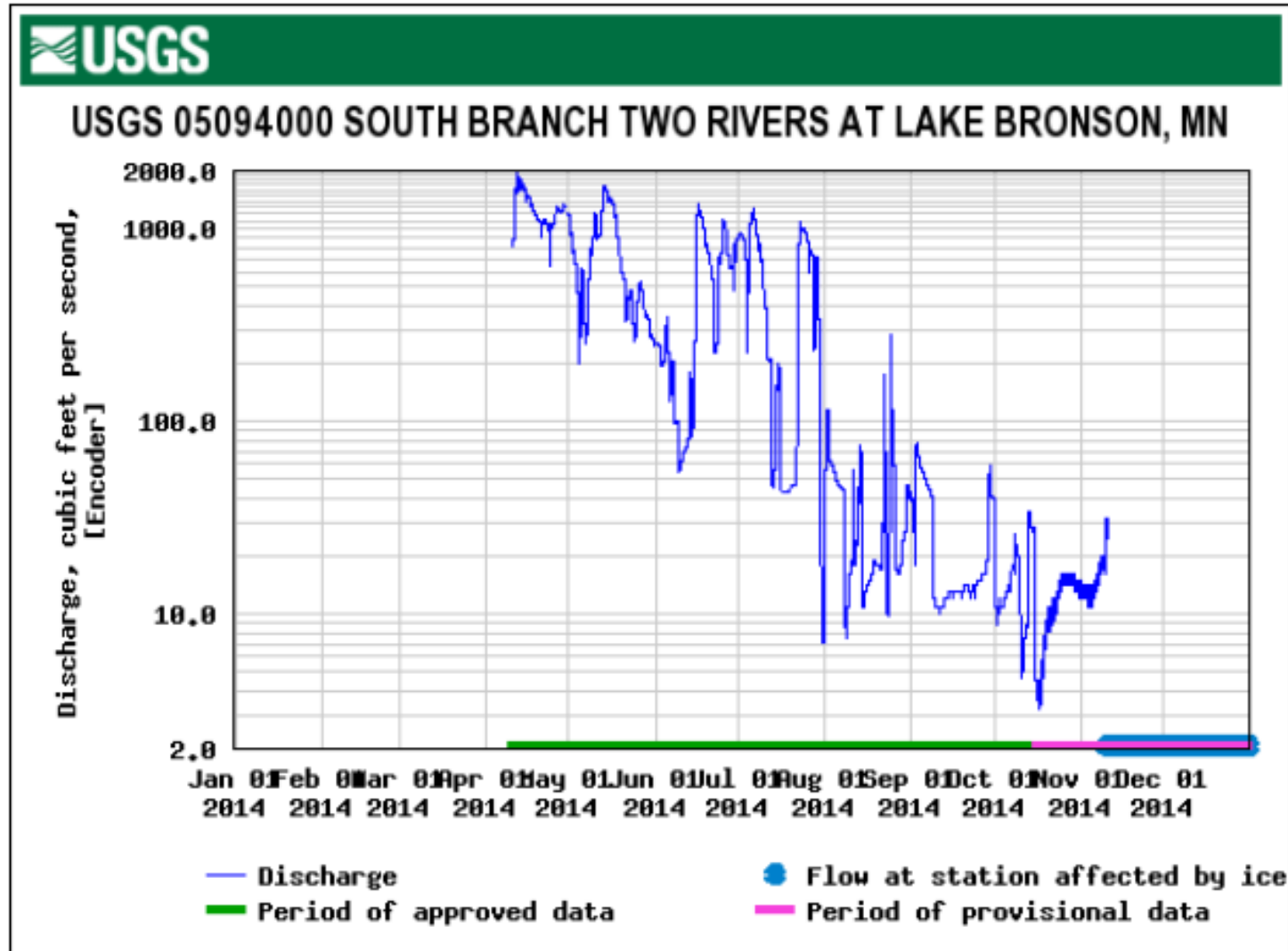
Source - Minnesota Climatology Working Group: <http://climate.umn.edu/>

The District annually collects snow depths and snow water equivalents in order to help analyze snow melt and runoff for spring flooding. The following table shows snow depths and water equivalents taken during March, 2014 at various locations as described.

March 2014			
Location	Name	Depth	Water
SE, NE, Sect. 13, T161N, R49W Gilbert Olson Park, City of Hallock	Hallock	18.5	4.9
SW, SE, Sect. 16, T162N, R49W Wooded lot @ Village of Northcote	Northcote	26	6.2
SE, NE, Sect. 11, T163N, R48W Meadow - scrub shrub	Richardville	23	4.34
SE, NE, Sect. 31, T163N, R46W Logged area (1995)	McKinley	20	4.31
NW, SW, Sect. 26, T162N, R46W CRP Field	Cannon	9.5	2.26
NW, NW, Sect. 11, T159N, R48W Ag field, plowed	Davis	7	2.02
SE, SE, Sect. 2, T160N, R48W Ag field, plowed	Tegner	8	2.33
SE, SE, Sect. 1, T160N, R45W Meadow, Moose Pt. Learning Center	Pelan	18	3.82
SW, SW, Sect. 16, T159N, R44W Scrub Shrub, State WMA	Lind	23	4.58
NE, SE, Sect. 43, T162N, R41W Ag field, plowed	Ross	10	2.92
<i>*2005 Moved to the SW of SW of Sect 34 200ft N of intersection of 310th Ave and Co. 114</i>			
NW, NW, Sect. 28, T160N, R41W Open meadow; outlet to Nereson Imp.	Nereson	15.5	3.23

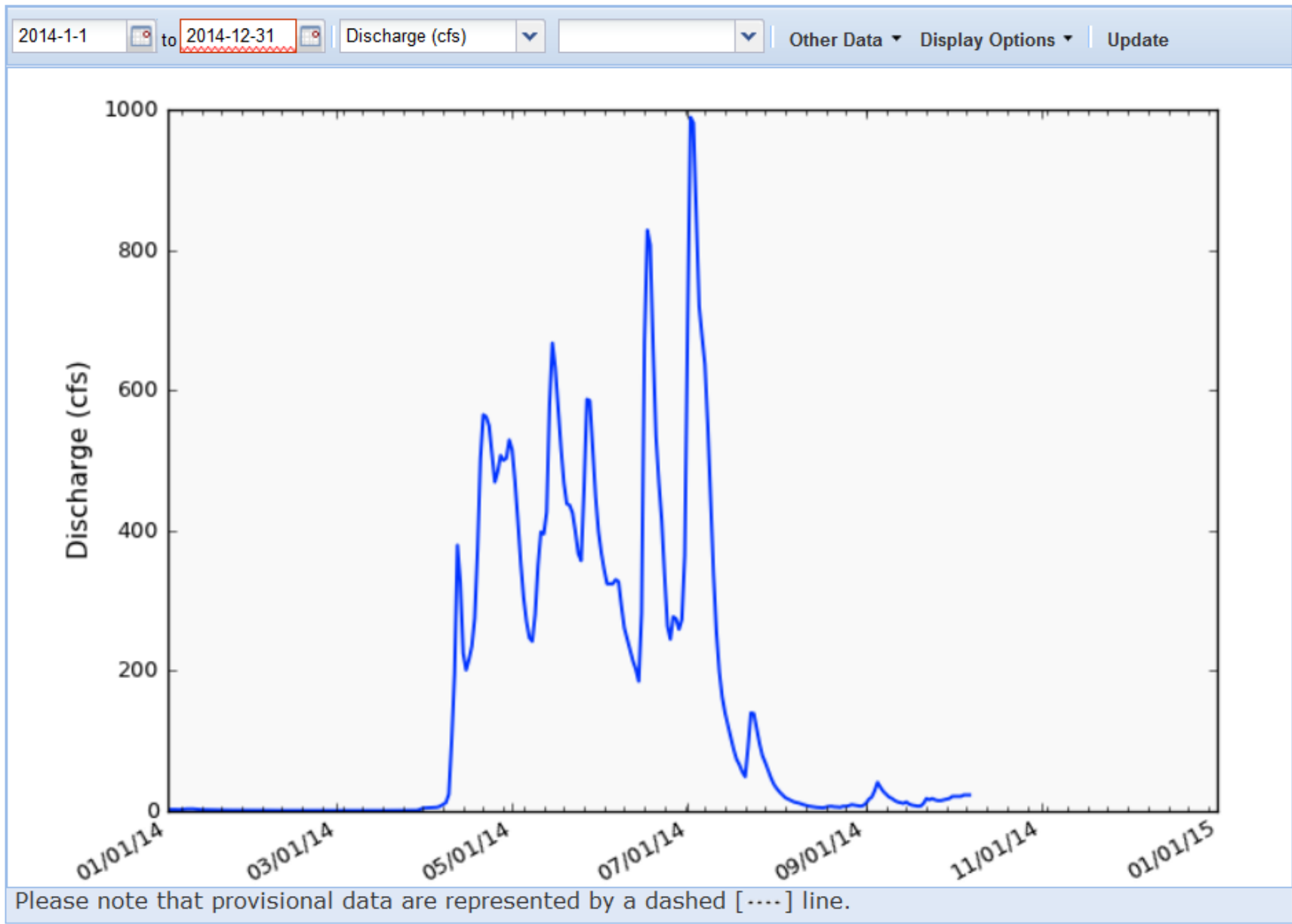
2014 STREAM FLOW

Stream flow and water levels throughout the year were varied by location. The following hydrographs depict streamflows within the Watershed District during 2014. A wet spring led to sustained flows up until July and August, followed by a drier period.

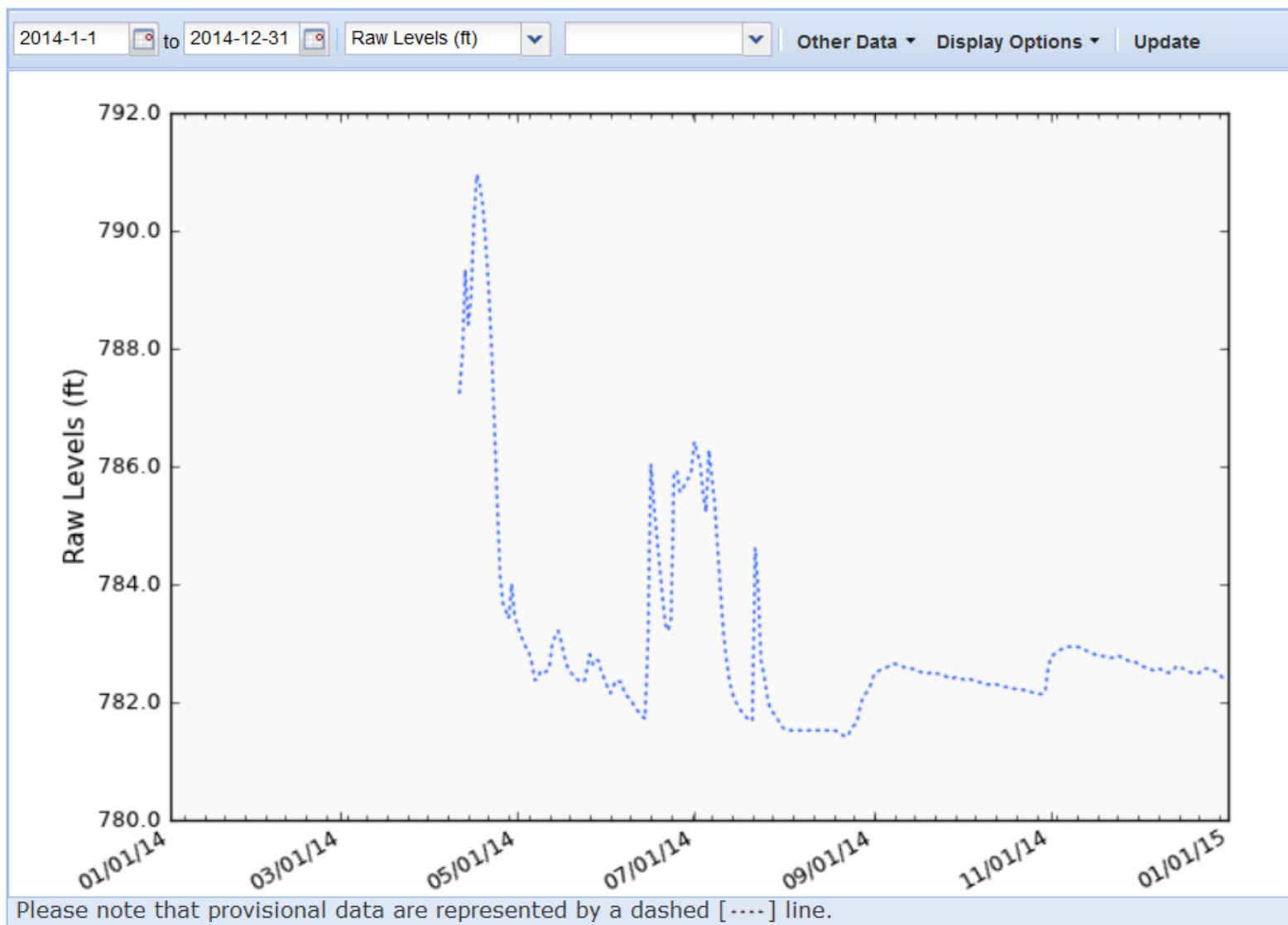


Stream Flows in Cubic Feet Per Second for South Branch Two Rivers at the City of Lake Bronson

Source: US Geological Survey



Stream Flows in Cubic Feet Per Second for the North Branch Two Rivers at Kittson County Road #4, near Northcote
 Source: MN DNR http://www.dnr.state.mn.us/waters/csg/site_report.html?mode=getsitereport&site=70021001



Stream Flows in Mean Sea Level Elevations for the Unnamed Coulee at Kittson CSAH #1, Section 19, Skane Township, Kittson County, MN
 Source: MN DNR - http://www.dnr.state.mn.us/waters/csg/site_report.html?mode=get_site_report&site=69014001

OBJECTIVES FOR 2015

PROJECT ACTIVITY

Inspection and maintenance will be done on all existing projects. Normal maintenance activities include mowing of right of way, removal of brush, spraying vegetation, beaver removal and other obstructions, and repair of any sloughing or erosion and damage to any structures.

IMPOUNDMENTS

Quick – The ‘Quick’ project will continue to be jointly developed with the Natural Resources Conservation Service. This is a wetland restoration and flood control project on over 1,500 acres located in Polonia Township, Roseau County. The purpose of the project is to restore wetlands, habitat, and provide flood control. Plans and specifications for the site will be developed, permits will be applied for, and construction will hopefully be done in 2016.

Klondike Clean Water Retention Project #11 – The District in 2015 will be working on pre project monitoring, HEC RAS model development, project plans and specifications, natural resources enhancements, permitting and environmental concerns, and funding issues. Tentatively it is hoped that this phase will be completed in one to two years and phase one construction could be undertaken in 3 to 4 years.

PROGRAM ACTIVITY

Stream Flow Monitoring: Stream flow and velocities will continue to 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 Lower Red Watershed Restoration and Protection Plan – watershed study will proceed to year 4 in 2014. This is a study of the unnamed coulee system and series of legal ditches that include the Kennedy coulee and the JD 10 systems. It is funded by the MN Pollution Control Agency, and is a collaborative effort between the Joe River, Two Rivers, and Middle-Snake-Tamarac Rivers Watershed Districts. The process will involve analysis of existing data, collection of additional data, public information meetings, identification of sources of impairments, and implementation of correction strategies.

Two Rivers Watershed Restoration and Protection Plan – This study, similar to the Lower Red WRAP, will proceed with year 3 in 2014. Water quality data will be analyzed, potential impairments will be identified, and further monitoring of geomorphology and streamflow will be done.

Other Grants: Work will continue with the ‘Lake Bronson Upstream’ grants.

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.

Permits: The District will continue to review permit applications for projects that affect the water resources of the District and permits will be approved accordingly.

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.

ADMINISTRATIVE ACTIVITIES

The District will continue to employ a full time District Administrator, who will be responsible to keep the meeting minutes, financial reports, permits, and all other paperwork of the District. In addition, the administrator will be required to organize and file all information regarding any programs, projects, or activities of the District. The Administrator will also perform field investigations, data collection, and other technical duties as determined by the Board of Managers.

The District will also continue employing a permanent, full time Technician. The position performs surveying, monitoring and inventory, data management, reporting, permit review, and other duties as dictated by the Administrator.

DITCHES

All District ditches will be inspected in 2014. Judicial Ditch #3 and Judicial Ditch #10 will be surveyed. A maintenance schedule will be followed for each ditch, which will include cattail and brush spraying, beaver and beaver dam eradication, sediment removal, repair of any damages, and other activities as necessary.

BUDGET

The District held a budget hearing in September 2014 to review, adopt, and approve an administrative budget for 2015. The approved budget is listed below. The TRWD levied taxes in the amount of \$212,000 for payable 2014.

Administrative Budget	2014 Adopted
Administrative	65,000
Auto Expense	3,000
Capital Outlay	10,000
Conferences & Meetings	12,000
Dues & Subscriptions	2,000
Engineering	30,000
Information & Education	1,000
Insurance	2,250
Manager's Per Diem & Expense	12,500
Office Supplies & Miscellaneous	1,500
Payroll Tax Expense	25,000
Postage & Delivery	1,000
Printing & Advertising	1,000
Professional & Legal	20,000
Rent	5,000
Telephone	1,400
Totals	192,650

FINANCIAL SUMMARY

The following pages contain selected information from the annual audit for the Two Rivers Watershed District as supplied in accordance to state law by the certified public accounting firm of Drees, Risky & Vallager, LTD. This audit covers the period of January 1, 2014 to December 31, 2014. A complete version of the audit is available upon request.