



Red Lake  
Watershed District  
**2021**  
Annual Report





Letter from the President .....	3
Board of Managers – 2021 .....	4
Staff – 2021 .....	4
History of the Red Lake Watershed District .....	8
<b>2021 District Projects.....</b>	<b>9</b>
Pine Lake Watershed (RLWD Project No. 26) .....	9
Pine Lake Flood Damage Reduction and Habitat Project (RLWD Project No. 26B) .....	10
Redetermination of Judicial Ditch 72 (RLWD Project No. 41) .....	11
Burnham Creek Wildlife Habitat Project (RLWD Project No. 43A) .....	13
Challenger Ditch (RLWD Project No. 122) .....	13
Threat Ring Dike (RLWD Project No. 129AS) .....	14
Red Lake River One Watershed One Plan (RLWD Project No. 149).....	14
Thief River One Watershed One Plan (RLWD Project No. 149A) .....	16
Erosion Control (RLWD Project No. 164).....	17
Black River Impoundment (RLWD Project No. 176).....	17
Petition to Establish Red Lake Watershed District No. 16 (RLWD Project No. 177) .....	18
Thief River Falls Westside Flood Damage Reduction Project (RLWD Project No. 178).....	19
Petition for the Improvement to Polk County Ditch No. 39 (RLWD Project No. 179) .....	22
Nelson Ring Dike (RLWD Project No. 129AU).....	22
<b>Flood Control Impoundments .....</b>	<b>24</b>
Euclid East Impoundment (RLWD Project No. 60C) .....	26
Brandt Impoundment (RLWD Project No. 60D).....	27
Parnell Impoundment (RLWD Project No. 81) .....	28
BWSR Flood Storage Easement Pilot Site 1 “Tiedemann Site” (RLWD Project No. 133C) .....	29
North Parnell Site 2 “Gasper Site” (RLWD Project No. 154) .....	29
Pine Lake (RLWD Project No. 35).....	32
Little Pine Lake (RLWD Project No. 26A).....	34
Elm Lake-Farmes Pool (RLWD Project No. 52).....	35
Lost River Impoundment (RLWD Project No. 17).....	36
Moose River Impoundment (RLWD Project No. 13) .....	38
Schirrick Dam (RLWD Project No. 25) .....	40
Black River Impoundment (RLWD Project No. 176).....	41
<b>Maintenance of Drainage Systems.....</b>	<b>42</b>
<b>Water Quality Program .....</b>	<b>56</b>
Long-Term Water Quality Monitoring Program .....	56

<b>Dissolved Oxygen Logger Deployments</b> .....	65
<b>Blue Green Algae Sampling</b> .....	68
<b>Bartlett Lake</b> .....	69
<b>Watershed Restoration and Protection Strategy (WRAPS) Projects</b> .....	70
<b>Public Education</b> .....	70
<b>Red Lake River Watershed One Plan (1W1P)</b> .....	71
<b>Red Lake River Small Watersheds Focus 319 Grant</b> .....	74
<b>Thief River One Watershed One Plan (1W1P)</b> .....	76
<b>Clearwater River One Watershed One Plan (1W1P)</b> .....	82
<b>Red River Watershed Management Board Water Quality Funding</b> .....	83
<b>BWSR Clean Water Fund Grants Awarded to the RLWD and Local SWCDs</b> .....	83
<b>Thief River Falls Oxbow Restoration Project</b> .....	85
<b>Water Quality Partnerships</b> .....	87
<b>2022 Plans</b> .....	89
<b>GIS</b> .....	90
<b>Other Watershed Activities</b> .....	97
<b>Permits (RLWD Project No. 90)</b> .....	97
<b>Wild Rice Water Allocation (RLWD Project No. 45)</b> .....	98
<b>Stream Flow &amp; Pool Elevation Monitoring (RLWD Project No. 21)</b> .....	99
<b>Geographic Information Systems-GIS (RLWD Project No. 145)</b> .....	100
<b>Website</b> .....	101
<b>Financial Report</b> .....	102

## **Letter from the President**

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Greetings to all the citizens of the Red Lake Watershed District and other interested parties.

Please take some time to look through the 2021 Annual Report to get a first-hand glance at how much good work the Red Lake Watershed District has completed this year. During the construction season of 2020 and 2021, the district has started and have completed construction on various projects which have totaled over \$18,000,000. The construction and completion of Thief River Falls Westside Flood Damage Reduction Project, the establishment of RLWD Ditch #16 and various projects listed in our Red Lake and Thief River One Watershed One Plans highlight some of the projects in this report. There are also projects in various stages of construction which include the Black River Impoundment and Pine Lake Outlet Structure. These projects will be completed in early 2022 and are also featured in this report. As we move into 2022, the RLWD will continue to look at water quality and water quantity projects throughout our District.

In 2021, we had two members of the Red Lake Watershed Board of Managers who were appointed by their respective counties. Gene Tiedemann, Euclid, was reappointed to a three-year term by the Polk County Board of Commissioners and Tom Anderson, Clearbrook, was appointed by Clearwater County to replace Les Torgerson, Gonvick, to serve a three-year term. First, I would like to thank Les Torgerson for his commitment over the years in serving the residents of Clearwater County. It was a pleasure working with him over the years and wish him well as he continues with his retirement travels. I also want to welcome Tom Anderson to the Board and welcome his experience as a past County Commissioner to assist the district in developing projects that will serve the residents of Clearwater County.

Another item that I must share with the residents of the Red Lake Watershed District is the recent retirement of Arlene Novak, the districts Accounting Officer. Arlene worked for the Red Lake Watershed District for upwards of 36 years and did a fantastic job in assuring the Red Lake Watershed District funds were maintained at a very high level. When you review the financial report in this document, you can only imagine the hard work and organization it takes in balancing each fund as well as assuring the Board is kept up to speed on the ever-changing budget funding commitments of the district. On behalf of the Red Lake Watershed District Board of managers, I would like to thank Arlene for her hard work and dedication to the district the past 36 years and congratulate her on the well-deserved retirement.

Please find our 2021 Annual Audit which is included in this report in an abbreviated form. A complete copy of the Annual Audit may be obtained at the district office at 1000 Pennington Avenue South, Thief River Falls, as well as on our website [www.redlakewatershed.org](http://www.redlakewatershed.org).

The Watershed District office is located at 1000 Pennington Avenue South, Thief River Falls, MN. Feel free to stop in and have a cup of coffee, but if you do not have time, please go to our website <http://www.redlakewatershed.org> and take a virtual tour of our facility, as well as get updates of projects throughout the year.

In closing, I would like to remind the citizens that the goals of a watershed district are to manage water in the areas of flood control, drainage, and water quality. We continue to hold our meetings on the second and fourth Thursday of each month and welcome public interest and/or attendance at these meetings.

I would like to thank the citizens of the district for being supportive of our mission and it was a pleasure to serve as President of the Board in 2021.

Sincerely,



Dale M. Nelson, President



## **Board of Managers – 2021**

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**Front Row** (left to right): Terry Sorenson, Treasurer; Dale M. Nelson, President; and Gene Tiedemann, Vice President. **Second Row** (left to right): Tom Anderson, Brian Dwight, Allan Page; and LeRoy Ose, Secretary. Gene Tiedemann, representing Polk County was reappointed to serve an additional 3-year term for the years 2021-2024. Tom Anderson was appointed by Clearwater County to replace Less Torgerson to serve a 3-year term.

## **Staff – 2021**

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**Front Row** (left to right): Tony Olson, Arlene Novak, Tammy Audette, Ann Joppru and Christina Slowinski.  
**Back Row** (left to right): Nate Koland, Myron Jesme, Nick Olson, Corey Hanson.

## **Arlene Novak Retires after 36 Years with the District**

After 36 years of dedicated service to the Red Lake Watershed District, Arlene Novak retired from full-time employment in October 2021. Arlene's professional career with the District started in 1986 after being hired as the accounting secretary. Arlene was instrumental in developing the District's accounting software that was still in place upon her retirement. Arlene was a very dedicated employee and single handedly managed the day-to-day funds of the District as identified under Minnesota Statutes. Arlene also wore other hats for the District which included Human Resources as well as the District's wellness program. Arlene was a delight to work with and will be missed by her co-workers and Board members alike. After 36 years of dedicated service, we wish Arlene well in her retirement and if you see her on the street congratulate her on all her years of service to our watershed community!



Best wishes Arlene!



## Red Lake Watershed District Office

1000 Pennington Avenue South  
Thief River Falls, MN 56701  
Office Hours: Monday – Friday 8:00 a.m.– 4:30 p.m.  
Phone: 218-681-5800 ~ Fax: 218-681-5839  
Website: [redlakewatershed.org](http://redlakewatershed.org)  
E-Mail: [RLWD@redlakewatershed.org](mailto:RLWD@redlakewatershed.org)



### Meetings

The Board of Managers held twenty-four regularly scheduled board meetings and two Special Meetings in 2021. These regular meetings are normally held the 2<sup>nd</sup> and 4<sup>th</sup> Thursday of each month at the District office at 9:00 a.m. Due to the Covid19 pandemic, the 2021 RLWD Advisory Committee meeting was cancelled. Notice of these meetings are mailed or e-mailed to the Advisory Committees, county auditors, county commissioners, and SWCD/NRCS offices and by request. The agenda, minutes and Board meeting packet from board meetings are available by visiting our website at [www.redlakewatershed.org/minutes](http://www.redlakewatershed.org/minutes).

The 2021 General Fund budget was set at \$150,337. The General Fund Budget hearing for 2021 was held on August 27, 2020. Notice for the General Fund Budget hearing was published in at least one newspaper in each of the 10 counties within the District.

## 2021 Advisory Committee

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### Black River

Dan Schmitz, RLF  
Curt Beyer, RLF  
Greg Dyrdal, TRF

### Moose River

Wayne Larson, Middle River  
Elroy Aune, Gatzke

### Upper Red Lake Area

John Ungerecht, Northome  
Wayne Skoe, Northome  
Shane Bowe, Red L. Band Chippewa Indians

### Thief River Area

Dave Rodahl, TRF  
Trent Stanley, Grygla  
Steve Holte, Grygla  
Jim Sparby, Grygla

### Clearwater River Area

Steve Linder, Oklee  
John Gunvalson, Gonvick  
Mark Larson

### Lost River Area

Gary Mathis, Gonvick

### Pine Lake Area

Dave Dalager, Gonvick

### Red Lake River Area

### Hill River Area

Jake Martell, Oklee

### Walker Brook Area

John A. Nelson, Clearbrook

### Grand Marais/Red Area

Roger Love, EGF

### Burnham Creek Area

### Poplar River Area

### Clearwater Lake Area

### Sportsman Clubs

Jim Counter  
Larry Peterson

Members of the local SWCD's offices are also asked to participate on the Advisory Committee.

Members of the Advisory Committees did not meet in 2021 due to the COVID19 pandemic



## **History of the Red Lake Watershed District**

The Red Lake Watershed District (District) covers an area of approximately 5,990 square miles in northwestern Minnesota and includes all Red Lake County, most of Pennington County, and parts of Mahnommen, Polk, Itasca, Marshall, Clearwater, Beltrami, Roseau, and Koochiching Counties.

A governmental unit known as the Red Lake Drainage and Conservancy District preceded the District, whose territory included approximately the same land. Under the Conservancy District, three major improvement projects were completed: dredging of the Clearwater, Red Lake, and Lost Rivers.

The Board of Directors of the Red Lake Drainage and Conservancy District felt the District could better function under the Minnesota Watershed Act. The Board petitioned the District Court for the right to operate under Chapter 112, the Minnesota Watershed Act. A hearing was held in Thief River Falls on January 25, 1969, and the Conservancy District was authorized to operate under and exercise all the rights and authorities contained in the Minnesota Watershed Act.

The Board petitioned the Minnesota Water Resources Board (now the Board of Water and Soil Resources) on July 24, 1969, amended January 20, 1970, for a change of name, review of boundary, and distribution of managers of the District. A hearing on the matter was held at Thief River Falls on March 31, 1970, and at Kelliher on April 2, 1970. In their Order, the Water Resources Board stated that the principal place of business shall be at Thief River Falls; that a description of the land within the District be written; specified that the Board of Managers be seven members, the procedure by which county boards shall appoint managers and terms of office for the Managers.

On March 25, 1975, the District adopted the Rules and Regulations pursuant to Minnesota Statutes. They were amended on May 12, 1978; December 14, 1978; August 10, 1989; and reviewed and updated on June 24, 1993, and again in 2015 to be entitled "Permit and Drainage Rules of the Red Lake Watershed District."

In 1977, the District signed a Joint Powers Agreement with other watershed districts in the Red River Basin to form the Lower Red River Watershed Management Board. In 1991, the name was changed to the Red River Watershed Management Board. This organization currently consists of eight watershed districts in the Red River Basin and provides funding to member districts, primarily for floodwater detention structures, which benefit more than one-member district. The levy collected is used for funding the development, construction, and maintenance of projects of common benefit to the Red River Basin.

The District currently is governed by Minnesota Statutes 103D, which provides a broader scope for a local unit of government to manage quantity and quality of water within the hydrological boundaries.

## 2021 District Projects

### Pine Lake Watershed (RLWD Project No. 26)

In 2013, at the request of the Property Owners of Pine Lake Association (POOPLA), the Board of Managers hired HDR Engineering, Inc. to investigate the Pine Lake Watershed, to not only come up with solutions and alternatives that could assist in frequent flooding on Pine Lake, but also investigate the opportunities for distributed storage sites which may assist the District in our long range plan to reduce flooding to the Red River of the North by implementing the Red Lake Watershed 20% Reduction Strategy.

After various landowner meetings held in 2014 and 2015, it was apparent that there was interest in looking at areas upstream of Pine Lake to determine if any Flood Damage Reduction (FDR) projects could be developed. This interest led the RLWD in applying for and being approved for a Natural Resource Conservation Service PL566 grant which will assist in a study which could lead to the possibility of engineering and design of Flood Damage Reduction (FDR) projects in the Pine Lake Watershed. It is the hopes of the District that the contracts will be signed and executed in early 2016, with a comprehensive study to be completed which would lead to projects being developed to reduce flood damages in the Red Lake Watershed District.



On January 11, 2016, the District entered into an agreement with the Natural Resource Conservation District to complete a comprehensive watershed plan using the Regional Conservation Partnership Program (RCPP). This program encourages partners to join in efforts with producers to increase the restoration and sustainable use of soil, water, wildlife and related natural resources on regional or watershed scales. The District proceeded with the RCPP process through 2017 and hoped to complete the required step process in 2018. Due to time and delays in being able to reach a consensus with permitting folks on how to forward with the purpose and need of the project, grant dollars have been exhausted and a decision on how to move forward will have to be made.

In 2019, after various roadblocks were presented by the Minnesota Department of Natural Resources concerning the proposed projects upstream of Pine Lake, the Red Lake Watershed District Board of Managers made a request to the Natural Resource Conservation Service to move forward in closing-out the agreement for this project. On May 18, 2020, the District received a letter from the USDA/NRCS indicating that after review of the above referenced agreement, they have determined that the terms and conditions were met, and all funds have been expended thus closing out the agreement.



## **Pine Lake Flood Damage Reduction and Habitat Project (RLWD Project No. 26B)**

As a result of the work that was completed on the Pine Lake Watershed, RLWD Project No. 26, it was determined there may be a few components of the RCPP study could be used to capture a few of the goals listed in the report. The Project Work Group continued to work on portions of the study they could reach a consensus on. One item agreed on was the replacement of the old sheet piling stoplog structure at the outlet of Pine Lake and replacing it with a more operational structure to better reduce lake elevations in the fall thus capturing additional FDR benefits in the spring. There was also interest in designing a fish passage structure to allow migration of fish to and from Pine Lake. At a hearing held on March 11, 2021 at the Red Lake Watershed Board Room, the Red Lake Watershed Board of Managers approved the establishment of the Pine Lake Flood Damage Reduction and Fish Habitat, RLWD Project 26B. On July 22, 2021 bids were opened with the low bid being awarded to Wright Construction of Thief River Falls contingent upon final audit by Engineering staff, RLWD staff and legal counsel. Upon completion of the audit, there were various issues of concern with the bid. On August 5, 2021 the RLWD Board held a special hearing to discuss concerns with the bid. Upon considerable discussion, bid was awarded to Davidson Construction, Inc. in the amount of \$342,162.00. Construction of the project was substantially completed in the fall of 2021 with final completion spring of 2022.



Looking North at the outlet channel



Fish Passage Structures



Outlet Structure without steel gates and catwalk

## **Redetermination of Judicial Ditch 72 (RLWD Project No. 41)**

On July 31, 2017, the Joint Board for Judicial Ditch 72 held a public meeting at the McIntosh Community Center for the consideration to complete a “Redetermination of Benefits and Damages” to the public drainage system per Minnesota Statutes 103E.351. After considerable discussion by landowners and the Joint Board, it was determined by the Board to move forward with the redetermination of benefits and damages. At their meeting held August 22, 2017, the Joint Board approved by unanimous motion to appoint three viewers to complete the redetermination process as stated under statutes.

Due to the complexity of completing a redetermination on upwards of 6 public drainage systems as well as a delay in hearing for COVID 19, the project continued into 2021. After the Viewers Report was filed with the Joint Board, a public hearing was set for 2:00 pm April 6, 2021, at the McIntosh Community Center. As a result of the public hearing and questions by the public, it was determined by the Joint Board that the Viewers should review some of the areas in question and meet with landowners to clear up some of the issues that arose. Upon the Viewers completing the tasks directed by the Joint Board, a continuation of the hearing was scheduled and held at 2:00 pm June 24, 2021, at the McIntosh Community Center. After the Viewers completed their amended report, the Joint Board approved by motion the Redetermination of Judicial Ditch 72 and ordered legal counsel to draft the Finding of Facts and Order Approving the Redetermination of Benefits Pursuant to Minnesota Statutes 103E.351.

On September 28, 2021 at 11:00 am, a public hearing was held under Minnesota Statutes 103E.801 for the “Consolidating or dividing drainage systems” which included but not limited to Judicial Ditch 72 (Branch 1) (Branch 2) (Branch 3) and County Ditch 88 (Branch 1), County Ditch 136 (Branch 10), County Ditch 88 (Main), Judicial Ditch 72 (Branch 12) (Branch 13) (Branch 13-1) Branch 13-2) (Branch 13-3) (Branch 14) (Branch 15E) (Branch 15W) (Branch 16). During the public hearing, it was requested by landowners that due to the fact there were two distinct outlets for the remaining Judicial Ditch #72 system, that remaining portion be separated into two legal drainage systems with one being located west of the Lost River and one being located east of the Lost. River. Upon considerable discussion by the Board, a motion was made and approved to separate the remaining Judicial Ditch #72 into two systems and that the portion located west of the Lost River be named Joint Ditch 100 and the portion east of the Lost River be named Joint Ditch 101.







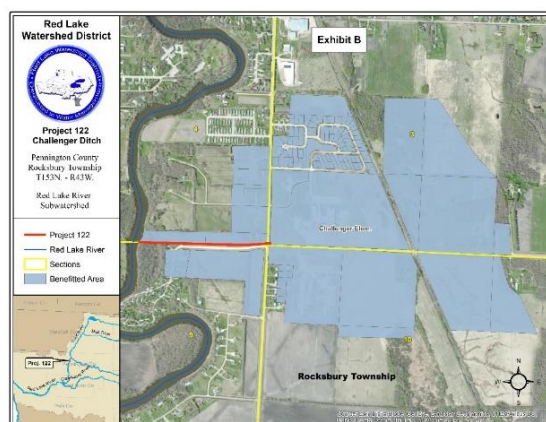
## **Burnham Creek Wildlife Habitat Project (RLWD Project No. 43A)**

During the summer of 2019, the District was contacted by the Minnesota Department of Natural Resource Wildlife staff concerning the outlet structure for the Burnham Creek Wildlife Habitat portion of the project which was a component of a multi-purpose flood control project completed in 1988 known as Burnham Creek Project No. 6 Impoundment, Project 43A. Upon inspection of the structure, it was confirmed that the outlet structure needed repair and based on the signed agreement of the project, the RLWD and the MnDNR were jointly responsible for maintenance and repair of the structure. In August of 2019, the RLWD and the MnDNR applied for a Conservation Partnership Legacy Grant through the MnDNR Division of Fish and Wildlife Conservation Partners Legacy Grant to remove and replace the structure. December 17, 2019, the District was informed that a grant in the amount of \$168,420 was awarded for the project. September 9, 2020, a contract for the construction to replace the outlet structure was awarded to Swingen Construction in the amount of \$148,400.00. Notice to Proceed was given October 6, 2020, with construction continuing into late November 2020. Due to delays in getting stoplogs and catwalk material, construction was suspended. On Monday July 19, 2022 a final hearing was held for making final payment to Swingen Construction Company. In December of 2022 the CPL Grant was closed and the project was completed.

## **Challenger Ditch (RLWD Project No. 122)**

On November 8, 2018, Pennington County Highway Department approached the Red Lake Watershed concerning a project which would require the relocation of Challenger Ditch, RLWD Project 122. The project initiated by the County was for the construction of a bridge over the Red Lake River at the proximity of the outlet to Challenger Ditch as well as extending CSAH #8 west to the intersection of TH #32. It was determined that a hearing would have to be held for the project to assure landowners are informed of the change.

On January 10, 2019, a petition was received from Pennington County for the Re-Alignment and Modification of a an Existing Drainageway and Outlet for RLWD Project 122, commonly referred to as Challenger Ditch system. At this meeting, the RLWD Board approved by unanimous motion to set a hearing date for realignment of the drainage system and rename it Red Lake Watershed District 122A for February 28, 2019. Public hearing was held and upon unanimous decision they adopted the Re-Alignment and Modification of a Portion of the Existing Drainageway and Outlet of the Challenger Ditch, RLWD Project No. 122A. Construction of the project was substantially completed in 2020 with final completion in early summer 2021.



### **Threat Ring Dike (RLWD Project No. 129AS)**

In late September 2019, a request for ring dike funding was received by Athena Threatt located in SW1/4 NW1/4, Section 14 Andover Township, Polk County Minnesota. Due to complexity of the ring dike location near a public water and within a flood plain, the ring dike project went through various designs, cost estimates and agreements. After considerable time was required to address the high costs of the project, a final plan was submitted by Widseth Engineering for approval of the Red Lake Board of Managers and Red River Watershed Management Board. After discussion by both Boards, it was determined that the RRWMB would pay 50% of the total cost of the ring dike with District paying 37.5% and landowner paying 12.5%. Bids were opened March 11, 2021, with low bid being awarded to Taggart Contracting, Inc. in the amount of \$113,575.00. Construction started in spring of 2021 with final payment hearing held October 14, 2021.



Looking north along west end of yard (before)



Looking north along west end of yard (after)

### **Red Lake River One Watershed One Plan (RLWD Project No. 149)**

Minnesota has a long history of water management by local governments. One Watershed, One Plan is rooted in this history. In work initiated by the Local Government Water Roundtable (Association of Minnesota Counties, Minnesota Association of Watershed Districts, and Minnesota Association of Soil and Water Conservation Districts) in 2011, it was recommended that the local governments charged with water management responsibility should organize and develop focused implementation plans on watershed boundaries. The recommendation was followed by legislation that permits BWSR to adopt methods to allow comprehensive plans, local water management plans, or watershed management plans to serve as substitutes for one another; or to be replaced with one comprehensive watershed management plan. This legislation, and the associated BWSR program, is referred to as One Watershed, One Plan. Further Legislation was passed in 2015, defining purposes and outlining additional structure for the program.

Early 2014, the Red Lake Watershed District, Pennington, Red Lake County and West Polk Soil Conservation Districts, along with their respective Counties, partnered to apply for a grant through the Board of Water Resource One Watershed One Plan Pilot Project, to establish a Comprehensive Water Management Plan for the Red Lake River Watershed. The grant was for five pilot projects that were approved for funding in December of 2014.

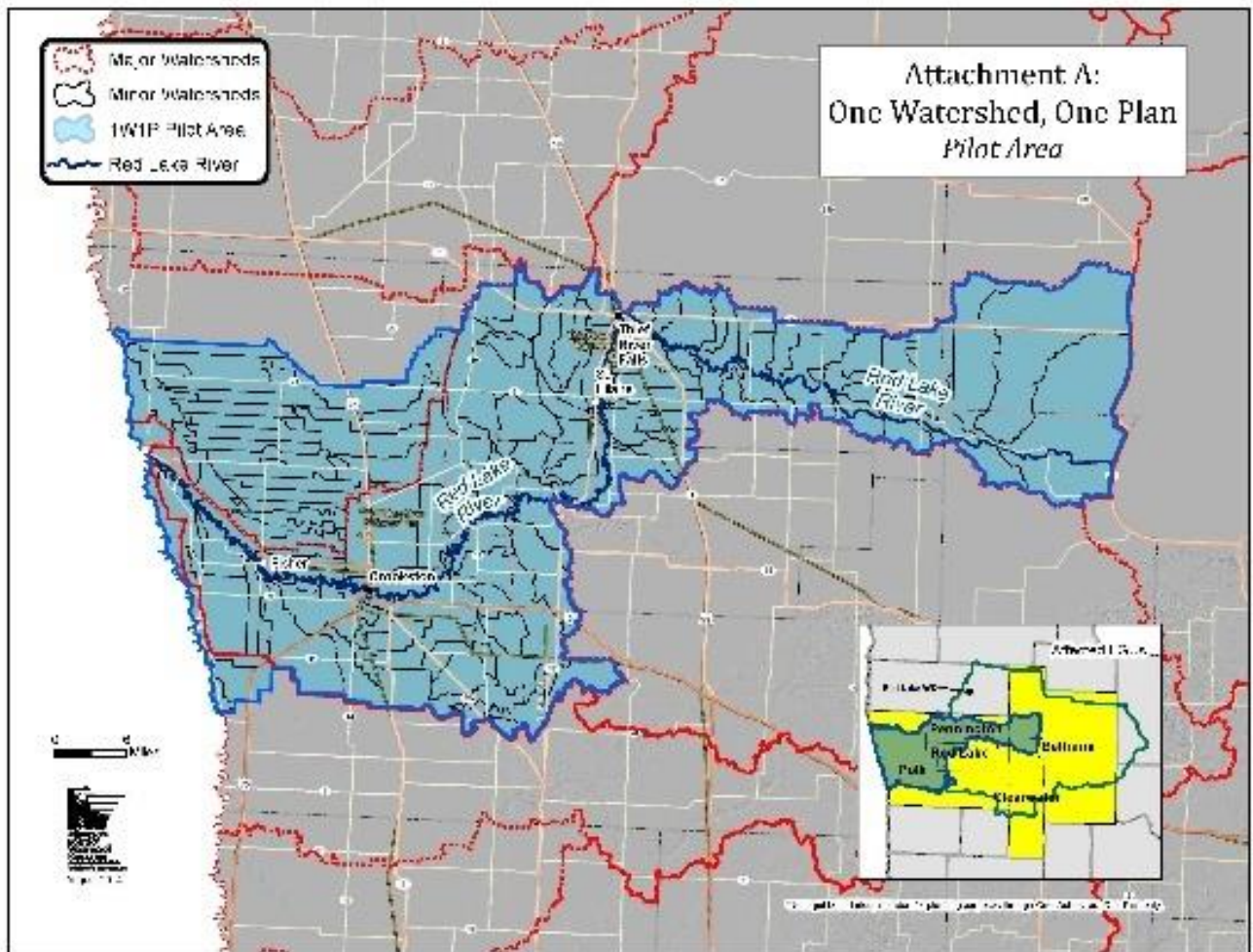


In 2015, the project partners started the planning process outlined by the BWSR which ultimately resulted in the approval of the plan in January 2017.

In 2018 the “Planning Work Group” for the Red Lake River One Watershed One Plan completed the required “Work Plan”. Upon completion of the Plan and approval from the Board of Water and Soil Resources, a grant in the amount of \$677,500 was awarded to complete various water quality projects highlighted in the plan.

In 2019 the Implementation of the projects in the plan started slow due permitting delays as well as untimely rainfall events. In the spring of 2020, construction started on various projects identified in the plan and continued into 2021. The 2018 Watershed Based Grant was completed and closed late fall of 2021.

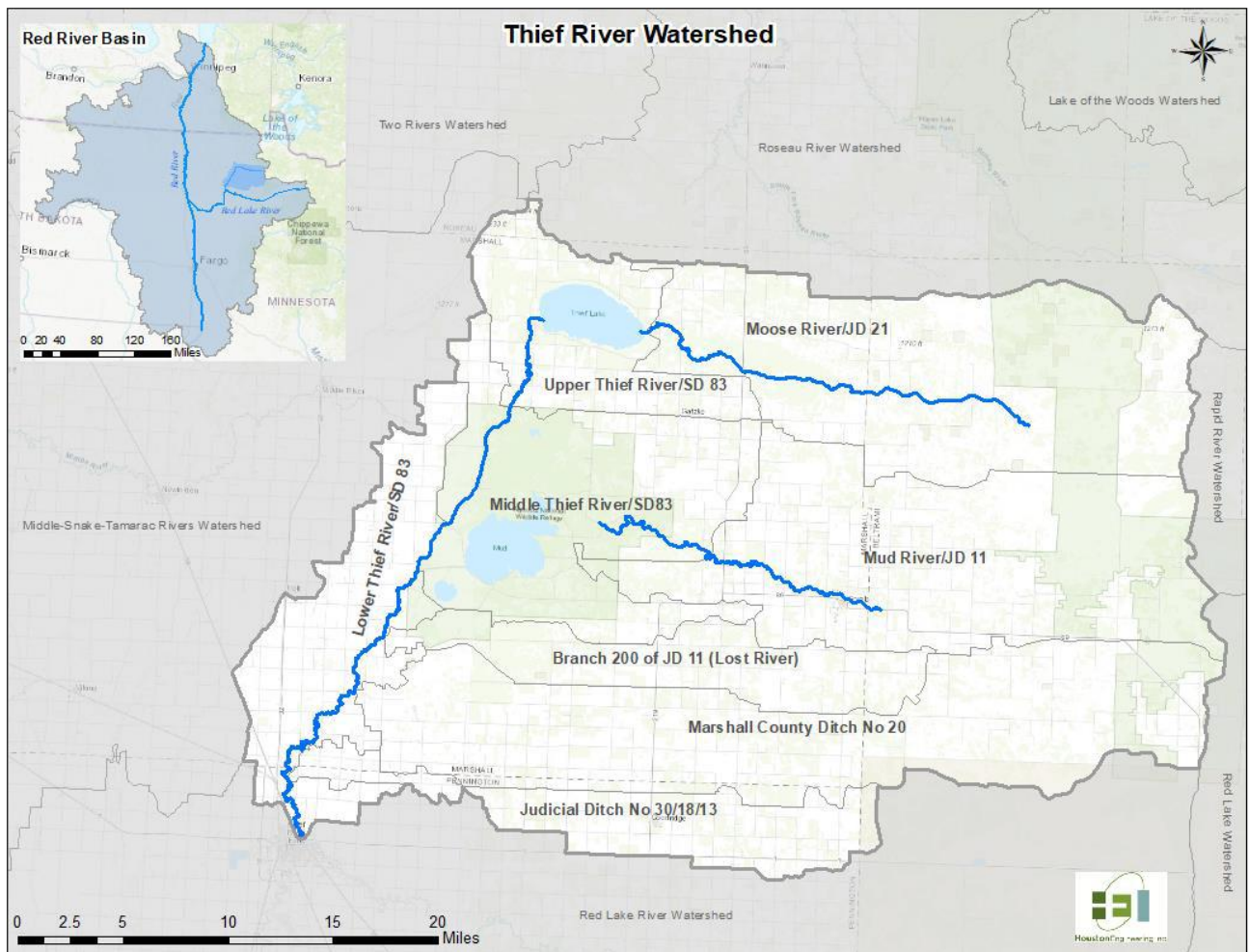
In December of 2019, the Red Lake River 1W1P Biennial Work Plan for 2020-2021 was approved by BWSR. As a result of the approval, an additional \$1,071,149 of Watershed Based Funding was awarded for projects identified in the Work Plan. Implementation and construction of projects listed in the workplan started in 2021 and will continue in 2022.





## Thief River One Watershed One Plan (RLWD Project No. 149A)

In June of 2016, the Red Lake Watershed District, Pennington, Marshall and Beltrami Soil Conservation Districts and their respective counties applied for and were approved to receive a grant from the Board of Water and Soil Resources (BWSR) through their One Watershed One Plan program, to develop a Ten-Year Comprehensive Plan for the Thief River Watershed. On July 11, 2017, the grant was approved and executed by the BWSR. The plan development continued into 2018 and 2019 with the draft plan being approved by the Policy Committee and partners in late 2019. In 2020 the BWSR approved the Thief River Watershed plan and awarded a Watershed Base Grant in the amount \$529,892 for plan implementation. In 2021 the RLWD and partners started construction on various projects listed in the plan with the hope of completing projects in the plan by fall 2022.



### **Erosion Control (RLWD Project No. 164)**

This project program was established in 2004 and is used on a yearly basis to provide cost share funding for various erosion control projects usually initiated and developed by local Soil and Water Conservation Districts (SWCD). In 2021, there were ten cost share funding requests from local SWCD offices. Total requests match for project cost share totaled \$40,710.00.



**Bank Stabilization Project, Outlet of Pennington County Ditch 96  
Pennington County SWCD**

### **Black River Impoundment (RLWD Project No. 176)**

November 10, 2016 the RLWD Board of Managers, by Board motion, initiated the Black River Impoundment Project.

On January 12, 2017, the Board appointed two members of their Board to sit on a Project Work Team to assist in the development of a flood damage reduction project near the Black River.

On April 18, 2017, a Step I submittal was presented to the Red River Watershed Management Board with the Step II submittal for funding presented to their board October 17, 2017.

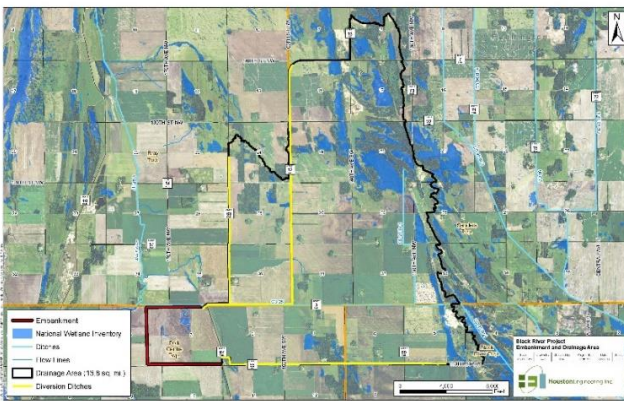
On August 9, 2018, a public hearing was held for the Black River Impoundment with an estimated cost of 7.8 million dollars. Also, in 2018 the District tried to secure funding through Minnesota Flood Hazard Mitigation Funding which was not successful. The District will continue with the development of the project, as well as trying to secure State funding for construction.

In 2019, the District, with the assistance of Houston Engineering Wetland Specialist, continued with the permitting application process with Wetland Conservation Act staff as well as United States Army Corps of Engineers to review wetland impacts to the project. After nearly two years of meetings and review, the District completed an application for permitting wetland impacts for the project.



On July 21, 2020, the Red Lake WD presented the RRWMB with a Step III Submittal for funding the Black River Impoundment Project with a revised estimated cost of \$8,883,000. Three funding alternatives were presented which included: (A) No outside cost-share from federal or state agencies; (B) Fifty percent funding cost-share from the State of Minnesota Flood Hazard Mitigation Program; and (C) \$3 million cost-share from a grant request through the USDA's Natural Resources Conservation Service (NRCS) FY 2020 Regional Conservation Partnership Program (RCPP) Alternative Funding Arrangements.

At the July 21, 2020, RRWMB meeting and due to the fact, there would be no State Flood Hazard Mitigation funding available for the project, the RRWMB of Managers approved funding the Black River Impoundment Project in the amount of \$5,922,000. It was also agreement between the Red Lake Watershed and the RRWMB to proceed with bids and specifications to start construction on this project as soon as possible. On September 24, 2020, the RLWD Board of Managers awarded the contract for construction to RJ Zavoral & Sons, Inc. in the amount of \$4,374,457.66 with notice to proceed being given on October 22, 2020. Construction started almost immediately and with the great working conditions, nearly half the project was completed in the fall of 2020. Construction started early summer of 2021 and continued late in the fall. The project was substantially completed and will be completed by mid-summer 2022.



Project Location Map



Looking East along south side CSAH #3



Outlet Channel Looking East (before)



Outlet Channel Looking East (after)

**Petition to Establish Red Lake Watershed District No. 16 (RLWD Project No. 177)**



On July 27, 2017, at the RLWD regularly scheduled Board meeting, a petition to establish a new drainage system project in Polk County was presented to the RLWD Board of Managers. Upon review of the petition and receipt of the bond, the RLWD Board of Managers, by order, appointed Pribula Engineering to make a preliminary survey.

On April 26, 2018, a preliminary hearing was held for the project. Upon completion of the hearing, the Board of Managers issued the order to proceed. The Board of Managers appointed viewers and directed the engineer to complete a detailed survey report.

On April 4, 2019, the final hearing for this project was held and on April 11, 2019, the Detailed Findings of Facts and Order was approved by the Board of Managers. On June 20, 2019, Notice to Proceed was issued to Burski Excavating, Inc. for their bid in the amount of \$1,454,118.40. Prior to awarding the contract, it was brought to the District's attention that there was an error in the advertising of bids which lead the District and Burski Excavating to reach a settlement agreement in the amount of \$118,078.30, thus changing the awarded bid to \$1,572,196.70.

Construction started in the spring of 2020 and continued into mid-summer 2021 with final payment hearing held for Burski Construction on August 12, 2021.



Ditch along TH #220 looking south



Looking west from TH#220

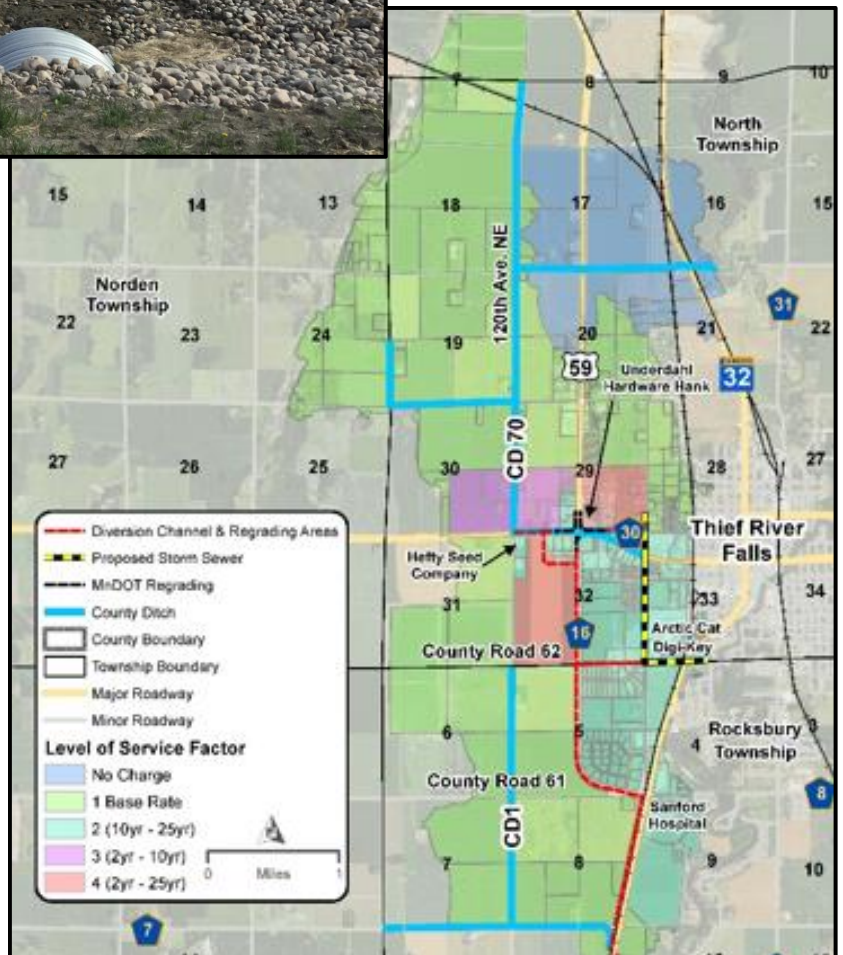
### **Thief River Falls Westside Flood Damage Reduction Project (RLWD Project No. 178)**

October 12, 2017 at their regular scheduled Board meeting, the RLWD Board of Managers received a petition from the City of Thief River Falls and Pennington County Commissioners requesting a project to divert waters, from Pennington County Ditch #70, as it enters from the north and west of the City of Thief River Falls.

In 2018, the Red Lake Watershed District, Minnesota Department of Transportation (MnDOT), City of Thief River Falls and Pennington County developed a partnership to move forward with this project in conjunction with a project MnDOT was designing near the west side of the city. The District retained HDR Engineering Inc. to develop a plan for the proposed project. On February 24, 2018, an application for a \$1,500,000 Flood Hazard Mitigation Grant as applied for through the Minnesota Department of Natural Resources. In May of 2018, the Red Lake Watershed District was informed that the grant application was approved and on September 7, 2018, the grant agreement in

the amount of \$1,500,000 was executed. To assist in the 50% cost share match required by the State, on July 17, 2018, the RRWMB reaffirmed their Step I and II funding in the amount of \$1,000,000.

On March 20, 2020, bids were opened for this project with the low bid being awarded to RJ Zavoral & Sons, Inc. in the amount of \$6,632,761.68. April 8, 2020, Notice to Proceed was given with construction being substantially completed in 2020. Project continued into 2021 with the completions of various punch list items. On November 24, 2021, at 9:30 am the Final Payment hearing was held for RJ Zavoral & Sons, Inc.





**Outlet looking east to the Red Lake River**



**Outlet looking west towards Highway 32**





### **Petition for the Improvement to Polk County Ditch No. 39 (RLWD Project No. 179)**

On October 26, 2017, at the RLWD regularly scheduled Board meeting, a petition was received for the improvement to Polk County Ditch #39 in Polk County was presented to the RLWD Board of Managers. Upon review of the petition and receipt of the bond, the RLWD Board of Managers, by order, appointed Pribula Engineering to complete a preliminary survey. April 11, 2019 a Preliminary Hearing for the Improvement of Polk County Ditch #39, RLWD Ditch No. 17, Project 179 was held. Upon completion of the hearing, the Board of Managers by motion, approved moving forward with the appointment of viewers and instructed the engineer to proceed with the final detailed survey report.

The final hearing was held July 24, 2020, at the Red Lake Watershed District. At their regular board meeting held August 24, 2020, the Red Lake Watershed District Board of Managers approved the Finding and Order for the improvement petition. The construction of the project is presently being delayed due to an appeal of the Finding by various landowners. It is the hopes of the petitioners that a satisfactory decision will be handed down by the courts to allow the project to proceed.

### **Nelson Ring Dike (RLWD Project No. 129AU)**

In December 2020, a request for ring dike funding was received by Peter Nelson located in the NW1/4, Section 10 Grand Plain (Strip) Township, Marshall County Minnesota. 50% of the project funding came from the Red River Watershed Management Board (RRWMB), The RLWD paying 37.5% and landowner paying 12.5%. Bids were opened August 12, 2021, with the low bid being awarded to Trent M. Stanley in the amount of \$37,079.25. Construction started in the summer of 2021. Work completed in 2021 included levees built to specified elevation, centerline culverts with waterman gates installed, interior & exterior drainage. Work left to do in the spring includes final shaping of the levee, topsoil spreading, and seeding.



**Larson Ring Dike (RLWD Project No. 129AV)**

In June of 2021, a request for ring dike funding was received by Craig & Melinda Larson located in the NE1/4, Section 29 Crookston Township, Polk County Minnesota. 50% of the project funding came from the Red River Watershed Management Board (RRWMB), The RLWD paying 37.5% and landowner paying 12.5%. Bids were opened August 23, 2021, with the low bid being awarded to Bertils Gravel Excavating LLC in the amount of \$42,243.90. Construction started in the summer of 2021. Work completed in 2021 included levees built to specified elevation, centerline culverts with waterman gates installed, interior & exterior drainage. Work left to do in the spring includes final shaping of the levee, topsoil spreading, and seeding.



Looking east along north end of yard (during)

Looking west from SE corner of yard (during)



## Flood Control Impoundments

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The 2021 spring melt and runoff was basically a “non-event” in the basin. By March 15<sup>th</sup> the landscape was void of snow cover and the surface water was also gone. Due to the Exceptional/Extensive drought throughout the 2021 growing season, none of the impoundments were operated this summer either.

Impoundments operated by the District are quite diverse and actual project operations are based on available flood storage, outlet structure facilities, and outlet channel capacity. Each impoundment is designed, based on upstream drainage area, topography, and runoff conditions. Some of the flood storage facilities are operated with adjustable stop-logs, adjustable flood gates, and some are non-gated fixed crest weir structures.

### Non-gated – Fixed Crest Weir Type Structures

“Fixed crest” structures store water to the specific elevation of a weir. When the water surface raises above the weir elevation, outflows occur automatically. Most of the non-gated projects were constructed in the 1970’s and early 1980’s by the former Soil Conservation Service (SCS), known today as the Natural Resource Conservation Service (NRCS).



Latendresse Dam located in Red Lake Falls  
Township, Red Lake County



Odney Flaas Dam located in Onstad  
Township, Polk County

### Storage Volume & Operations

Water storage is calculated in acre feet, which is a volume measurement that is one acre in area by one foot deep. Storage capacity in impoundments varies depending on the size in acres and depth of the storage area. One foot of water depth in an impoundment can be many thousands of acre feet of storage. Some impoundments are considered “dry” which means that the pool is drained dry after stored flood waters are released. Other impoundments are operated with a small permanent pool throughout the year.

Operation and maintenance vary, depending on the specific project. Some are operated solely by the District, and others are operated cooperatively with the Minnesota Department of Natural Resources, U.S. Fish and Wildlife Service, Natural Resource Conservation Service, and local Soil and Water Conservation Districts.

Routine inspections are performed, and the condition of the embankment and control structures are evaluated. Typical maintenance includes flood damage repairs, debris removal, removal of beaver dams/debris, nuisance beaver, and vegetation control.

## Gated /Stop-log Type Structures

Projects with ‘adjustable flood gates and/or stop-logs’ have more flexibility for storage and for controlling outflows from flood events. During large runoff events, flood waters are stored within the impoundments and as downstream conditions allow, the stored water is released in a controlled manner. This is done by operating flood gates or by adjusting stop-logs, depending on the respective flood storage facility. Water levels are typically lowered during the fall season. This ‘fall drawdown’ is performed to create additional flood storage for the next spring’s runoff.



Example of a “Dry” Impoundment. Stored flood water is released as soon as downstream channel conditions are acceptable to pass flows.

Example of an Impoundment with a permanent pool





## **Euclid East Impoundment (RLWD Project No. 60C)**

**GENERAL:** Construction of the Euclid East Impoundment began on June 15, 2006. Due to excellent working conditions, it was substantially completed by the middle of November. The project became functional for operation in the spring of 2007. This project is funded jointly between the State of Minnesota, Red River Watershed Management Board, and the District.

**LOCATION:** The project is in Section 24, Euclid Township, and Section 19, Belgium Township, Polk County, approximately 12 miles north of Crookston.

**PURPOSE:** The project stores runoff and reduces flooding on downstream agricultural lands and urban areas by retaining up to approximately 2,443 acre-feet of floodwater. The storage of water in the reservoir will reduce peak discharges on downstream legal ditch systems, Branch C of County Ditch #66, County Ditch #66 (Main), and County Ditch #2.

**PROJECT COMPONENTS:** The project has a drainage area of 17.1 square miles. The embankment and reservoir are constructed of approximately 3.6 miles of earthen clay embankment (332,681 cubic yards and approximately 12 feet at highest point), a grass lined emergency spillway, 2.4 miles of inlet channels and culvert work, 0.8 mile of outlet channel, and a gated concrete outlet structure. The operable components are the gated structure which releases water from the impoundment into an outlet channel. This water then flows northwesterly through legal ditch systems and eventually to the Red River of the North.

### **FUNCTIONAL DESIGN DATA**

	<b>Elevation (ft.-msl)</b>	<b>Storage (ac.ft.)</b>
Top of Dam (Total Storage)	908.0	2,443 (2.68 in. runoff)
Gated Storage (Structure Crest)	905.0	1,878 (2.06 in. runoff)
Ungated Storage to Emergency Spillway	906.0	565 (0.62 in. runoff)

\*October 13, 2019 was recorded as the highest pool elevation at 905.90’\*



In 2021, no flood gate operation was required. The outlet channel was cleaned to the design grade through Section 16, Euclid Township, Polk County. Berms were installed along the south side of the channel from the levee continuing downstream to Trunk Highway #75.

**Brandt Impoundment (RLWD Project No. 60D)**

**GENERAL:** Construction of the Brandt Impoundment began on July 31, 2006 and was substantially completed by the middle of November and functional for operation in the spring of 2008. The project is funded by the State of Minnesota, Red River Watershed Management Board, and the District.

**LOCATION:** Section 7, Belgium Township, Polk County, approximately 14 miles north of Crookston, or 1 ½ miles east and 1 mile north of Euclid.

**PURPOSE:** The project stores runoff and reduces flooding on downstream agricultural lands and urban areas by retaining up to approximately 3,912 acre-feet of floodwater. The storage of water in the reservoir also reduces peak discharges on the downstream “Brandt Channel,” RLWD Ditch 15 and Polk County Ditch #2 system.

**PROJECT COMPONENTS:**

The project has a drainage area of 23.6 square miles. The embankment and reservoir are constructed of approximately 3.5 miles of earthen clay embankment (492,579 cubic yards & approx. 19 feet at highest point), a grass lined emergency spillway, 2 – lines of 6 x 8 concrete box culverts and a gated concrete outlet structure.

Operable components are the gated structure which releases water from the impoundment into an outlet channel. This water then flows west - northwest through the “Brandt Channel” legal County Ditch #2 system and eventually to the Red River of the North.



In 2021, no flood gate operation was required.

**FUNCTIONAL DESIGN DATA**

	<b>Elevation (ft.-msl)</b>	<b>Storage (ac.ft.)</b>
Top of Dam (total Storage)	918.0	3,912 (3.1 in. runoff)
Gated Storage (Secondary Spillway)	914.5	3,126 (2.48 in. runoff)
Ungated Storage to Emergency Spillway	916.0	786 (0.62 in. runoff)
*October 13, 2019 was recorded as the highest pool elevation at 915.45*		



## **Parnell Impoundment (RLWD Project No. 81)**

**GENERAL:** Construction of the Parnell Impoundment began in 1997 and was completed in 1999. In 2004, modifications were made to the original design by lowering the emergency spillway 1.5 feet, expanding the inter-pool connecting channel, and installing an operable screw gate on the weir structure in the JD #60 outlet. The impoundment is now better utilized to store floodwaters by operating control gates. In 2009, excavation of an east pool interior channel, along with an inter-pool structure, consisting of 2-48” diameter culverts with operable gates was installed. The channel enhances flow conveyance to J.D. #60 and the inter-pool structure will be beneficial in managing west pool water levels and held reduce flooding in County Ditch #126.

**LOCATION:** Sections 3 and 4, Parnell Township, Polk County, approximately 12 miles northeast of Crookston.

**PURPOSE:** The project will reduce flooding on downstream agricultural lands and urban areas by retaining up to approximately 4,000 acre-feet of floodwater. The storage of water in the reservoir will also reduce peak discharges on four legal ditch systems, County Ditch #126, Judicial Ditch #60, County Ditch #66, and County Ditch #2.

**PROJECT COMPONENTS:** The project has a drainage area of 23 square miles. The impoundment incorporates a two-pool design (no permanent pool), with two separate outlets, and an inter-pool connecting channel. The embankment and reservoir are constructed of approximately 5 miles of earthen embankment (approx. 18 feet at highest point), a concrete emergency spillway and two gated concrete outlet structures.

Operable components are the two gated structures which release water from the impoundment into two separate outlet channels. One of these channels is JD #60, which flows south to the Red Lake River and the other is CD #126, which flows west and eventually to the Red River of the North.



### **FUNCTIONAL DESIGN DATA:**

	<b>Elevation (ft.-msl)</b>	<b>Storage (ac.ft.)</b>
Top of Dam (total Storage)	943.0	4,000 (3.2 in. runoff)
Emergency Spillway	939.5	3,000 (2.4 in. runoff)
*April 8, 2020 was recorded as the highest pool elevation at 940.6*		

Operation of the impoundment was not required in 2021.

## **BWSR Flood Storage Easement Pilot Site 1 “Tiedemann Site” (RLWD Project No. 133C)**

**GENERAL:** Construction of the “Tiedemann Site” began in the spring of 2002 and was substantially completed by the summer of 2002 and functional for operation in the spring of 2003. The project is funded by the Minnesota Board of Water & Soil Resources (BWSR) and the District.

**LOCATION:** Section 5, Parnell Township, Polk County, approximately 12 miles northeast of Crookston.

**PURPOSE:** The project stores runoff and reduces flooding on downstream agricultural lands and urban areas by retaining up to 247 acre-feet of floodwater. The storage of water in the reservoir also reduces peak discharges on the downstream ditches; Polk County Ditch 126 and the Grand Marais.

**PROJECT COMPONENTS:** The project is directly downstream of the Parnell West Pool outlet and the North Parnell Site 2 outlet. The embankment is constructed of approximately 0.75 miles of earthen clay embankment, 0.63 miles of raised township road, a grass lined emergency spillway, 1 – line of 6 x 5 concrete box culvert with a gated outlet structure.

Operable components are the gated structure which releases water from the impoundment into Polk County Ditch 126. This water then flows west to the Grand Marais Coulee eventually to the Red River of the North.

### **FUNCTIONAL DESIGN DATA**

	<b>Elevation (ft.-msl)</b>	<b>Storage (ac.ft.)</b>
Top of Dam (total Storage)	925.5	324
Emergency Spillway	924.5	247 (1.6 in. runoff)

## **North Parnell Site 2 “Gasper Site” (RLWD Project No. 154)**

**GENERAL:** Construction of the “Gasper Site” began in the spring of 2003 and was substantially completed by the summer of 2003 and functional for operation in the spring of 2004. The project is funded by the Minnesota Board of Water & Soil Resources (BWSR), Red River Management Board (RRWMD), and the District.

**LOCATION:** The Sections 3&4, Parnell Township, Polk County, approximately 12 miles northeast of Crookston.

**PURPOSE:** The project stores runoff and reduces flooding on downstream agricultural lands and urban areas by retaining up to 324 acre-feet of floodwater. The storage of water in the reservoir also reduces peak discharges on the downstream ditches; Polk County Ditch 126 and the Grand Marais.

**PROJECT COMPONENTS:** The project is directly upstream and adjacent to the Parnell Impoundment. The embankment is constructed of approximately 1.0 miles of earthen clay embankment, a grass lined emergency spillway, 1 – line of 36” concrete pipe with a gated outlet structure.

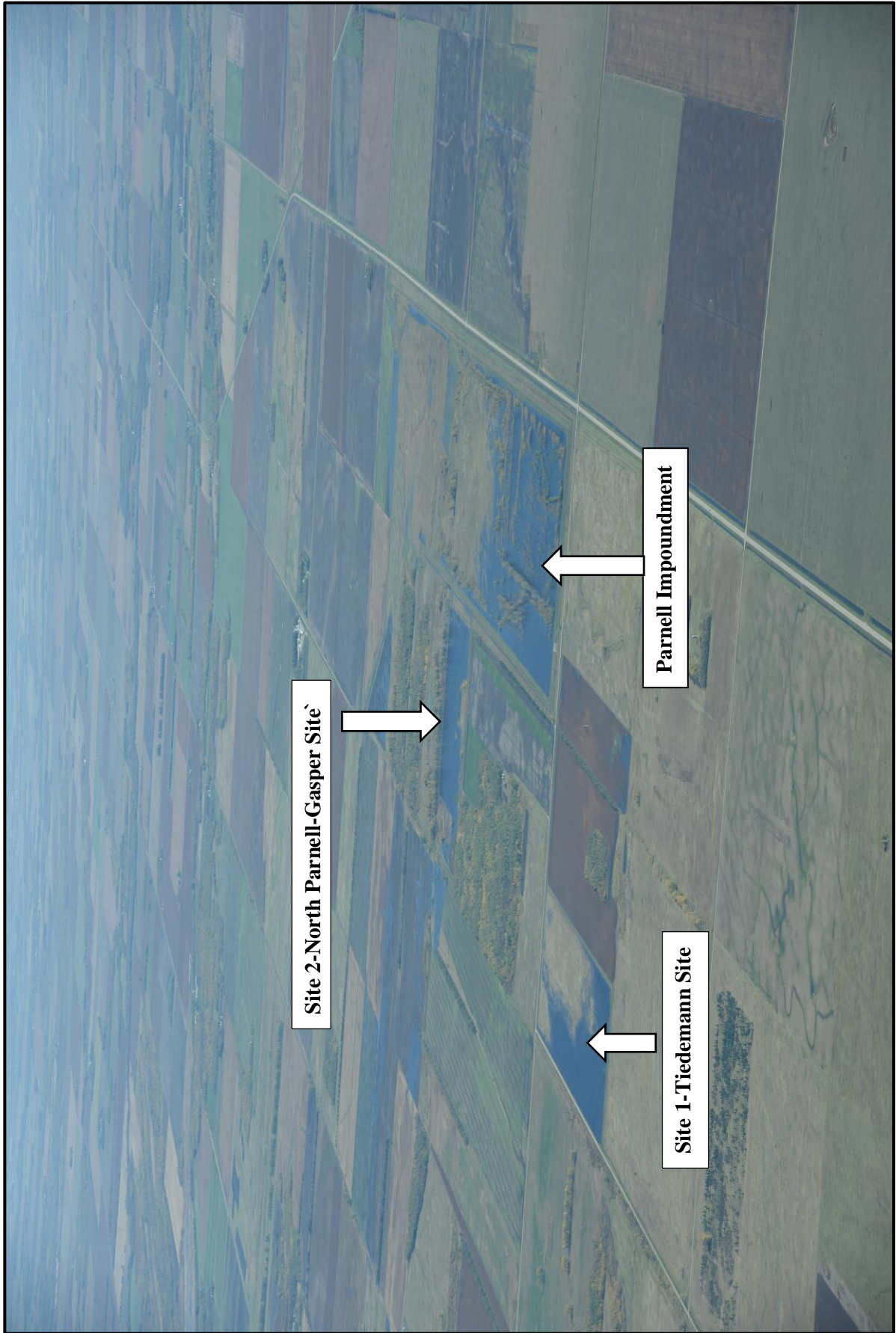
Operable components are the gated structure which releases water from the impoundment into an outlet ditch which then goes into RLWD project 133C, from there the water flows into Polk County Ditch 126. This water then flows west to the Grand Marais Coulee eventually to the Red River of the North.

### **FUNCTIONAL DESIGN DATA**

	<b>Elevation (ft.-msl)</b>	<b>Storage (ac.ft.)</b>
Top of Dam (total Storage)	938.0	324
Emergency Spillway	937.0	247 (2.7 in. runoff)



**Parnell Impoundment – Site 1 Tiedemann Site – Site 2 North Parnell Gasper Site  
Looking Northeast**



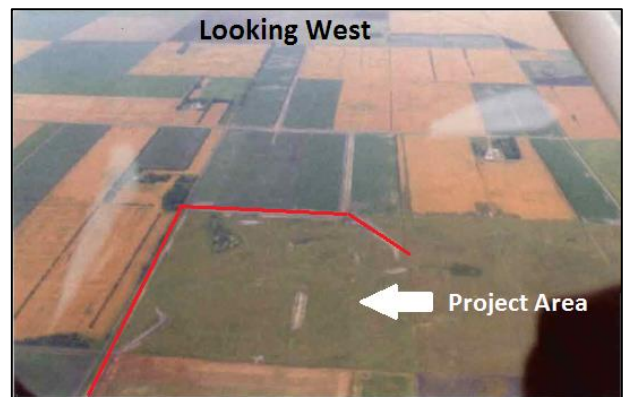
**Louisville/Parnell Project (RLWD Project No. 121)**

**GENERAL:** Construction of the Louisville/Parnell Impoundment began in mid-1998 and was substantially completed by the end of July 1998 and functional for operation in the fall of 1998. The District and HDR Engineering of Thief River Falls jointly performed construction surveying and inspection duties. The project is funded by the Red River Watershed Management Board, Department of Natural Resources, Minnesota Department of Transportation, and the District.

**LOCATION:** The project is located, approximately 12 miles northeast of Crookston, in Section 13 and 14, Parnell Township, Polk County and Section 18, Louisville Township, Red Lake County, Minnesota.

**PURPOSE:** The project will store runoff and reduce flooding on downstream agricultural lands and urban areas by retaining up to ten percent more storage (400 acre-ft) to the JD-60 Watershed. The storage of water will reduce peak discharges by .2 % in Crookston and .02% East Grand Forks. The project also created 37 acres of wetland banking.

**PROJECT COMPONENTS:** The drainage area above (upstream) of the impoundment is 5.1 square miles. The project controls break out flows from Lateral 2 of JD-60. It is designed to provide up to 25-yr flow control to the immediate drainage systems downstream of the project. The embankment is approximately 2,900 feet long along the west edge of the southeast quarter of Section 13. The project utilizes four gated outlet structures consisting of one principal outlet (STA 19+50) and three secondary outlets. Each control structure and storage site are designed to operate using passive detention. The sluice gates are 18-inch diameter, Waterman Model C-20-C-Y and operated through a gate wheel. As well as providing local and regional flood mitigation, this project provides wetland banking for the Minnesota Department of Transportation. The project consists of five pools each designed to provide specific functions and benefits. Gate operation is the responsibility of the District and coordinated with operation of the Schirrick Dam, RLWD #25.



**Louisville/Parnell Impoundment and Wetland Bank  
100 Year 30 Hour Summer Flood - Stage and Storage Summary**

Storage Site	Peak Elevation (ft-MSL)	Total Storage at Peak (ac-ft)	100-Year Bounce (ft)	Gated Storage Available (ac-ft)
A	965.19	89.9	2.8	15
B	954.16	24.2	2.2	0
D	952.21	47.6	1.7	47.6
C/E	949.21	207	5.3 (C) 1.3 (E)	190

**FUNCTIONAL DESIGN DATA**

	Elevation (ft.-msl)
Top of earthen embankment	951.0/952.0
Top of Spillway	949.0



## **Pine Lake (RLWD Project No. 35)**

**GENERAL:** In 2021, the RLWD replaced the existing sheet pile dam with a concrete structure along with a rock riffle fish passage. Please see the Project No. 26B for further information, which was a Capitol Improvement Project.

**LOCATION:** The site is near the south center of Section 21, Pine Lake Township, Clearwater County.

**PURPOSE:** This multi-purpose project is designed to provide the public with flood control and wildlife benefits. The Gonvick Area Lions Club has donated hundreds of man-hours and when necessary, members operate the aeration system, install, and maintain aeration signage.

### **FUNCTIONAL DESIGN DATA:**

	Elevation (ft.-msl)
Top of Dam	1285.0
Bottom of Bay	1281.0
Fish Passage Notch	1281.0
Typical summer-top of stop logs	1283.5
Typical winter	1282.5
*April 11, 2009 was recorded as the highest pool elevation at 1286.0*	

The new concrete structure has two - 5' X 4' bays. One bay has an adjustable “sluice-gate”, the other is controlled by “stop-logs”. A rock-riffle fish passage was also installed as part of the project. The stop-logs can be adjusted between elevations 1281.0 to 1285.0. The project has a drainage area of 45 square miles. Based primarily on lake elevation, stop-logs may be removed from the dam to allow additional outflow until the lake recedes, and then they are replaced to the typical summer or winter elevation. The dam is also designed with a fish passage notch at elevation 1282.5, which is one foot lower than the normal summer lake elevation. This is very important for keeping some flow in the Lost River especially during periods of low flow. Factors to consider when adjusting the stop-logs are monitoring “inflows” to the lake, existing lake elevation, downstream conditions, and predicted runoff. Staff personnel at the Sportsman’s Lodge are very helpful in reading the lake elevation gauge located inside the business and a local resident records rainfall data at the lake.

In 2021, the local Sportsman’s Club operated the aeration system from February 16<sup>th</sup> to March 23<sup>rd</sup>. Stoplogs were installed on March 25<sup>th</sup> to the typical summer elevation of 1283.5. Pine Lake crested at elevation 1284.04’ on April 19<sup>th</sup>. On November 16<sup>th</sup>, stop-logs were removed to begin the normal fall drawdown and continued until November 28<sup>th</sup> at which time two stop-logs were installed in each of the two stop-log bays to elevation 1282.5. This installation is to be done by December 1<sup>st</sup> of every year, as per the Minnesota Department of Natural Resources requirements.



New structure without gates and catwalk.



Riprap riffles downstream of concrete



Looking up-stream at fish passage.



### **Little Pine Lake (RLWD Project No. 26A)**

As a result of the RCPP Project Work Team meetings for Pine Lake, it was identified that the Minnesota Department of Natural Resources agreed to store an additional 250 acre-feet of water on Little Pine Wildlife Management Area (WMA) to assist in reducing flood flows to Pine Lake during flood events. Upon further discussion with the RLWD Board of Managers, the District agreed to construct a new outlet structure on the WMA to allow better operation for regulating water surface elevations. The District and MnDNR entered into a Joint Powers Agreement as well as drafting an operating plan which gives the MnDNR the responsibility for all operation and maintenance of the water control structure. Quotes for the project were opened at the District office on June 14, 2018, with the low quote awarded to Red Lake Builders in the amount of \$119,220. Project construction was completed November 14, 2018.

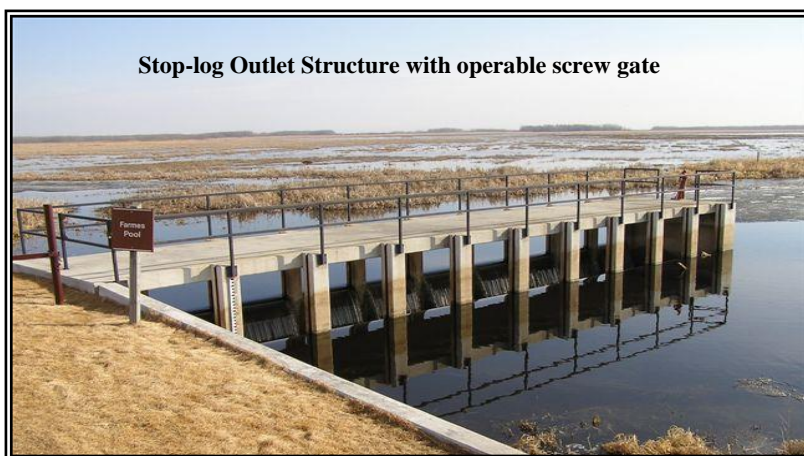


## **Elm Lake-Farmes Pool (RLWD Project No. 52)**

**GENERAL:** Elm Lake was drained around 1920 by the construction of Branch #200 of Judicial Ditch #11. The Elm Lake project is a cooperative effort of the U.S. Fish and Wildlife Service, MN Department of Natural Resources, Red Lake Watershed District, and Ducks Unlimited. Majority of funding for the project was provided by Ducks Unlimited and at the time Elm Lake was created, it was the largest Ducks Unlimited project in the lower 48 states.

**LOCATION:** Marshall County, approximately 17 miles northeast of Thief River Falls. The drainage area of Ditch 200 above Elm Lake is 63 square miles.

**PURPOSE:** Multi-purpose – designed to meet three major objectives: Flood control, increase wildlife values, and upstream drainage improvement.



**PROJECT COMPONENTS:** Approximately 9 miles of earthen embankment, an outlet control structure, rock lined emergency spillway, and an enlargement of a portion of Ditch 200.

### FUNCTIONAL DESIGN DATA:

	Elevation (ft.-msl)	Storage (ac.ft.)
Top of Dam	1145.0	19,700
Emergency Spillway	1142.0	11,000 (8.9 in. runoff)
Max Summer	1141.0	7,500 (6.11 in. runoff)
Typical Summer	1140.0	5,500 (4.48 in. runoff)
Typical Winter	1139.0	3,500
*Project Drainage Area 63.0 sq.mi.*		
*Highest recorded pool elevation was 1143.30 on April 23, 1997		

**OPERATIONAL:** 1991

In 2009, repairs were made to the principal outlet structure. Work consisted of repairing stop-log bays and channels, removal of corroded stop-logs, and installation of new handrails and safety grates.

Agassiz National Wildlife Refuge staff performs the actual operation of the outlet structure with cooperation from the District.

**Lost River Impoundment (RLWD Project No. 17)**

**GENERAL:** In the mid-1970’s, the project was constructed by the Minnesota Department of Natural Resources to improve waterfowl habitat. On December 14, 1978, the District entered into a formal agreement with the Minnesota Department of Natural Resources to modify the original impoundment by raising the elevation of the dike and emergency spillway. Four - 48” diameter gated pipes and a spillway from Ditch 200 of JD #11 supply water to the impoundment which is an “off channel” reservoir.

**LOCATION:** Marshall County, Grand Plain Township, proximately 20 miles northeast of Thief River Falls. The drainage area above the impoundment is 53 square miles.

**PURPOSE:** Multi-purpose – designed to increase wildlife values and provide flood control.

**PROJECT COMPONENTS:**  
Approximately 10 miles of earthen embankment, an outlet control structure, and an emergency spillway into Ditch 200.



**FUNCTIONAL DESIGN DATA:**

	Elevation (ft.msl)	Storage
Top of Dam	1150.2	14,600
Emergency Spillway	1148.2	10,000 (4.7 in.runoff)
Typical Summer	1146.2	5,500 2.6 in. runoff)
Typical Winter	1145.2	3700
*Drainage Area 53.0 sq.mi.*		
*Highest recorded pool elevation (RLWD) was 1147.80 on April 14, 1999*		

**OPERATIONAL:** 1978

In 2014, the MnDNR obtained funding to make repairs on the outlet end of the control structure. Most of the work consisted of sediment removal, re-shaping of the plunge pool and ditch banks, plus installing rock riprap. The Watershed District helped with the design, cost estimate, and partial funding. The work was completed late in the year.

The Minnesota Department of Natural Resources (MnDNR) staff perform the actual operation of the outlet structure with cooperation from the District.





## **Good Lake Impoundment (RLWD Project No. 67)**

**GENERAL:** The Good Lake Project was a cooperative effort between the Red Lake Band of Chippewa Indians and the District.

**LOCATION:** The project area lies entirely within the Red Lake Indian Reservation. The impoundment is approximately 30 miles east of Thief River Falls, in Clearwater and Beltrami Counties. The drainage area above the dam is 73 square miles.

**PURPOSE:** Multi-purpose project to provide wetland habitat, flood water retention, and potential irrigation water supply. Enhanced wetland habitat for waterfowl, furbearers, and other wetland species. The reservoir also has the potential for seasonal rearing of northern pike. The project reduces flood peaks on both the Red Lake River and the Red River of the North. The dam stores runoff from the 73 square mile drainage area. Spring storage capacity is 11,300 acre-feet and is equal to 2.6 inches of runoff from the drainage area. The project will also reduce flooding on approximately 4,000 acres of private land immediately west of the project, by intercepting overland flows. The reservoir may be used as a water source for irrigation of wild rice paddies. Paddies have not been built, but there is potential for paddy development in adjacent areas.

**PROJECT COMPONENTS:** Approximately 9 miles of earthen embankment, 7.5 miles of inlet channels, a reinforced concrete outlet structure, and 2 miles of outlet channel. Water released from the impoundment, enters the Red Lake River approximately 2.5 miles downstream (south easterly) from the outlet control structure. The project was operational in 1996.

### FUNCTIONAL DESIGN DATA:

	Elevation (ft.-msl)	Storage (ac.ft.)
Top of Dam	1178.5	27,500
Flood Pool (Emergency Spillway)	1176.1	13,100 (4.8 in. runoff)
Normal Summer Pool	1173.0	3,250 (1.2 in. runoff)
Normal Winter Pool	1172.0	1,800
*Drainage Area – 73 sq.mi.*		
*Highest recorded pool elevation was 1176.80 on May 25, 1999*		

On April 12, 2011, the Red Lake Tribal Council approved a new 5-year Special Land Permit (Resolution No. 61-11) granted to the District. The original permit had expired on January 12, 2010. In part, the permit states “The purpose of this permit is to facilitate cooperative management of the Good Lake Impoundment, where the District and the Red Lake Band will cooperatively inspect, supervise and conduct necessary maintenance at the Good Lake Flood Control project site. Activities will be coordinated with the Red Lake Department of Natural Resources.” Also, as part of the land use permit, the District is granted a right of access to the land described for a period of five years, starting on the date the permit commenced. It was signed by the Tribal Chairman and Secretary on April 13, 2011 and expired on April 13, 2016.

On July 12, 2016, two District Board Managers and two Staff members met before the Red Lake Tribal Council to discuss and ask for a renewal of the Special Land Permit. On August 24, 2016, the office received a new 2-year Special Land Permit (Resolution No. 138-16) signed by the Tribal Chairman and Secretary and dated July 12, 2016 (expires on July 12, 2018). The Special Land Permit (Resolution No. 138-16) with the Red Lake Nation expired on July 12, 2018. RLWD personnel have not been able to access the project since that time.



**Moose River Impoundment (RLWD Project No. 13)**

**GENERAL:** The project, which is a two-pool design, is the largest impoundment operated by the District. It was a cooperative effort of the District, Red River Watershed Management Board, and the Minnesota Department of Natural Resources for flood control and wildlife management. Flood damages will be reduced by storing floodwaters in the upper reaches of the watershed. Wildlife and associated recreational benefits will be enhanced by water retained in the two pools. The project is constructed on lands managed by the Minnesota Department of Natural Resources.

**LOCATION:** The project is located at the headwaters of the Moose and Mud Rivers in northwestern Beltrami County, approximately 15 miles northeast of Grygla, MN.

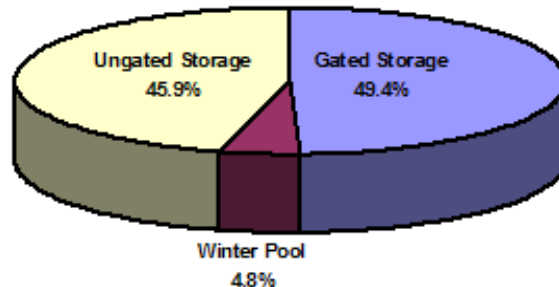
**PURPOSE:** Multi-purpose; designed to provide flood control, streamflow maintenance, increase wildlife values, and benefit fire control.

**OPERATIONAL:** 1988

FUNCTIONAL DESIGN DATA:

	North Pool	South Pool	Total
Top of Dam Elevation (ft.msl.)	1218.0	1220.0	
Freeboard Flood Elevation (ft.-msl)	1217.2	1219.3	
Freeboard Flood Storage (ac.ft.)	16,250	38,250	54,500
Emergency Spillway Elevation (ft.-msl)	1216.0	1218.0	
Emergency Spillway Storage (ac.ft.)	12,000	24,250	36,250 (5.4 in. runoff)
Gated Pool Elevation (ft.-msl)	1215.3	1217.4	
Gated Pool Storage (ac.ft.)	9,750	19,750	29,500 (4.4 in. runoff)
Typical Summer Elevation (ft.-msl)	1211.7	1213.6	
Typical Summer Storage (ac.ft.)	2,000	4,000	6,000 (2.1 in. runoff)
Typical Winter Elevation (ft.-msl)	1210.5	1212.4	
Typical Winter Storage (ac.ft.)	800	1,800	2,600
Max No-Flood Elevation (ft.-msl)	1212.5	1214.5	
Max No-Flood Storage (ac.ft.)	3,000	6,000	9,000
Project Drainage Area (sq.mi.)	41.7	83.3	125.0
*Highest Recorded Pool Elevation May 16, 1999	*1215.90	*1218.05	

This impoundment has a small permanent winter pool to allow for maximum storage capacity as indicated on the graph shown to the right.



## **Moose River Impoundment – North Pool**

The North Pool outlets into the Moose River (JD #21). The major components of the north pool are: 5 miles of diversion ditch, 4 miles of earthen dike with a top elevation of 1218.0, one gated outlet structure, one rock lined emergency spillway at an elevation of 1216.0. Approximately 1/3 (41.7 sq. mi.) of the total project drainage area (125.0 sq. mi.) drains to the Moose River.

**2021 Operation:** The maximum North Pool elevation for 2021 was 1211.90' (2,234 ac/ft) which occurred on October 28<sup>th</sup>. Fall drawdown was the only time the gate was operated all year. Fall releases began October 28<sup>th</sup>, drawdown was complete November 20<sup>th</sup>.

The Minnesota Department of Natural Resources (MnDNR) performed spotted knapweed control at various locations of the project. The watershed performed other routine maintenance (beaver dam removal & debris removal).

## **Moose River Impoundment – South Pool**

The South Pool outlets into the Mud River (JD #11 Main Branch). The major components of the south pool are: 3 miles of diversion ditch, 9 miles of earthen dike with a top elevation of 1220.0, 4 miles of earthen dike between the north and south pools, one gated outlet structure, two rock lined emergency spillways at an elevation of 1218.0. Between the North and South pools is an inter-pool structure which may be used to pass water between the pools. Approximately 2/3 (83.3 sq. mi.) of the total project drainage area (125.0 sq. mi.) drains to the Mud River.

**2021 Operation:** The maximum South Pool elevation for 2021 was 1213.85' (4,460 ac/ft) which occurred on October 28<sup>th</sup>. Fall drawdown was the only time the gate was operated all year. Fall releases began October 28<sup>th</sup> and drawdown was complete November 22<sup>nd</sup>.

The Minnesota Department of Natural Resources performed spotted knapweed control at various locations of the project. The watershed performed other routine maintenance (beaver dam removal & debris removal).





**Schirrick Dam (RLWD Project No. 25)**

**GENERAL:** The Schirrick Dam Project was constructed on the Black River in 1984 and was operational in 1985.

**LOCATION:** Section 35, Wylie Township, Red Lake County, approximately 20 miles northeast of Crookston. The drainage area above the dam is 107.7 square miles.

**PURPOSE:** The primary purpose is to provide flood relief on the Red Lake River and the Red River of the North by controlling the flow contribution from the Black River. A small permanent pool is also provided.

**PROJECT COMPONENTS:** An earthen embankment (38 feet at highest point) and a gated concrete outlet structure. The reservoir has the capacity to detain up to 4,800 acre-feet of water. Operable components are stop-log bays to control the elevation of the permanent pool and hydraulic flood gates to control the flow contribution of the Black River during floods. The gates will normally be open and will only close in the event of severe mainstem flooding.

**FUNCTIONAL DESIGN DATA:**



	Elevation (ft.-msl)	Storage (ac.ft.)
Top of Dam	992.5	6,000
Gated Storage	987.0	4,000
Emergency Spillway	989.3	4,800
Permanent Pool	962.0	70
*Drainage Area 107.7 sq.mi.*		
*Highest recorded pool elevation was 988.75 on April 17, 1997*		

Downstream river levels did not trigger a gate closure in 2021. In late November, annual gate operation occurred. Both hydraulic gates were test operated (closed and opened) to make sure that they function properly. This is done to be prepared in the event of a severe 2022 flood which would require closure. This dam and the timing of closure are vitally important for the flood protection for city of Crookston.

## **Black River Impoundment (RLWD Project No. 176)**

**GENERAL:** Construction of the Black River Impoundment began October of 2020 and with the great working conditions, nearly half of the project was completed in the fall of 2020. Construction resumed in the early summer of 2021 and continued to the late fall. The project was substantially completed and will be completed by mid-summer of 2022.

**LOCATION:** Section 3 & 4, Polk Centre Township, Pennington County, approximately 9 miles west of St. Hilaire.

**PURPOSE:** The project stores runoff and reduces flooding on downstream agricultural lands and urban areas by retaining up to approximately 4,064 acre-feet of floodwater. The storage of water in the impoundment will reduce downstream river levels on the Black River, Red Lake River & Red River of the North.

**PROJECT COMPONENTS:** The project has a drainage area of 16.9 square miles. The embankment and reservoir are constructed of approximately 3.12 miles of earthen clay embankment 557,799 cubic yards and approximately 14 feet at highest point), a grass lined emergency spillway, 11.7 miles of inlet channels and culvert work, 0.53 miles of outlet channel, and a gated concrete outlet structure. The operable components are the gated structure which releases water from the impoundment into an outlet channel. This water then flows westerly into the Black River.

### **FUNCTIONAL DESIGN DATA:**

	Elevation (ft.-msl)	Storage (ac.ft.)
Top of Dam	1023.50'	
Gated Storage	1019.00'	3,162
Emergency Spillway	1020.50'	4,064
*Drainage Area 16.9 sq.mi.*		

If needed, the Black River Impoundment will be ready able to store spring 2022 spring snowmelt flood water.



## **Maintenance of Drainage Systems**

One of the many tasks of the Ditch Inspector at the Red Lake Watershed District (RLWD) is to inspect the legal drainage ditch systems that are under the jurisdiction of the District. Semi-annual or annual inspections are conducted on these legal drainage systems to determine what type of repairs or any maintenance work that may be needed to keep these ditches functioning in good working order. Some of the things that the Ditch Inspector looks for: erosion around culverts, damage to slopes or scouring of the ditch bottom, violations to the right-of-way or buffer strips, and cattails or other weeds that may need to be managed.

Larson Helicopters from Perham, Minnesota was not contracted this year to spray the District's ditches. A helicopter is used because a lot of our ditches are not accessible to a ground sprayer due to fences, wet ground, and some of the ditches go cross country with no right of way to drive on. Due to the extremely dry year there were a total of zero miles of ditch that needed to be sprayed for cattails out of the 285.03 miles of ditch that are under the jurisdiction of the Red Lake Watershed District.

Most of the District's ditches have a permanent grass buffer strip on one or both sides. By state law the buffer strip is required to be a minimum of 16 ½ feet wide but is wider on some ditches. The District is required to inspect these grass strips and maintain them. Maintenance of these buffer strips will consist of mowing the ditch and its right-of-way at least once a year, starting around July 1<sup>st</sup>, and spraying for any noxious weeds. Four to five contractors are hired each year to mow the many watershed projects and the approximately 170 miles of accessible ditch right-of-way.

## **Legal Drainage Systems under jurisdiction of Red Lake Watershed District**

The District at present has jurisdiction of approximately 288.21 miles of legal drainage systems throughout the Watershed. The list of all the systems is shown below.

Ditch #	County	Length (mi.)
Red Lake River	Pennington	18.88
Clearwater River	Clearwater, Polk, Pennington, Red Lake	38.24
Lost River	Clearwater, Polk, Red Lake	23.32
RLWD Ditch #9	Beltrami	1.0
State Ditch #83	Marshall, Beltrami	23.36
Clifford Arveson Ditch	Pennington	2.2
RLWD Ditch 13	Pennington	2.04
RLWD Ditch 14	Pennington	4.42
TRF Flood Damage Reduction	Pennington	1.84
Challenger Ditch	Pennington	.44
RLWD Ditch #10	Red Lake	4.59
Equality/RLWD Ditch #1	Red Lake	2.95
RLWD Ditch #3	Red Lake	4.98
RLWD Ditch #1, Lat A, B	Red Lake, Polk	4.0
RLWD Ditch #7	Red Lake, Polk	12.27
Main Judicial Ditch #2	Clearwater	1.6 (e)
Judicial Ditch #2A	Clearwater	5.44
Judicial Ditch #4	Clearwater	5.39
Judicial Ditch #5	Clearwater	2.72
County Ditch #1	Clearwater	5.5
Judicial Ditch 2B & C	Clearwater	5.52
Winsor-Hangaard	Clearwater, Polk	13.9
Judicial Ditch #72	Clearwater, Polk	14.51
RLWD Ditch #8	Polk	2.01
RLWD Ditch #11	Polk	6.36



RLWD Ditch #12	Polk	17.34
Polk County Ditch #63	Polk	2.91
Polk County Ditch #33	Polk	4.42
Polk County Ditch Improvement	Polk	13.42
Burnham Creek	Polk	14.43
Krostue Petition	Polk	1.7
Kenneth Johnson Petition	Polk	2.58
Scott Baatz Petition	Polk	1.47
RLWD Ditch #15	Polk	13.26
RLWD Ditch #16	Polk	9.2
Total Mile of Ditches	Polk	288.21

In 2018, the Board approved the installation of culvert markers on every Side Water Inlet (SWI) culvert in each drainage system. Listed are the system where the installation of markers has been completed:

- RLWD #1 Lateral A & B, Project 5
- RLWD #3, Project 7
- RLWD #7, Project 20
- RLWD #9, Project 39
- Arveson Petition, Project 109
- Winsor Hangaard, Project 113
- RLWD #1 Lateral C, Project 115
- Project 117
- Polk County Ditch Improvement #'s 104, 61, 47, 94, Project 119
- Baatz Petition, Project 123
- Polk County Ditch #63, Project 134
- Polk County Ditch Improvement #33, Project 135
- RLWD #10 Project 161
- RLWD #11, Project 166
- RLWD #13, Project 170A
- RLWD #12, Project 169
- RLWD #14, Project 171
- RLWD #15, Project 175
- RLWD #16, Project 177
- Thief River West Side Project, Project 178



2021 Ditch Mowing		
Project #	System	Contractor
5	RLWD #1 Lat A & B	Olson Construction
7	RLWD #3	Danni Jarshaw
14	State Ditch #83	Brad Lunke
20	RLWD #7	Olson Construction
36	RLWD #8	Olson Construction
39	RLWD #9	Todd Stanley
41	JD #72	Olson Construction
43B	Burnham Creek	Shane Vanosek
48	JD #2 Br A & A1	Olson Construction
49	JD #2B	Olson Construction
53	Krostue Petition	David Shane
60FF	Grand Marais Creek Cut Channel	Shane Vanosek
109	Arveson Petition	Olson Construction
113	Winsor Hangaard	Olson Construction
115	RLWD #1 Lat C	Olson Construction
117	Kenneth Johnson Petition	Shane Vanosek
119	Polk Co Ditch Improvement #'s 104, 61, 47, 94	David Shane
122	Challenger Ditch	Olson Construction
123	Baatz Petition	Shane Vanosek
134	Polk Co Ditch #63	David Shane
135	Polk Co Ditch #33	David Shane
161	RLWD #10	Danni Jarshaw
166	RLWD #11	Shane Vanosek
169	RLWD #12	Shane Vanosek
170A	RLWD #13	Olson Construction
171/171A	TRF Flood Damage Reduction/RLWD #14	Les Cota
175	RLWD #15	Shane Vanosek

**Due to the dry conditions in 2021 there was no cattail spraying done this year.**

2021 Ditch Spraying by Larson Helicopters, LLC		
Project Number	System	Miles Sprayed
5	RLWD #1 Lat A & B	0
20	RLWD #7	0
36	RLWD #8	0
41	JD #72	0
43B	Burnham Creek	0
48	JD #2A & A of 1	0
49	JD #2B	0
115	Equality/RLWD #1	0
117	Johnson Petition	0
119	Polk Co. Ditch Improvement #'s 104, 61, 47, 94	0
135	Polk Co. Ditch #33	0
161	RLWD #10	0
169	RLWD #12	0
170A	RLWD #13	0
171	RLWD #14	0



**RLWD Project #5, RLWD #1 Lat A & B**

Along Lateral B of RLWD #1, at Station 129+71 (the NW corner of the SW4NW4, Section 26, Equality Township, Red Lake County), a 42” x 40’ Corrugated Steel Pipe (CSP) failed. In 1979, This pipe was replaced during an Improvement to Project 20, RLWD #7, which established Lateral B of RLWD #1 as a second outlet for RLWD #7. Due to the Improvement, Project 20, RLWD #7 was responsible for twenty percent of the bill while RLWD #5 was responsible for eighty percent of the bill.



New culvert Lateral B of RLWD #1 STA 129+71 looking north

**RLWD Project #14, State Ditch 83, Marshall County**

During inspection, it was noted that a lot of erosion is occurring around most of the side water inlets. Rip rap is to be placed at these outlets in the Spring of 2021. In the summer, Lunke Construction Inc. removed trees from four different locations that were causing log jams. RLWD paid for half the bill while Agassiz Wildlife Refuge paid the other half. In the fall, RLWD staff cut down trees from a windstorm that were blocking the ROW trails.

In the recent years, sloughing along the system has increasingly gotten worse. There were 5 locations that had sloughing fixed on the system that was paid by one watershed one plan (1W1P). Three of these locations had toe wood sod mat installed to help prevent undercutting and sloughing. There are pictures of this installation on the next page below the chart. See also 1W1P projects for more information.

<b>Construction of SD #83 Costs Since 2003</b>		
<b>Year</b>	<b>Sites Completed</b>	<b>Construction Cost</b>
2003	5	\$ 17,924.00
2004	High water levels	\$ 0.00
2005	7	\$ 39,033.00
2006	11	\$ 36,004.00
2007	16	\$ 42,144.00
2008	11	\$ 34,450.00
2009	7	\$ 41,574.00
2010	High water levels	\$ 0.00
2011	6	\$ 41,400.00
2012	11	\$ 80,480.00
2013	5	\$ 30,096.00
2014	High water levels	\$ 0.00
2015	4	\$ 16,040.00
2016	1	\$ 2,615.00
2017	12	\$ 55,330.00
2018	4	\$ 14,213.00
2019	High water levels	\$ 0.00
2020	0	\$ 0.00
2021	12	\$ 19,897.40
<b>Total</b>	<b>100</b>	<b>\$ 471,200.00</b>



**RLWD Project 20, RLWD #7**

Upon inspection in the spring, a small gully was found forming at STA 421+05 (SE corner of the SE4SW4 sec 24 Equality Township). This spot will need to be watched and considered for future maintenance. A pipe was replaced at station 540+59 at a field crossing that accesses a field owned by Austin Erlandson. It was a 72”X22’ and was replaced with a 72”X40’ CMP.

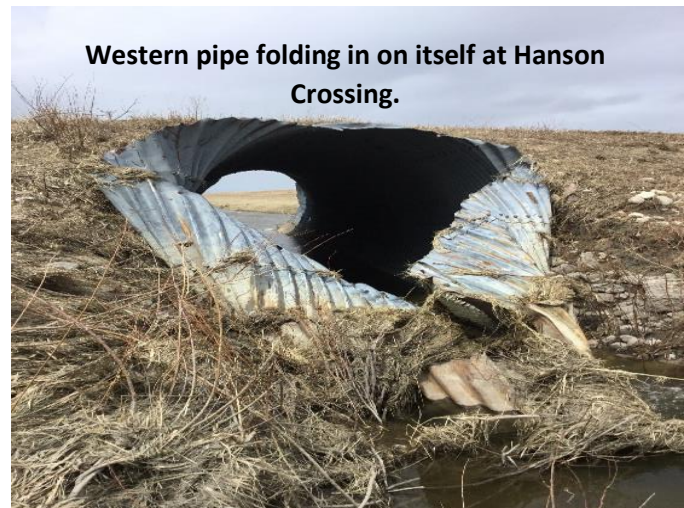


**RLWD Project 36, RLWD #8**

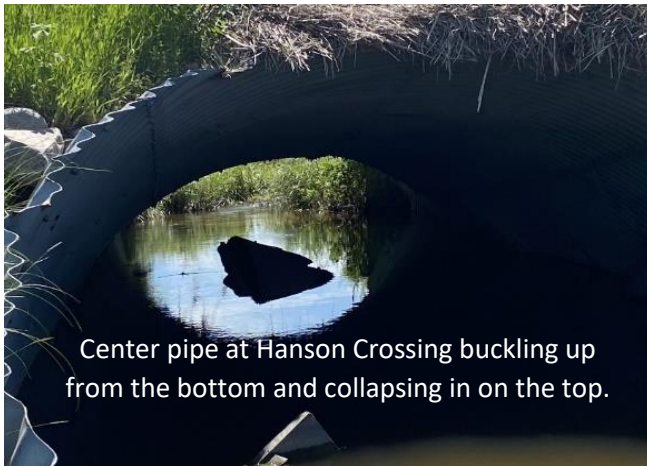
In the late fall, RLWD received a request from a landowner to remove sediment along ¼ mile of the ditch along the NW4NE4 of Section 23, Johnson Township, Polk County. They also requested having down trees cut and chipped along the NE4NE4 of Section 23, Johnson Township, Polk. There is a lack of plans in the office for this ditch system, so in the spring of 2022, a survey and a few soil borings will be done to create and establish ditch plans. Once plans are reestablished, the district will consider the requests.

**RLWD Project #43B, Burnham Creek**

During spring inspection, at a crossing known as the “Hanson Crossing,” the western pipe was found folding in on itself again and the center pipe was beginning to fail, buckling in on itself. The pipes are under 340<sup>th</sup> St SW straddling Section 1 of Hammond and Section 31 of Fairfax, Polk County. The road authority, Hammond Township, is responsible for the replacement of pipes. Due to the high cost of replacing the pipes, Hammond Township is applying for bridge funds through the state.







Center pipe at Hanson Crossing buckling up from the bottom and collapsing in on the top.

At a crossing located between Section 9 and 10 of Russia Township, known as “Simmons Crossing,” one pipe separated causing the crossing to cave in. This led to a more detailed inspection of both the pipes, and it was found that both pipes had rusted out along the bottom. The crossing has been temporarily removed as not to block flow. In the spring of 2021, two new 29” x 42” arch pipes will be installed, these pipes have a coating that allows them to last longer while sitting constantly in water. New pipes were installed in the summer of 2021. At Station 1310+10 (Section 10 Russia Township) a 30” flap gate was replaced.



Both culverts temporarily removed at Simmons Crossing until Spring of 2021.



Simmons Crossing After Two New Arch pipes were installed

**RLWD Project #48, JD #2A**

In October, a small area of sediment and cattails along Branch A (NE corner of the NE4SE4 sec 30 Greenwood Township) was cleaned out. One beaver was trapped, and a dam was pulled upstream of a farmyard crossing in section 17 of Greenwood Township. This year a detailed inspection was completed on this system. A detailed inspection implies that all culvert, side water inlets and ditch slopes were inspected. It also includes surveying the whole system to have an idea of how much sediment has accumulated. Once plans are drawn up in Auto CAD, the information will be available to the public.

**RLWD Project #49, JD #2B**

In mid-summer, a beaver dam was located in Winsor Twp. Section 25. Two beavers were trapped, and the dam was removed.



Beaver Dam located in Project 49

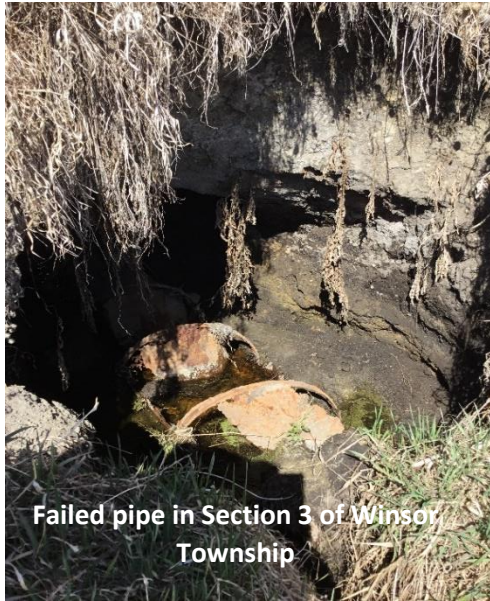
**RLWD Project #102, JD #5, Clearwater County**

In early spring, two beavers were trapped just upstream of the outlet. The dam was not removed due to the Board’s decision to not spend money on the system until after the court hearing on the Four-Legged Lake appeal. The court hearing is completed, and monitoring of water levels has resumed.



**RLWD Project #113, Winsor Hangaard**

This year a detailed inspection was mostly completed on this system. A detailed inspection implies that all culvert, side water inlets and ditch slopes were inspected. It also includes surveying the whole system to have



an idea of how much sediment has accumulated. Once plans are drawn up in Auto CAD, the information will be available to the public. The whole system was inspected, however only half of the survey was completed. There was a rusted out pipe that was discovered by a land owner at a field crossing. It was located Section 3 of Winsor Township. The old pipe was replaced with a 24"X40' cmp.

**RLWD Project 117, Johnson Petition**

We will monitor the snow pileup on the ditch, as it seems to happen most years there is snow. And have Brault Construction remove the snow as needed. A detailed inspection was completed on this system. A detailed inspection implies that all culvert, side water inlets and ditch slopes were inspected. It also includes surveying the whole system to have an idea of how much sediment has accumulated. Once plans are drawn up in Auto CAD, the information will be available to the public.

**RLWD Project #119, Polk County Ditch Improvement, Polk County**

There was a pipe extension put on a pipe in Andover Twp. NSW quarter of Section 31. In the late fall, RLWD staff finished removing trees from the side water inlet pipes, and centerline pipes.

**RLWD Project #122, Challenger Ditch**

In 2019, the RLWD Board approved a petition from Pennington County for the realignment and modification of a portion of the existing drainageway and outlet of the ditch system due to the construction of a round-a-bout and a bridge. In 2020, most of the construction was completed by R.J. Zavoral & Sons, Inc. The ditch has been reconstructed and the outlet is completed.





**RLWD Project #134, Polk County Ditch 63, Polk County**

During spring inspection, a large gully was found in the SW4NW4NW4 section 10 of Andover Township (near STA 184+00). The gully is about twenty feet long, eleven feet wide and six feet deep. Due to the topography of the area, the best fix is to shape the gully and place riprap to stabilize the slopes. This work will be done in 2022.



**RLWD Project #135, Polk Count Ditch #33**

In March of 2020, about three quarters of a mile work of snow removal was done by Grant Plante. In 2019, it was determined that the bridge at STA 369+60 is not structurally sound and needs to be replaced. The existing structure is a cast-in-place bridge with the base of the walls having integral footings that extend approximately a foot into the waterway, which is exposed on both sides due to erosion. The northern bridge wall is tilting inwards 3-5 degrees, while cracking on the inlet wings are showing several inches of movement. About one foot of the concrete is deteriorating substantially and there is significant evidence of piping erosion along the structure. Currently, RLWD staff is looking into the history of the crossing and will be in contact with landowners about the issue.





**A.** South west corner of failing bridge. **B.** East side of failing bridge. **C.** Under failing bridge, looking west.

**RLWD Project #161, RLWD Ditch 10, Red Lake County**

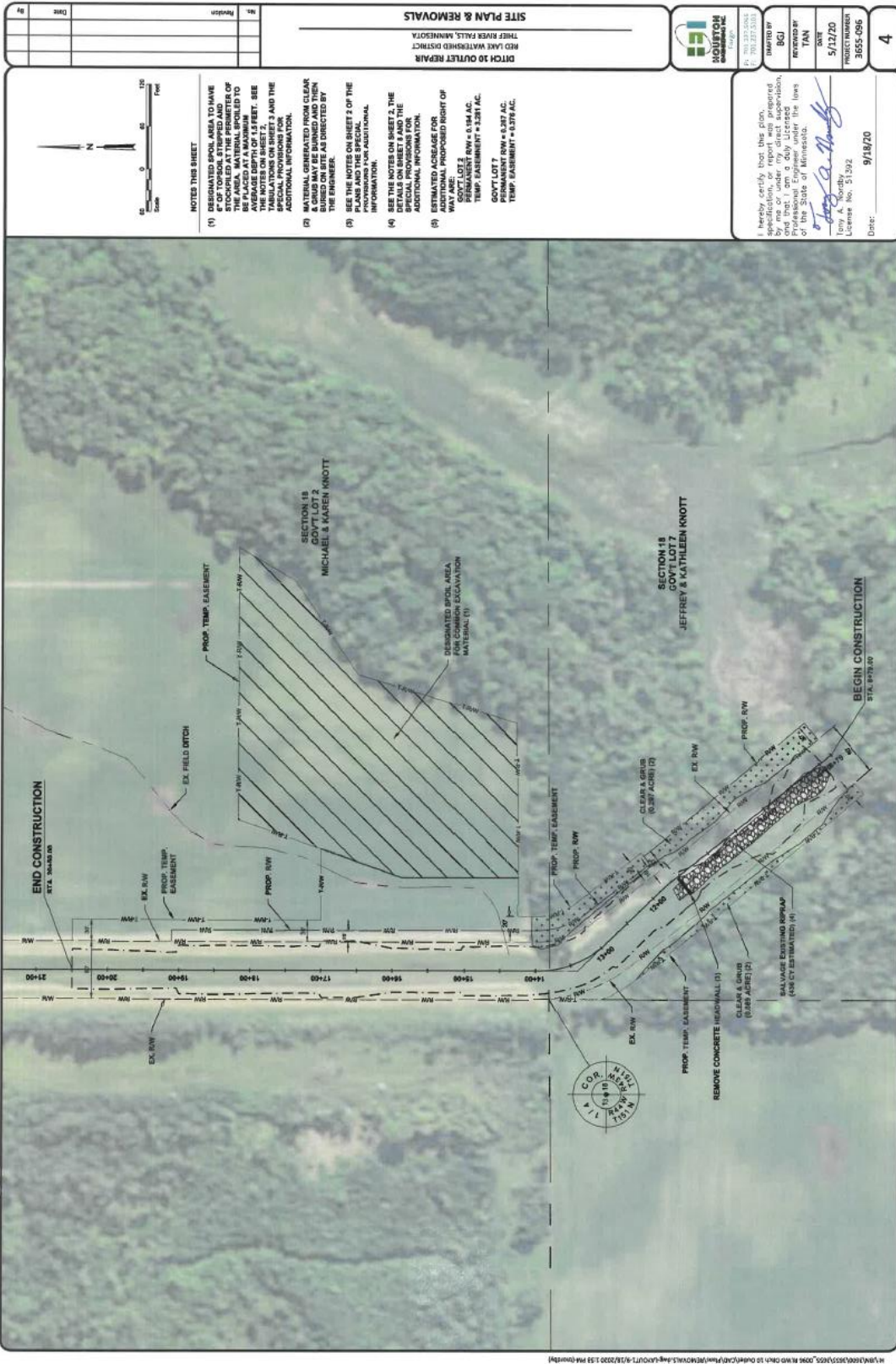
In 2019 a disaster was declared by the Federal Emergency Management Agency (FEMA) due to the spring flood. RLWD staff submitted a request for public assistance in repairing the outlet for Ditch 10. RLWD staff went through the process required for mitigation and was awarded a total of \$84,412.86 (Federal: \$63,309.65 State: \$21,103.21). Due to COVID restrictions, this process took longer than expected and the District was awarded the money in the late fall of 2020. It was the Engineers opinion that construction wait till the Spring of 2021. The RLWD staff then applied for a Time Extension which was accepted. This money is to be used by September 20, 2021.



The new outlet structure construction was awarded to R.J. Zavoral & Sons, Inc. According to the contract, the work will be substantially complete on or before July 16, 2021 and completed and ready for final payment on or before July 30, 2021. The contract price of the awarded contract is \$218,498.95. The pictures below show the completed ditch outlet pipe and plunge pool.







No.	Revisions	Date	By

**SITE PLAN & REMOVALS**  
 DITCH 10 OUTLET REPAIR  
 THREE RIVER FALLS, MINNESOTA

**HOUSTON CONSULTING**  
 701.227.2111  
 701.227.2111  
 BCU  
 TAN  
 JUNE  
 5/12/20  
 PROJECT NUMBER  
 3655-096  
 4

**NOTES THIS SHEET**

- DESIGNATED SPOIL AREA TO HAVE STOCKPILED AT THE PERIMETER OF THE AREA. MATERIAL STOCKPILED TO AVERAGE DEPTH OF 1.5 FEET. SEE THE NOTES ON SHEETS 2, 3 AND THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- MATERIAL GENERATED FROM CLEAR AND GRUB WORK SHALL BE STOCKPILED ON SITE AS DIRECTED BY THE ENGINEER.
- SEE THE NOTES ON SHEET 2 OF THE PLAN AND THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- SEE THE NOTES ON SHEET 7, THE DETAILS ON SHEET 8 AND THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- ESTIMATED ACRES FOR ADDITIONAL PROPOSED RIGHT OF WAY: GOVT LOT 2 TEMP. EASEMENT = 1.37 AC. GOVT LOT 7 PERM. EASEMENT = 0.194 AC. GOVT LOT 7 TEMP. EASEMENT = 1.37 AC. TEMP. EASEMENT = 1.37 AC.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

*Jeffrey A. Knott*  
 Jeffrey A. Knott  
 License No. 51392

Date: 9/18/20

Engineer approved Construction plans for the outlet of Project 161, RLWD

**RLWD Project #166, RLWD #11**

There was brushing near the outlet, and at side water pipes that was completed by RLWD staff along this ditch system

**RLWD Project #169, RLWD 12, Polk County**

There was a failed 72” cmp pipe located in the SESE Quarter of Section 13 of Tynsid Twp. In Polk County. It was replaced early in the summer of 2021 by Brault Construction Inc.



Failed 72” cmp pipe



Failed 72” cmp pipe replaced in the summer of

**RLWD Project #170A, RLWD #13**

RLWD Staff was notified about a damaged flap gate on a pipe under Pennington County Road 60. Upon inspection it was also discovered that the pipe had rusted out. In the fall, Pennington County replaced and paid for the pipe through the road while the District replaced and paid for the flap gate.



18” pipe that got replaced the summer of 2021



**RLWD Project #171, RLWD #14**

This ditch system got mowed more frequently than any other ditch system. There was an invasive weed species that we wanted to keep from spreading. There was also some brushing done by RLWD staff at various locations on the ditch.

**RLWD Project #175, RLWD 15, Polk County**

There was a beaver dam located near station 685+00. We had multiple beavers trapped and the dam removed. There was also a side water inlet pipe damaged near station 569+00 in the NESE quarter of Section 9 of Euclid Twp.

The pictures below are a before and after of the damaged pipe located near station 569+00 in the NESE quarter of Section 9 in Euclid Twp.



## **Water Quality Program**

The District and other local organizations are working to protect and restore water quality in rivers, streams and lakes in the five major watersheds within the District's boundary. To protect water quality, it is important to have a confident understanding of current water quality conditions. District staff monitor water quality and flow conditions. Monitoring involves regular sample collection, investigative sampling, and event monitoring with autonomous sensors. The data is used to assess water quality conditions by comparing statistics to water quality standards that are established by the State of Minnesota. The results of data assessment and analysis are used to identify problem areas, trends, pollutant sources, and priority areas for implementation of projects that will improve water quality. In addition to the District's long-term monitoring program, water quality staff deployed and maintained dissolved oxygen and water level loggers.

Thanks to the Clean Water Land and Legacy Act, the Minnesota Pollution Control Agency (MPCA) has been able to provide the District with funding for four watershed restoration and protection strategy (WRAPS) projects ([Thief River](#), [Red Lake River](#), [Grand Marais Creek](#), and [Clearwater River](#) watersheds). Another WRAPS project, for the Upper/Lower Red Lakes Watershed, was completed by the Red Lake Department of Natural Resources. The WRAPS process and stakeholder involvement informed the 1W1P process, which has provided much funding for water quality projects.

An important part of the District's water quality program is public education. The District supports River Watch programs at schools that monitor water quality in streams within its boundaries. The information collected by the District and others needs to be interpreted and shared for it to be most beneficial. Therefore, the District generates regular (monthly and annual) water quality reports, hosts or helps plan public events, and participates in other educational events like water festivals. Information is shared online. The creation of informative maps using GIS software is also used to attain a better understanding of water resources and watersheds.

The knowledge that is gained through the District's water quality program is also used for the planning of projects that will improve water quality conditions and comprehensive watershed planning efforts (1W1P). The District has identified sources of pollutants that can be addressed through large and small projects. The Board of Managers has approved financial support to projects and programs that will improve water quality. The success of those projects can also be monitored through the District's water quality program.

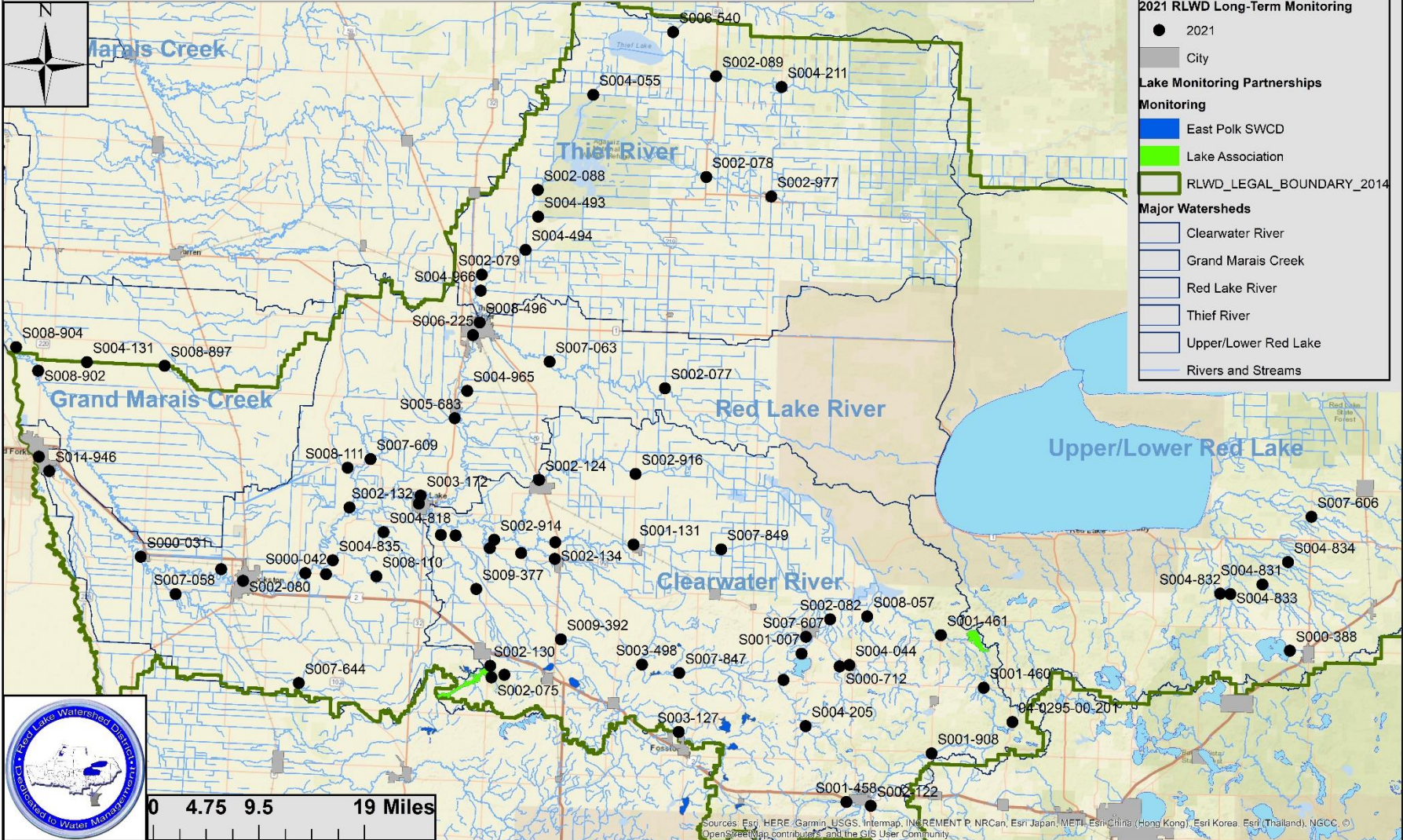
Some changes in the District's water quality personnel occurred in 2021. Ashley Hitt, Natural Resource Technician, accepted a new job with the NRCS. Ashley has been an important member of our team during her years at the District, working with River Watch students, fulfilling the role of the office's GIS specialist, helping with water quality sampling, and development of PTMapp for multiple watersheds. Christina Slowinski will transition from the Engineering Technician (Ditch Inspector) position to the Natural Resource Technician position in the spring of 2021.

### **Long-Term Water Quality Monitoring Program**

The District's long-term district monitoring program has collected water quality data throughout the district since 1980. Water quality monitoring was conducted at 77 stream crossings and one lake as part of the District's regular monitoring program in 2021. The District partnered with other local organizations to collect additional lake and stream data. Monitoring sites were selected so that data could be strategically collected from as many assessment units (reaches of rivers, streams, and ditches – delineated by the MPCA for assessment purposes) as possible. Generally, monitoring sites are located near the pour points (downstream ends) of rivers, streams, and ditches. Monitoring station locations can be changed to adapt to changes in MPCA assessment units. The four 2021 rounds of sampling occurred in May, July, August, and September. Locations of long-term monitoring stations are shown on the maps on the following pages.



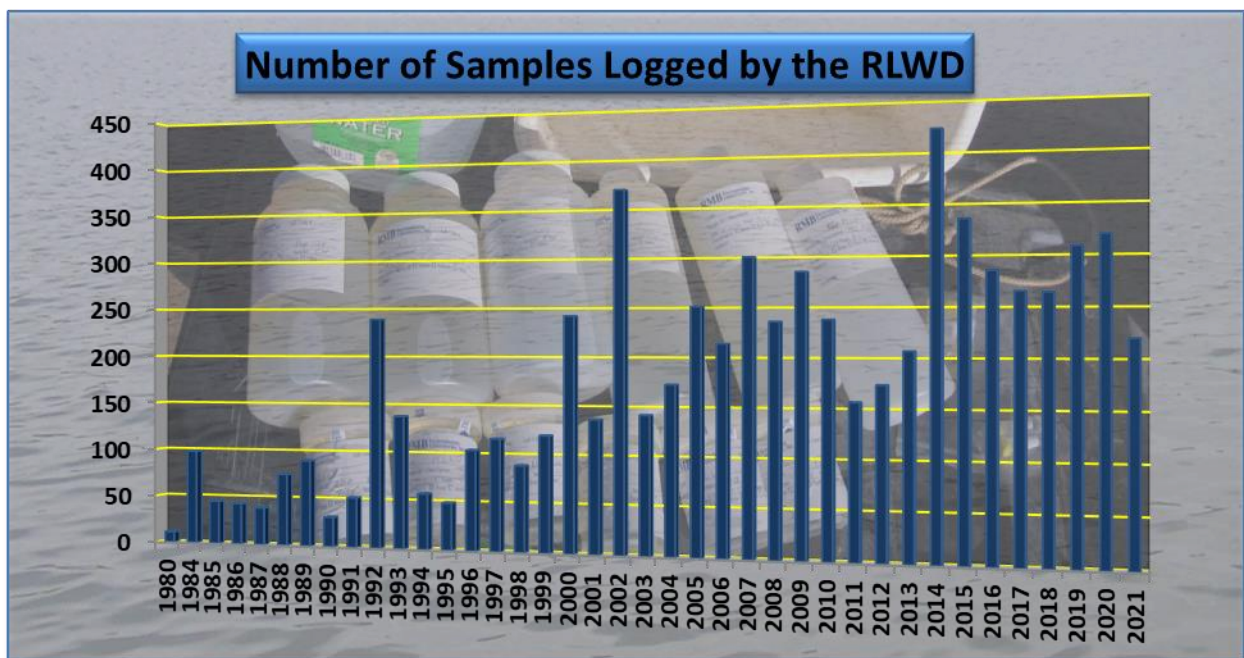
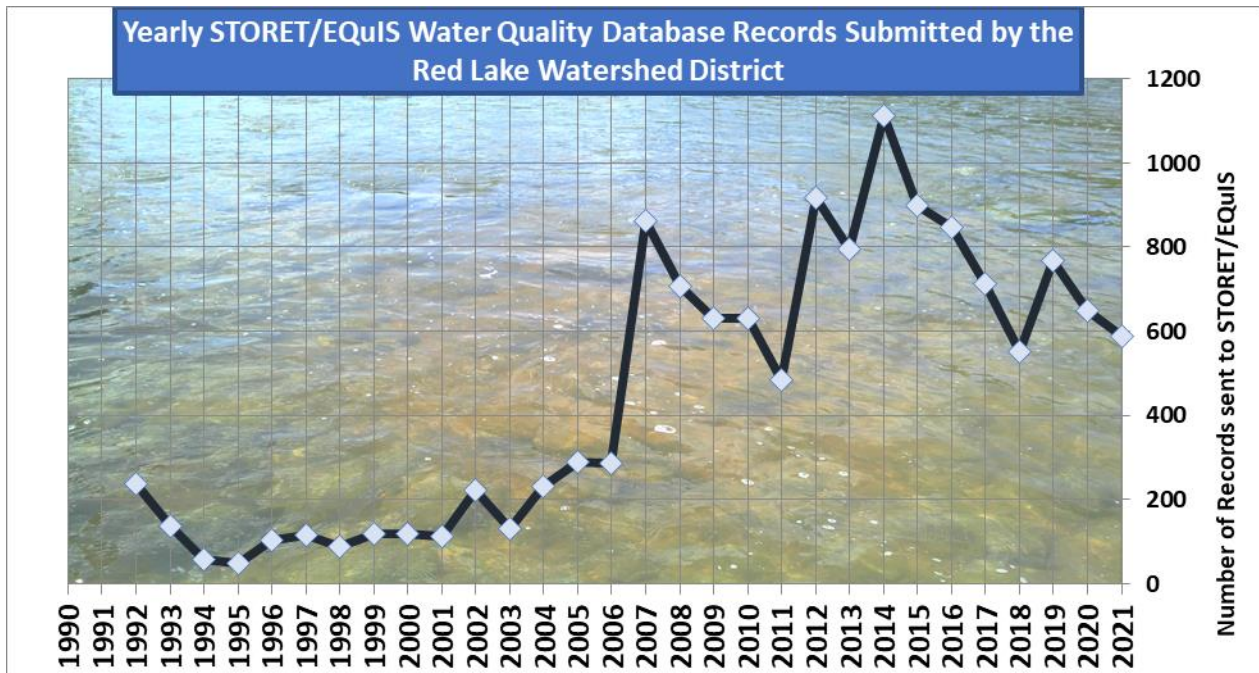
# Red Lake Watershed District 2021 Water Quality Monitoring Sites





Field measurements of dissolved oxygen, temperature, turbidity, specific conductivity, pH, and stage were collected during each site visit if there was flowing water. Four rounds of samples were also collected and analyzed for total phosphorus, orthophosphorus, total suspended solids, total Kjeldahl nitrogen, ammonia nitrogen, nitrates + nitrites, and *E. coli*. Biochemical oxygen demand analysis was performed on samples from rivers and streams that were impaired by low dissolved oxygen levels or have high total phosphorus concentrations.

Field measurement data from 2021 water quality monitoring was entered into the District’s database, transferred to an EQUIS submittal template, reviewed for accuracy, then submitted to the MPCA for storage in the EQUIS database. Data from RMB Environmental Laboratories was electronically submitted directly to the MPCA. A total of 589 records were submitted to the MPCA. Of those records, 220 involved the collection of water quality samples. Data collected by the East Polk SWCD staff from additional locations within eastern Polk County were also submitted to the MPCA.





The defining characteristic of the 2021 monitoring season was the drought that led to low flow conditions and dry channels throughout the District. Many monitoring site visits consisted of simply noting the stage and lack of water. Measure down readings were often preceded by the “>” symbol because the channel or culvert was dry below the reference point.



The lowest concentration of *E. coli* bacteria recorded in the District in 2021 was <1 MPN/100ml (less than the lab could accurately measure), in a sample collected from Clear Brook at CSAH 92 in May.

The highest concentration of *E. coli* bacteria recorded in the District in 2021 was >2,419.6 MPN/100ml, at multiple locations.

- Chiefs Coulee at Dewey Ave in Thief River Falls
- Gently River at CSAH 11
- Judicial Ditch 73 at 343<sup>rd</sup> Street SE, near Rydell National Wildlife Refuge
- Lost River at 486<sup>th</sup> Street, near the Pine Lake outlet
- Darrigan's Creek at CSAH 23
- Hill River at CSAH 35

High biochemical oxygen demand (BOD) concentrations (>3.5 in the South or more than the laboratory's 2 mg/L minimum reporting limit in the Central or North River Nutrient Regions) were found in the following streams.

- Chiefs Coulee at Dewey Ave in Thief River Falls
- Burnham Creek at CSAH 48
- Poplar River at CSAH 30 during discharge from the Fosston Wastewater Treatment Facility
- Thief River at 140<sup>th</sup> Ave NE
- Lost River at 109<sup>th</sup> Ave, upstream of Pine Lake
- Ruffy Brook at CSAH 11
- Poplar River at County Road 118
- Clearwater River at CR 127
- Poplar River at 310<sup>th</sup> Street SE

The majority of nitrate and nitrite concentrations measured in 2020 were lower than the laboratory's minimum reporting limit of 0.03 mg/L, a lower limit that is based on the accuracy of the laboratory method/equipment. The highest nitrate and nitrite concentration (11 mg/L) was found in the Mud River at CSAH 54. Some relatively high (>1 mg/L) concentrations were found in the Mud River, Chief's Coulee (Thief River Falls stormwater), Marshall County Ditch 20, and the Thief River in May and September. Typically, relatively high concentrations of nitrates and nitrites are found in streams in the Brooks and Red Lake Falls area, but the 2021 concentrations in those streams were all low (likely due to the dry weather and lack of flow from tile drainage).

The district partnered with the East Polk SWCD and the Maple Lake Improvement District to collect water quality samples from lakes in the Clearwater River watershed. Arrangements were also made to equip and train a volunteer for sampling of Bartlett Lake, near Northome. Those organizations and volunteers collect samples and send them to RMB Environmental Laboratories, and the District reimburses them for the laboratory analysis expenses. This was the fourth year of sampling for the East Polk SWCD partnership with watershed districts for lake monitoring (the SWCD also samples some lakes for the Sand Hill Watershed District). Some of the newly sampled lakes now meet data requirements for water quality assessment for the first time. The East Polk SWCD's lake monitoring effort found some nearly impaired and impaired lakes that weren't known at the time of the Clearwater WRAPS but can be prioritized in the Clearwater River 1W1P.

Data from the District's long-term monitoring program sites, East Polk SWCD monitoring sites, the state's Watershed Pollutant Load Monitoring Network, and dissolved oxygen deployments were compared to state water quality standards to create the following maps.

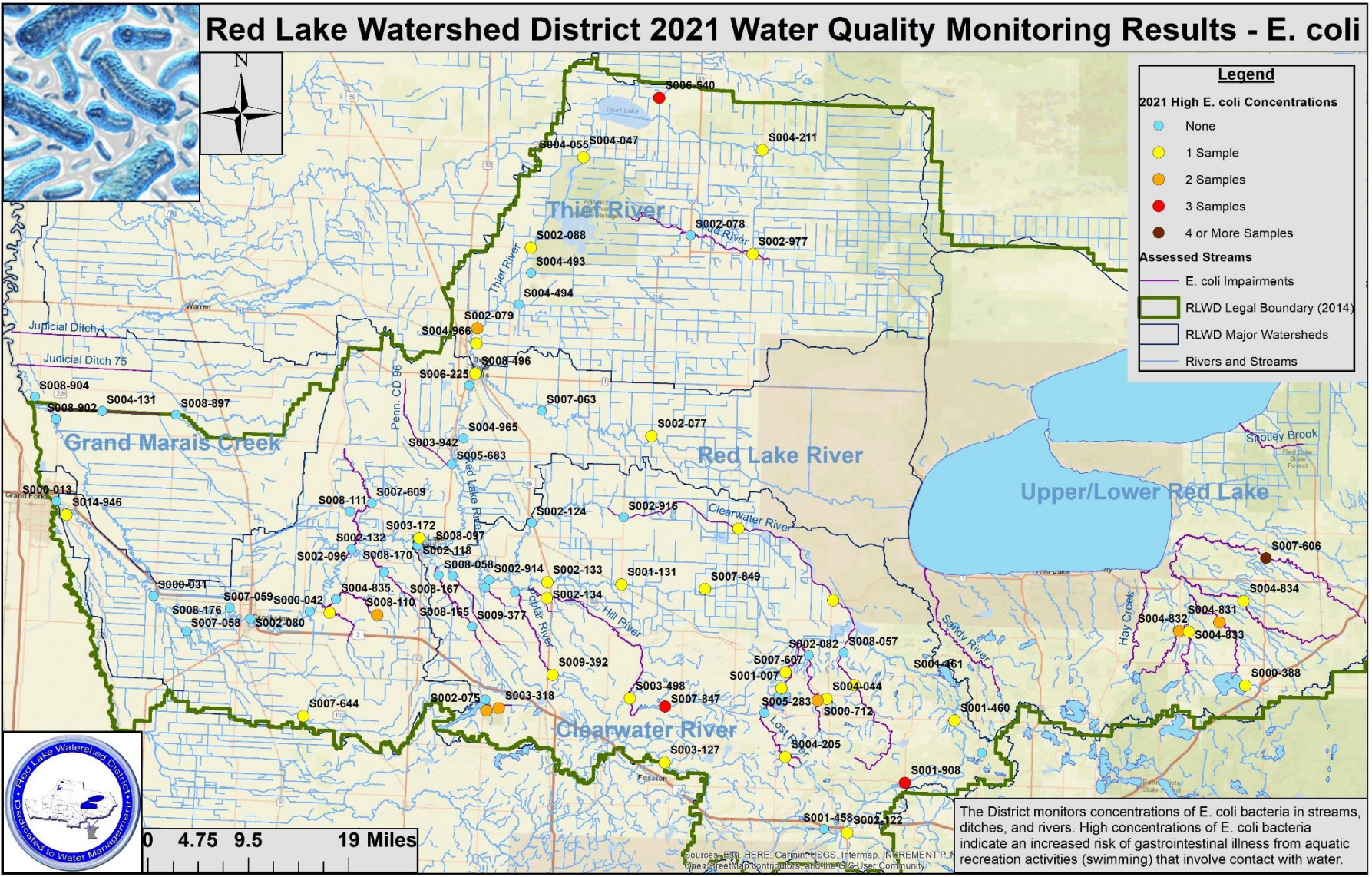


# Red Lake Watershed District 2021 Water Quality Monitoring Results - Total Suspended Solids





# Red Lake Watershed District 2021 Water Quality Monitoring Results - E. coli



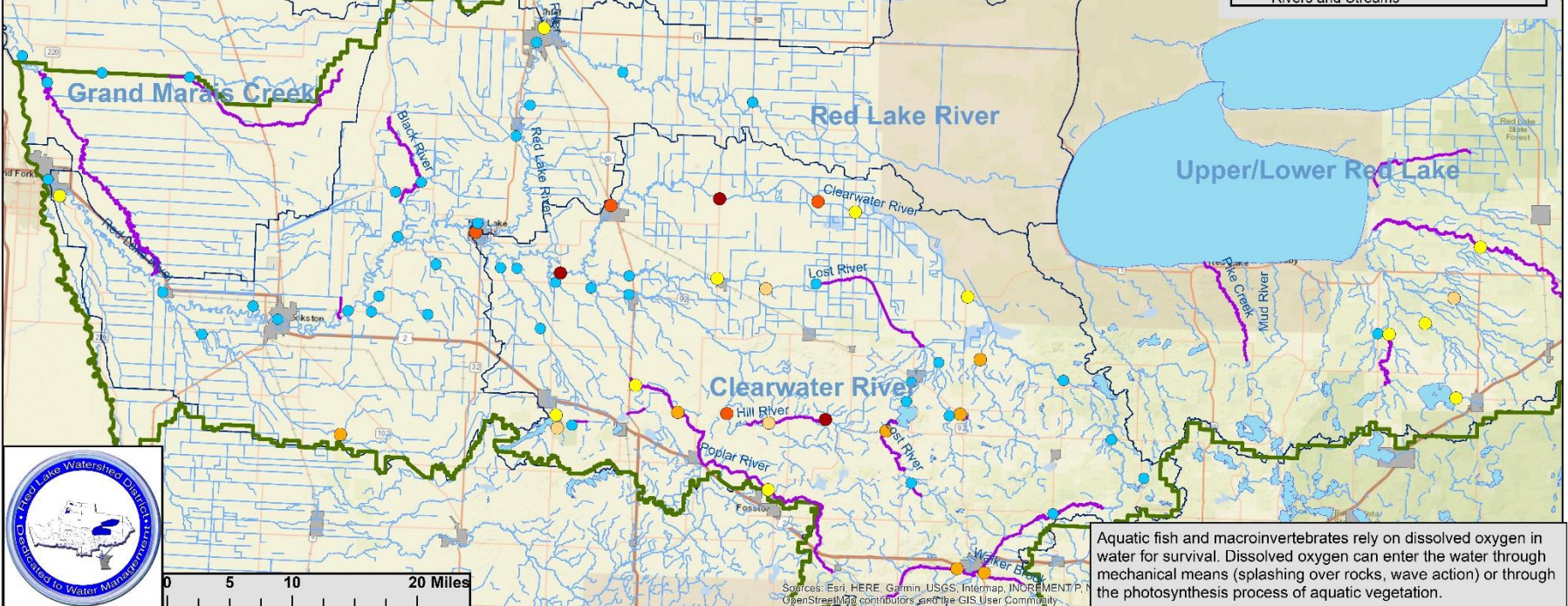
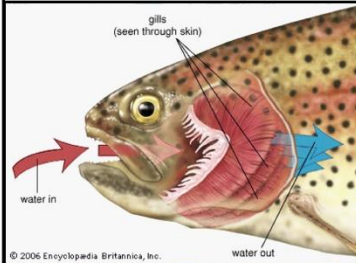






# Red Lake Watershed District 2021 Water Quality Monitoring Results - Dissolved Oxygen

This map shows the number of low dissolved oxygen levels that were recorded by the RLWD long-term monitoring program (4 site visits per year), investigative sampling, dissolved oxygen logger deployments (approximately 2 months at each site), and the East Polk SWCD monitoring effort.



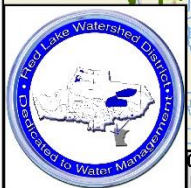
**Legend**

**2021 Low Dissolved Oxygen Levels (<5 mg/L)**

- 0
- 1 Day
- 2 Days
- 3 Days
- 4-10 Days
- >10 Days

**Assessed Streams**

- Low D.O. Impairments
- City
- RLWD Legal Boundary (2014)
- RLWD Major Watersheds
- Rivers and Streams



Aquatic fish and macroinvertebrates rely on dissolved oxygen in water for survival. Dissolved oxygen can enter the water through mechanical means (splashing over rocks, wave action) or through the photosynthesis of aquatic vegetation.

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, OpenStreetMap contributors, and the GIS User Community



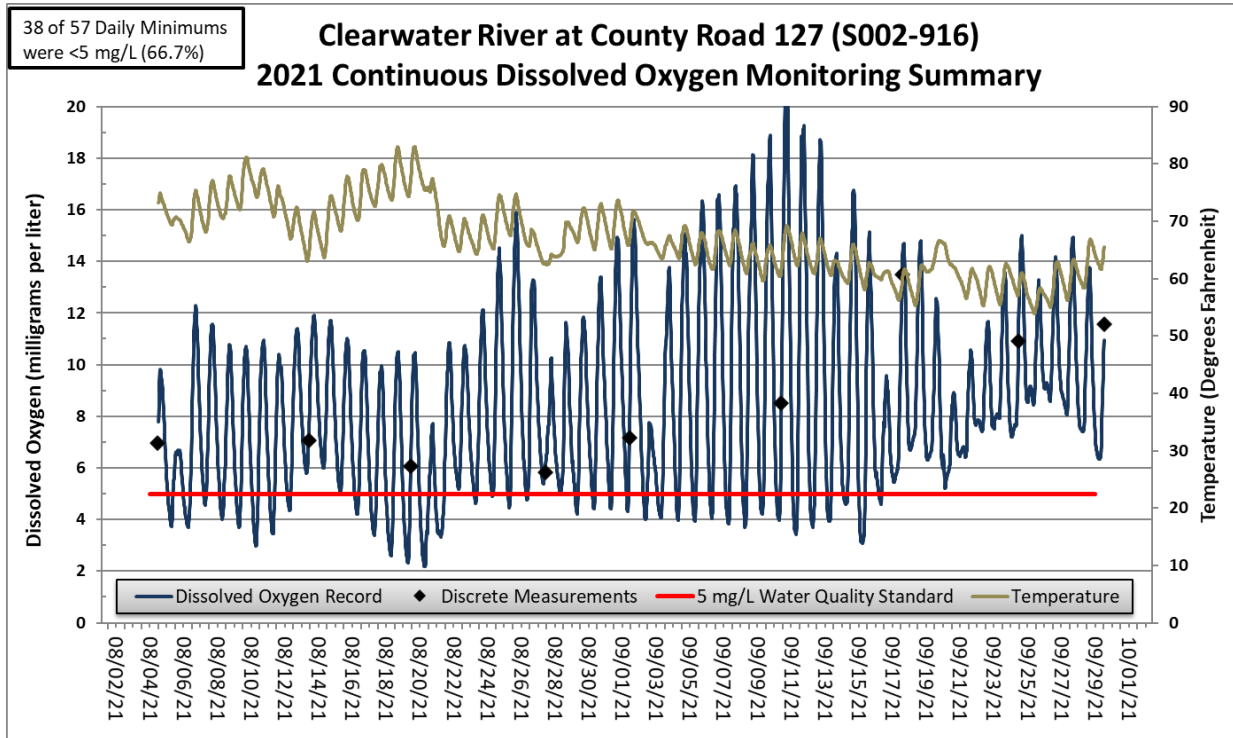
A fall drawdown of the Thief River began in mid-August. The Thief River was dry at CSAH 7 during the first site August site visit for the District's long-term monitoring, but it was revisited so that a sample could be collected when flow resumed later that month during the drawdown. The Minnesota Pollution Control Agency also collected regular samples from the Thief River during the drawdown period. Though total suspended solids, total phosphorus, and chlorophyll-a were relatively high on September 20th (receding limb of hydrograph) compared to other September samples collected at the CSAH 7 crossing of the Thief River, none of the August samples exceeded the state's applicable water quality standards. A high TSS concentration was recorded at that location in a sample collected for the Watershed Pollutant Load Monitoring Network in October, but that may have coincided with upstream construction.

Long Lake water quality data from the most recent 10 years (including 2021) was assessed to see if the impairment status has changed. Most samples collected by the District have met water quality standards. There were some occasions in which the standards were exceeded, included some relatively poor conditions that were recorded after lake turnover in September. The summer average total phosphorus concentration in Long Lake has decreased to 28.5 mg/L in 2012-2021 data (down from 44 µg/L in 2011-12 data and 31.46 µg/L in 2011-2020 data) and now statistically meets the 30 mg/L standard. Chlorophyll-a still exceeds the 9 mg/L standard at 10.4 mg/L, but annual summer averages have met the standard during the years that the lake has been sampled by the District (2018-2021). Secchi disk transparency in Long Lake meets the 2.0 meter standard with a 2.7 meter average transparency measurement. District staff will consult with MPCA staff about either removing the lake from the list of impaired waters or collecting additional data. A pattern has developed of clean water through the months of June through August and relatively high September concentrations (near the 30 µg/L standard). Temperature and dissolved oxygen profiles are recorded during each visit. Those profiles indicate that the lake is stratified during the summer but seems to be mixed during September samples (nutrients released into the upper water column).

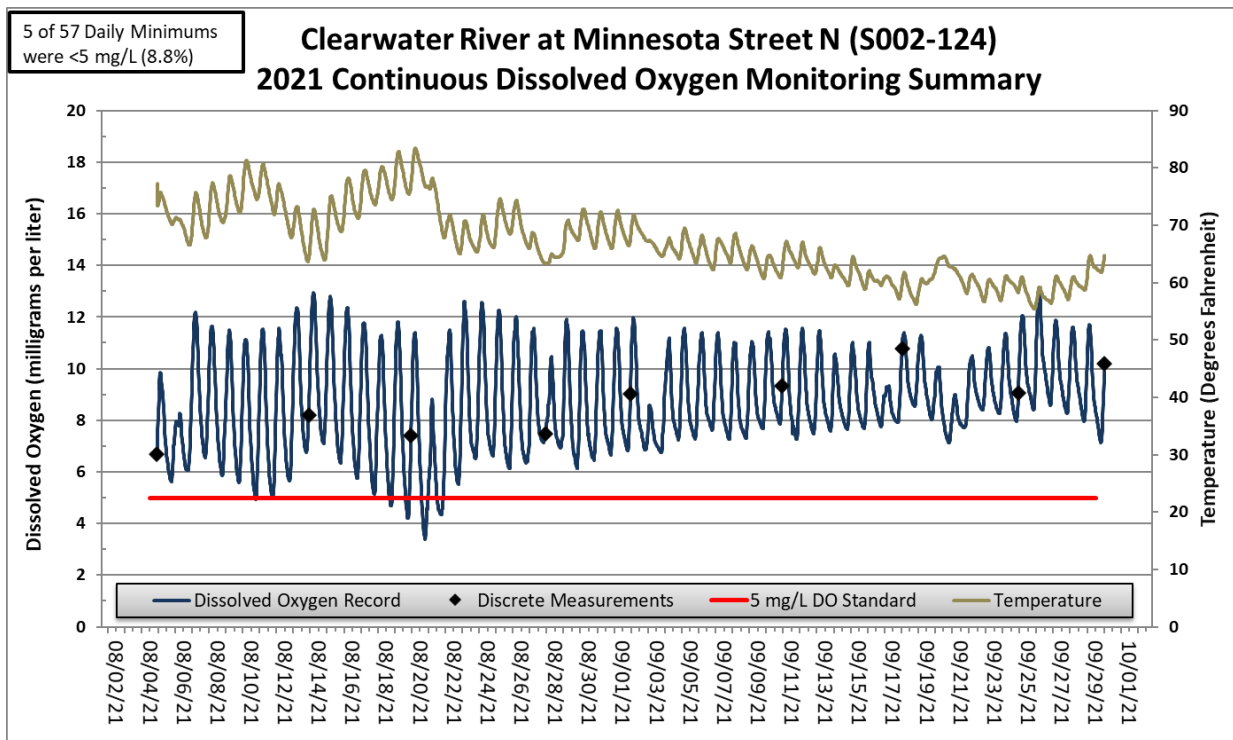
### **Dissolved Oxygen Logger Deployments**

Dissolved oxygen loggers were deployed at 5 sites throughout the District in 2021. These sites were monitored to provide a better understanding of conditions in streams that could be impaired by low dissolved oxygen, learn more about the conditions for aquatic life, measure the amount of daily fluctuation in dissolved oxygen levels, and have more confidence in dissolved oxygen data assessments. Sites selections for logger deployments are typically based on a 10-year schedule that was created to make sure that the District collected sufficient data for future water quality assessments. The Black River subwatershed was scheduled to be the focus of 2021 deployments, but the streams in that watershed went dry early in the summer. Instead, loggers were deployed in some larger streams (Clearwater River and Thief River). Discrete field measurements (dissolved oxygen, temperature, pH, specific conductivity, and stage) were recorded at the beginning, middle (approximately), and end of each deployment to aid the data review and correction process. The DO loggers were retrieved, cleaned, re-calibrated, and re-deployed after each two-week deployment.

**Clearwater River at CR 127, 280<sup>th</sup> Avenue SE (S002-916 on Assessment Unit 09020305-647):** Dissolved oxygen levels at this site along the channelized portion of the Clearwater River dropped below 5 mg/L on two-thirds of the days during the 2 months of data collection. There was a lot of vegetation floating down this portion of the river, as well duckweed that prompted a complaint call from a landowner. High total phosphorus concentrations were found in July and August samples. The source of the vegetation, pondweed, and relative cloudiness in the water could be influencing the eutrophication (high total phosphorus and high dissolved oxygen fluctuation) that was found in 2021 monitoring data.



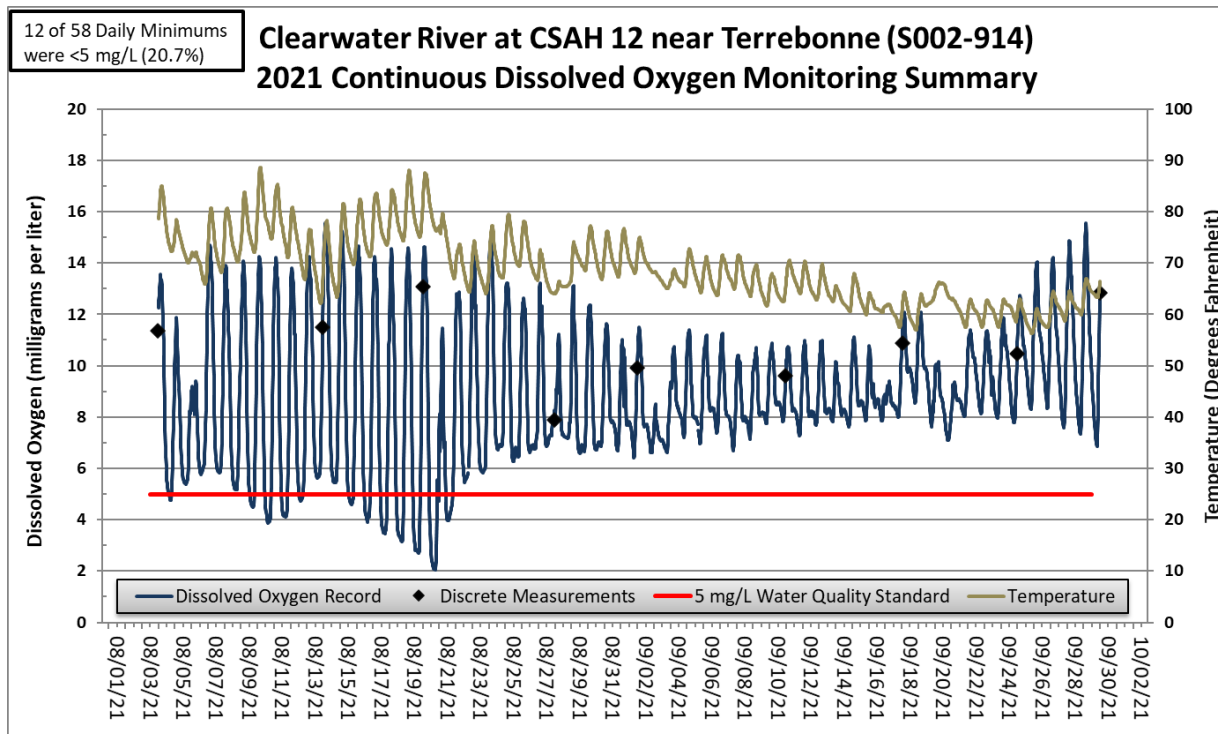
**Clearwater River, at Minnesota Street N, near Plummer** (Station S002-124 on Assessment Unit 09020305-648): This location met the 5 mg/L dissolved oxygen standard throughout over the two months of deployments. Dissolved oxygen fluctuated the most in August and coincided with high total phosphorus concentrations. The five low daily minimum dissolved concentrations were also recorded in August.



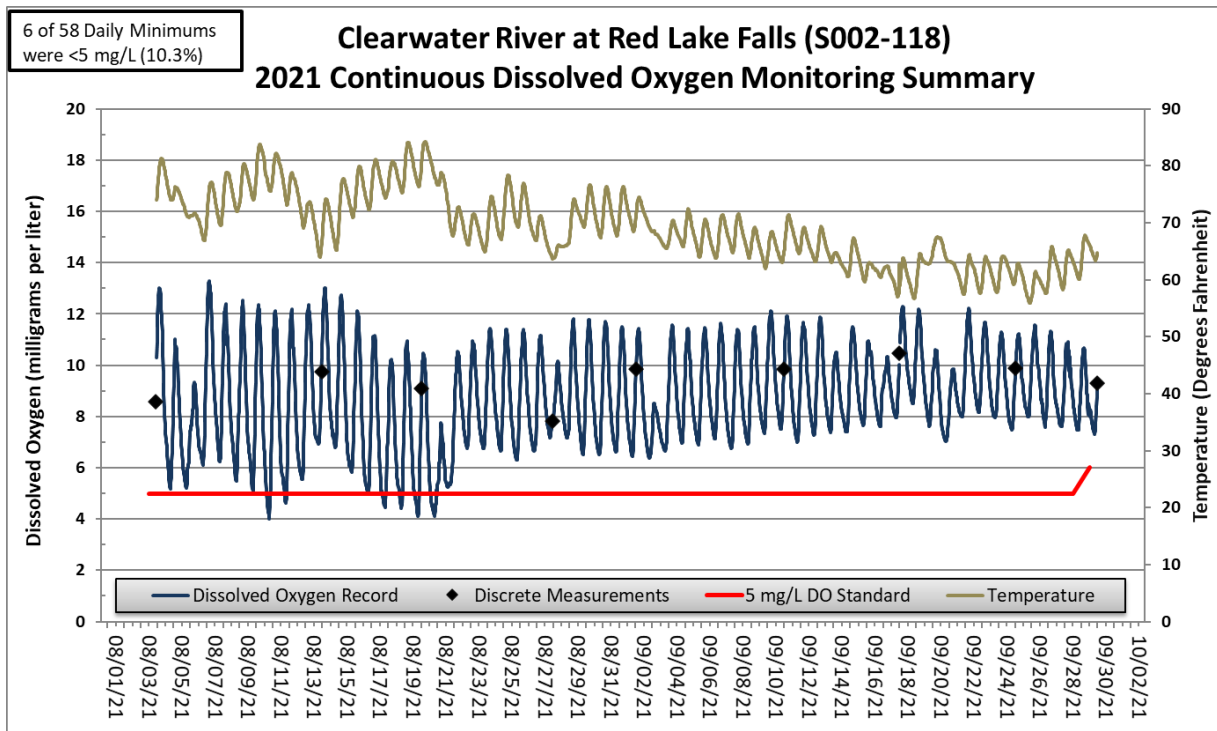
**Clearwater River at CSAH 12, near Terrebonne** (Station S002-914 on Assessment Unit 09020305-511):



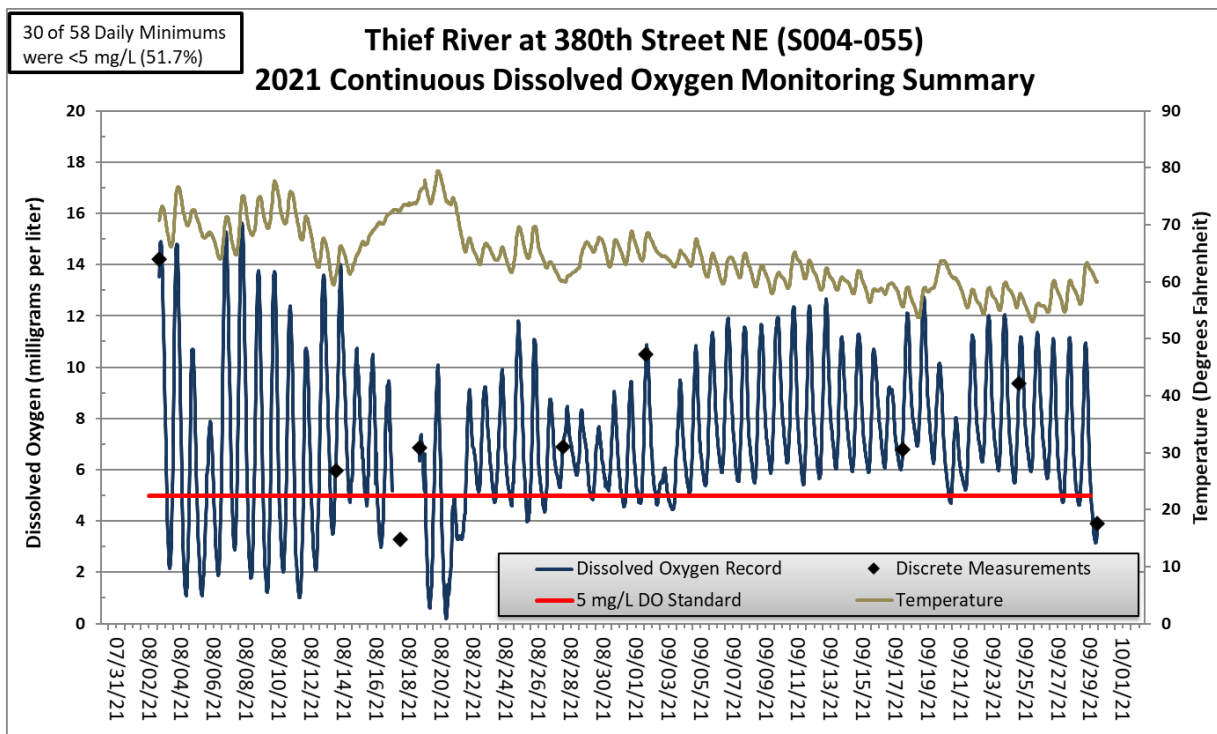
The river failed to meet the dissolved oxygen standard at this monitoring station, as it dropped below 5 mg/L on 20.7% of the days in which a logger was deployed. The dissolved oxygen levels appeared to be affected by high levels of dissolved oxygen fluctuation in the month of August when temperatures were high. The August total phosphorus concentration at this site was lower than upstream stations and met the 100 µg/L standard. Though the Clearwater River maintained flow throughout the drought, flow levels were lower than a typical year.



**Clearwater River at the Klondike Bridge in Red Lake Falls (Station S002-118 on Assessment Unit 09020305-501):** The river failed to meet the dissolved oxygen standard at this station during the 2-month period of logger deployments because dissolved oxygen levels dropped below 5 mg/L on 10.3% of the days in which data was collected. Like the upstream stations along the Clearwater River, high daily fluctuation of dissolved oxygen, low DO levels, and warm temperatures. Total phosphorus concentrations were relatively low throughout the year at this station, so eutrophication is a less likely cause. Low dissolved oxygen levels appear to coincide with days in which water temperatures neared and exceeded 80° Fahrenheit.



**Thief River at 380<sup>th</sup> Street NE (Station S004-047 on Assessment Unit 09020304-504):** Dissolved oxygen concentrations in Thief River dropped below 5 mg/L during more than half of the days in which dissolved oxygen loggers were deployed in August and September 2021. Daily dissolved oxygen fluctuation was very high (6.39 mg/L average).



### Blue Green Algae Sampling



The District began testing water in the Mud River and other lakes/ivers for blue-green algal toxins (microcystins and cyanotoxins) in response to dog deaths that were caused by ingesting blue-green algae. The District uses Abraxis kits to test the water for algal toxins. Previous blooms have been connected to high water temperatures and high concentrations of nutrients.

Since the discovery of blue-green algae or algal toxins in lakes and reservoirs during the summer of 2018, regular sampling and monitoring has been conducted to discover algal blooms/toxins and learn more about the conditions that may lead to algal blooms. District staff regularly sampled for algal toxins in Maple Lake (once every two weeks at the Polk County Park marina) because a visible blue-green algae bloom was found there in 2020. If measurable concentrations are found in Maple Lake, the district is prepared to sample other shallow eutrophic lakes to find other cases of measurable or high algal toxins.

District staff began summer 2021 sampling for algal toxins (from blue-green algae blooms) in July. No algal toxins were detected in any of the samples that were collected. There was a noticeable concentration of blue-green algae in the Thief River, at the bridge near the golf course, on July 20, 2021. There was a green tint to the river and blue-green algae was conspicuously present in the sample (confirmed by a jar test). District staff shared this finding with the city and recommended the implementation of a no-wake zone, like the one implemented in 2018, to reduce the amount of nutrient suspension from wakes. Thankfully, there were no measurable toxins in the sample and the bloom soon disappeared (by July 26, 2021) instead of getting worse. A sample was also collected from Maple Lake, on July 20, 2021, for algal toxin analysis. No measurable algal toxins were found in the sample, but the jar test showed that some blue-green algae was present in the sample. There were also reports of blue-green algae in the Red Lake River around July 20th, but there was no visual evidence of a Red Lake River bloom in Thief River Falls or upstream of the city on July 26, 2021. Samples were collected from the Polk County Park marina on Maple Lake on August 3rd and August 19th for blue-green algae toxin testing. No toxins were found in the samples. A jar test confirmed the presence of blue-green algae along the shore of Long Lake, near Pinewood in September. There were indications that fall turnover and mixing may have released nutrients into the water column and caused increased algae growth (including the blue-green algae).

Available information from the EPA and WHO indicates that concentrations above 8-10 ppb create a moderate risk during recreational exposure. Measurable concentrations below that level would be classified as "low risk." It is advisable to recommend keeping animals away from the water with a measurable concentration because they could drink from an area where the blue-green algae may accumulate along the shoreline and they could also end up licking blue-green algae from their fur. Nutrients, light intensity, and temperature are the drivers behind blue-green algae blooms. There is more to learn about how to predict blue-green algae blooms in our area, since they are a relatively recently documented problem in the Red Lake Watershed District.

Information about the confirmed blue-green algae blooms can be shared with MPCA staff that track Harmful Algal Blooms (HAB). The MPCA staff has a water quality hotline number (651-757-2822) and MN\_MPCA\_algae inbox (algae.mPCA@state.mn.us) that can be contacted report blue-green algae blooms. Results of the algal toxin tests are shared with the Maple Lake Improvement District and a Maple Lake, Mentor MN Facebook Group. A [website](#) was created in order to have a central location for sharing updates on the District's blue-green algae monitoring efforts and results.

## **Bartlett Lake**

Bartlett Lake is a shallow lake by Northome that has been affected by historical pollution from sanitary sewer discharge into the lake, logging operations along the shore, and pollution from a creamery that operated from 1916 to 1974. Excess nutrients have caused the lake to become eutrophic. The lake is impaired and has suffered from high levels of nutrients, high concentrations of chlorophyll-a, low water clarity, and winter fish kills. Sediment cores were collected from the lake and analyzed for geochemical and biological clues that

provide information about the lake and its history. The lake has been slowly recovering since the creamery was closed and a new wastewater treatment system was constructed.

The District began working with local staff from the City of Northome, local residents, MN DNR staff, MPCA staff, Koochiching SWCD staff, Koochiching County staff and others to draft a management plan for the lake. Edits were made to the plan in early 2021, before a virtual meeting of the planning group. Plans were made to outfit and train a local resident for water quality sampling in the lake. One sample was collected in May, but the volunteer sampler was unable to sample again due to difficulties with finding a watercraft.

### **Watershed Restoration and Protection Strategy (WRAPS) Projects**

The Federal Clean Water Act (1972) required each State to develop plans for the identification and restoration of waterbodies that were deemed impaired by state regulations. A TMDL was required by the U.S. Environmental Protection Agency (USEPA) to address water quality impairments as a stipulation of the Clean Water Act. A TMDL identifies the pollutant sources causing the impairment. It is a calculation of the maximum amount of pollutant that can enter a waterbody without causing the concentration of the pollutant within the waterbody to exceed water quality standards. The State of Minnesota adopted a “watershed approach” to address the state’s 80 major watersheds (denoted by 8-digit hydrologic unit code or HUC). This watershed approach incorporated water quality assessment, watershed analysis, civic engagement, planning, implementation, and measurement of results into a 10-year cycle that addressed both restoration and protection. The watershed-based strategy recognized the connectivity of the watershed better than the reach-by-reach system. An impairment may extend over multiple assessment units. Impairments for different parameters may be linked by common stressors and/or pollutants. There was an increased emphasis on civic engagement to engage stakeholders and the watershed-based process also reduced redundancy that could occur when addressing TMDLs with a reach-by-reach strategy. The watershed-based, comprehensive implementation plan addressed pollutant sources and stressors throughout each major watershed. The process was designed to reduce the complexity of incorporating TMDL implementation plans into watershed management plans.

TMDLs and WRAPS projects and reports have been completed for the [Thief River](#) (2019), [Red Lake River](#) (2019), [Grand Marais Creek](#) (2019), and [Clearwater River](#) watersheds (public notice concluded in December 2020, approved in early 2021). The [Upper/Lower Red Lakes](#) Watershed TMDL and WRAPS were completed in 2021. In early 2021, the Environmental Protection Agency approved the 24 TMDLs that were addressed in the Clearwater River Watershed Total Maximum Daily Load report.

### **Public Education**

- The District continued to support the [River Watch](#) program, which is described in more detail in its own section of this report.
- District staff participated in annual Northwest Minnesota Water Festivals (Warren and Fertile), which returned to in-person events in 2021.
- Information about the [Red Lake Watershed District](#), programs, and contacts is available on the District’s website.
- [Monthly water quality reports](#) are available on the District’s website.
  - [January 2021](#)
  - [February 2021](#)
  - [March 2021](#)
  - [April 2021](#)
  - [May 2021](#)
  - [June 2021](#)
  - [July 2021](#)
  - [August 2021](#)
  - [September 2021](#)



- [October 2021](#)
- [November 2021](#)
- [December 2021](#)
- Watershed-based information (reports, photos, projects, contacts) for the Red Lake River, Upper/Lower Red Lakes, Clearwater River, Thief River, and Grand Marais Creek major watersheds can be found online at: [www.rlwdwatersheds.org](http://www.rlwdwatersheds.org).
- The District maintains and posts to a [Facebook page](#).
- District staff helped with the “Macroinvertebrate Day” of the Thief River Falls Nature Day Camp, organized by local teachers, in which 5th and 6th graders from area schools learned where to find aquatic insects, why they are important, and how to identify them.



### **Red Lake River Watershed One Plan (1W1P)**

Minnesota has a long history of water management by local governments. One Watershed, One Plan is rooted in this history. In work initiated by the Local Government Water Roundtable (Association of Minnesota Counties, Minnesota Association of Watershed Districts, and Minnesota Association of Soil and Water Conservation Districts) in 2011, it was recommended that the local governments charged with water management responsibility should organize and develop focused implementation plans on watershed boundaries. The recommendation was followed by legislation that permits BWSR to adopt methods to allow comprehensive plans, local water management plans, or watershed management plans to serve as substitutes for one another; or to be replaced with one comprehensive watershed management plan. This legislation, and the associated BWSR program, is referred to as One Watershed, One Plan. Further Legislation was passed in 2015, defining purposes and outlining additional structure for the program.

In early 2014, the Red Lake Watershed District, Pennington, Red Lake County and West Polk Soil Conservation Districts, along with their respective Counties, partnered to apply for a grant through the Board of Water Resource One Watershed One Plan Pilot Project, to establish a Comprehensive Water Management

Plan for the Red Lake River Watershed. The grant was for five pilot projects that were approved for funding in December of 2014. In 2015, the project partners started the planning process outlined by the BWSR which ultimately resulted in the approval of the plan in January 2017. HDR Engineering, Inc. was hired as the consultant to help facilitate the planning process and help with the creation of the plan document. The plan was developed through the intensive efforts of the Planning Work Group (resource professionals from local government units, or LGUs), official approval of plan components by the Policy Committee (representatives appointed by participating LGUs), and an Advisory Committee (citizens and experts from state agencies). In 2018 the Planning Work Group for the Red Lake River One Watershed One Plan completed the comprehensive water management plan. Upon completion of the Plan and approval from the Board of Water and Soil Resources, a grant in the amount of \$677,500 was awarded to complete various water quality projects highlighted in the 2018-19 annual work plan.

The tasks of the 2018-19 Red Lake River 1W1P Annual Work Plan were completed and last of the 2018-19 watershed-based implementation funding (WBIF) was spent in 2021. Work completed in 2021 included grade stabilization structures throughout the Black River Watershed (including 37 side water inlets and 37 rock-drop structures installed as part of the Black River Impoundment project), grade stabilization projects in Red Lake County, grade stabilization projects in Pennington County, and grade stabilization projects in Polk County.

In early 2020, the Red Lake River 1W1P Planning Work Group (PWG) completed a 2020-21 Red Lake River 1W1P Biennial Work Plan. BWSR approved the funding request for the 2020 Watershed Based Funding submitted on January 22nd. The Red Lake River watershed is receiving \$1,071,149 in watershed-based funding from the Minnesota Board of Water and Soil Resources (BWSR). With the required matching funds, its work plan has a total budget of \$1,178,264. Priority projects and actions in the plan include.

- Grade stabilization projects in the Black River subwatershed
- Stabilization of the RLWD Ditch 10 outlet (completed in 2021)
- Grade stabilization in the Burnham Creek subwatershed
- Grade stabilization structure or WASCOD in the Browns Creek drainage area
- Grade stabilization near the Red Lake River, north of Red Lake Falls
- Exclusion fencing and grazing management in multiple subwatersheds
- Stabilization of the CD 96 outlet
- 
- Grade stabilization of a large erosion problem near the Red Lake River (Demarais-Hanson Project) west of Red Lake Falls
  - Survey, design, construction bid process, and hiring of a contractor were completed in 2021. Construction will be completed in 2022.
- Cover crops in priority management areas
- Agricultural practices in areas that were prioritized by PTMApp

The District used 2020-21 Red Lake River 1W1P WBIF to complete a feasibility study of large gully erosion problem (Demarais-Hanson project) west of Red Lake Falls, design a project to stabilize the Demarais-Hanson gully, stabilize the RLWD Ditch 10 outlet, and fund a portion of the Black River Impoundment side water inlets and rock-drop structures.

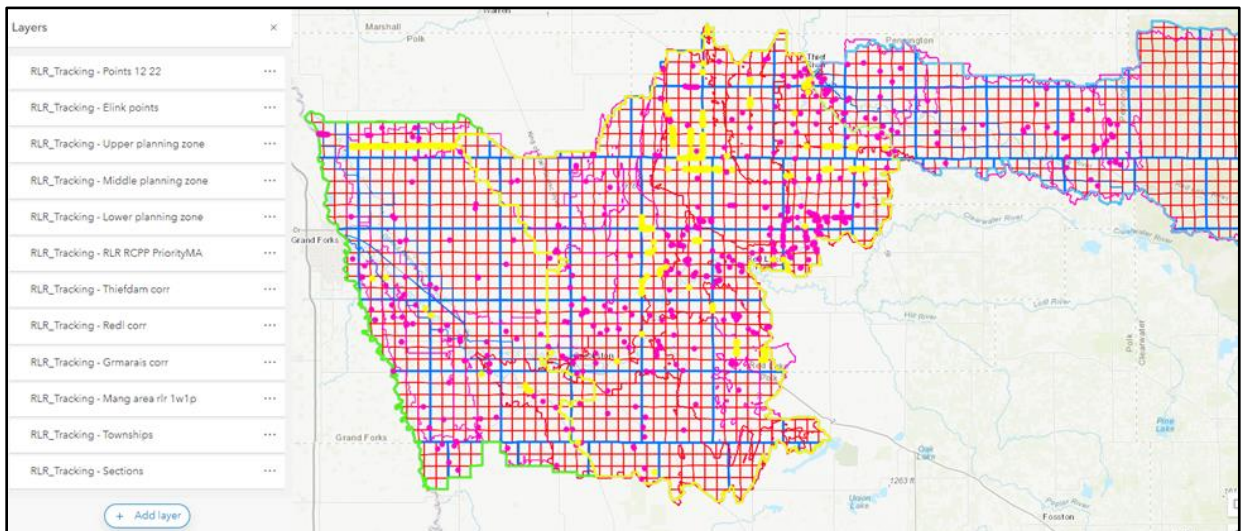
The RLWD Board of Managers approved the hiring of a consultant to conduct a survey and feasibility assessment of the Demarais-Hanson erosion problem. This area is a very large gully that has formed downstream of CSAH 11, near the Red Lake River west of Red Lake Falls. District staff contacted landowners in the project areas to learn about the history of the problem and get access permission. District staff helped staff from Houston Engineering complete a survey of the project area.

The Board approved construction of the Demarais/Hanson Bank Stabilization Project in May 2021. At the request of the 1W1P Planning Work Group, the engineer's cost estimate included an extension of the stabilization work downstream from the "tree row to the oxbow." approximately an additional 150 feet. The engineer stated that the preliminary design shows that the area flattens out about 150 feet downstream, which



would then enter a plunge pool. The original estimated cost of the project was \$210,000 and the additional work was estimated to cost an additional \$30,000 for a total approximate cost of \$240,000.

The construction of side water inlets and rock-check grade stabilization structures along ditches in the Black River Impoundment drainage area is mostly complete. These structures are installed to protect/improve water quality and are partially funded by grants from the Red River Watershed Management Board (Water Quality Base Funding), United States Environmental Protection Agency (319 Grant administered by the Minnesota Pollution Control Agency), 2018 Red Lake River 1W1P WBIF grant, and the Red Lake Watershed District. Houston Engineering provided some nice aerial drone photographs and created a [website](#) for the project.



Project partners are tracking progress with ArcOnline map in which project locations can be mapped and corresponding information (load reductions, costs, funding sources, etc.) can be recorded. Updates on the progress of individual projects near the end of 2021 included:

- Browns Creek Township, Section 32: Two projects will be constructed. Materials have been ordered and received. Due to the weather, construction will be postponed until the spring of 2022.
- Louisville Township, Section 10: Materials have been ordered and received for this project, as well. Due to the weather, construction will be postponed until the spring of 2022.

- Lake Pleasant Township, Section 8: Materials have also been ordered and received for this project. Due to the weather, construction will be postponed until the spring of 2022.
- Voyageur’s View Streambank Stabilization: Houston Engineering, Inc. completed a survey of the Voyageur’s View streambank stabilization project and began designing the project.
- Red Lake Falls Township, Section 14 and 21: Project requests has been submitted to the PWG and Houston Engineering is working on an engineering proposal. The Red Lake County SWCD Board will review the engineering proposal and decide whether to proceed with these two projects.
- Polk Centre Township, Sections 9 & 16 (Mosbeck): Construction of these grade stabilization projects will begin in 2022.
- Andover Township, Section 9: This grade stabilization project will not be completed in 2021, so construction will be planned for 2022.
- Hammond Township, Section 1: This project is not moving forward.
- Roome Township, Section 2: This grade stabilization project has been completed.
- Louisville Township, Section 26/27 (Demarais-Hanson) erosion control project: District staff completed staking. Construction of the project began but was halted after some initial brush clearing due to the weather. Construction will resume in the spring and summer of 2022.

The next round of 1W1P watershed-based funding (2022) was approved by BWSR in September. The Red Lake River 1W1P project partners focused on closing-out the first grant (2018) before the end of 2021 before applying for the next round in early 2022. The Red Lake River 1W1P 2018 Watershed-Based Implementation Funding grant reconciliation meeting with District staff, the plan coordinator, and BWSR staff was held on December 21, 2021.

The PWG prepared a draft 2022 Annual Work Plan for the next round of Watershed-Based Implementation Funding. The group applied lessons learned from previous grants to simplify budget and to add flexibility for funding beneficial projects throughout the watershed. To provide guidance for the 1W1P, District staff will use existing geomorphology data and some additional data collection to prioritize streambank stabilization sites throughout the watershed. A feasibility study for the stabilization of tall eroding riverbanks in/near the City of Red Lake Falls was added to the work plan. Those banks should rate high as a priority for stabilization based on their high bank erosion hazard index rating and their proximity to infrastructure/homes, but successful stabilization of the tall banks could be a challenge. Instead of creating an itemized budget for individual projects, the funding for constructed projects will be split into two “buckets” for “ag practices” and for “streambank and shoreline stabilization.” Project requests will be submitted to the PWG and projects that meet criteria for funding will be funded on a first come, first serve basis. Funding has been reserved, until the rest of the implementation funding has been spent (at least 80% of funds will be targeted in priority areas), for projects that are outside of priority areas but meet certain criteria. Additional priority areas have been added along the corridor of the Red Lake River downstream of the Thief River Falls dam and along Grand Marais Creek.

### **Red Lake River Small Watersheds Focus 319 Grant**

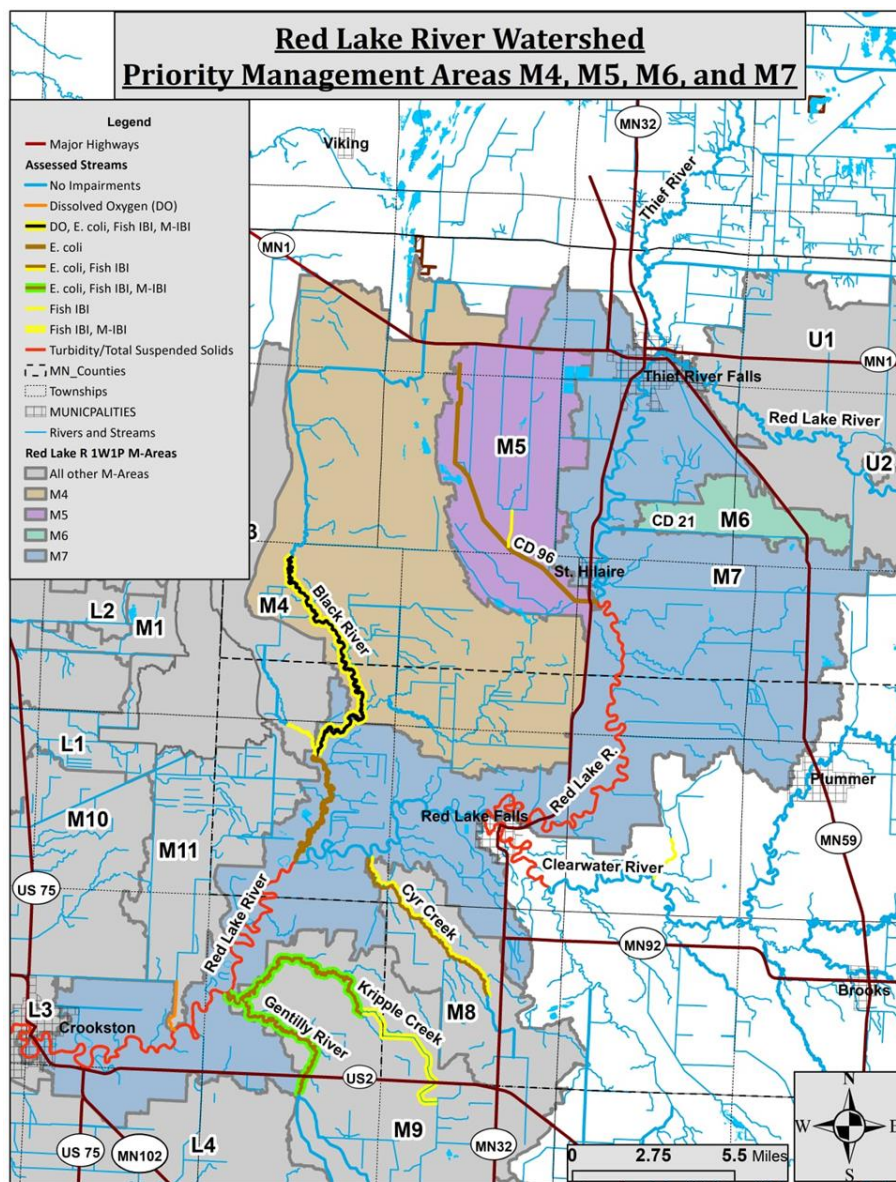
In November 2018, ten watersheds were selected to be prioritized for funding in federal fiscal year 2020. The selections were part of the transition in the federal Clean Water Act Section 319 program from one-time grants to more reliable funding focused on small watersheds. The goal of the program is to help local governments make measurable changes toward water quality improvements. Based on input from many local governments, the program is designed to provide a reliable and longer-term funding source to address all pollutants in small watersheds.

Red Lake River watershed was chosen to be one of the first 10 watersheds (Group A) to be eligible for this funding. On August 6, 2020, MPCA staff announced that the Red Lake River proposal for a Fiscal Year 2020 Section 319 Small Watersheds Focus grant was approved for funding in the amount for \$284,275. The projects and activities of the Red Lake River (Thief River Falls-Crookston) and Black River EPA NKE Plan will be targeted within priority management areas of CD 96, Black River, and the middle reach of the Red Lake River between Thief River Falls and Crookston. The projects will reduce the transport of eroded sediment (sediment



loading) to the Red Lake River by an estimated 1,148 tons/year. Some of the projects will also reduce E. coli concentrations in the Red Lake River and its tributaries (especially the Black River and Pennington County Ditch 96). The \$284,275 in EPA grant funding, along with at least \$189,517 in matching state/local funds, will implement:

- Grade stabilization structures (including side water inlets)
- Water and Sediment Control Basins (WASCOBs)
- Streambank stabilization or meander cutoff stabilization along the Red Lake River
- Cover crops, nutrient management, and other non-structural source reduction projects
- Riparian buffers
- Riparian forest buffers
- Field borders
- Grazing management plans
- Cattle exclusion or access control plans



In 2021, the 319 Grant funded a portion of the side water inlets installed in the Black River Impoundment drainage area, as well as survey and design of a Red Lake River streambank stabilization project along the

Voyageur’s View campground. An article was written to publicize the Small Watersheds Focus 319 Grant that was awarded to the priority subwatersheds of the Red Lake River watershed.

Red Lake River 1W1P partners were informed that the MPCA had additional 319 Grant funding available for a shovel-ready project(s) that could be completed in early 2022 (before the end of August). District staff compiled a list of shovel-ready projects from the Red Lake River 1W1P. There are multiple grade stabilization projects in Red Lake County for which construction nearly began or for which some work has already begun in 2021. The Pennington SWCD has two Clean Water Fund projects that could be constructed in 2022 and will reduce sediment loading to the Red Lake River. Because it will be “shovel-ready” in the summer of 2022, the Pennington County Ditch 96 Stabilization Project, Phase II will be the primary project to be funded with the additional 319 grant funding.

### **Thief River One Watershed One Plan (1W1P)**

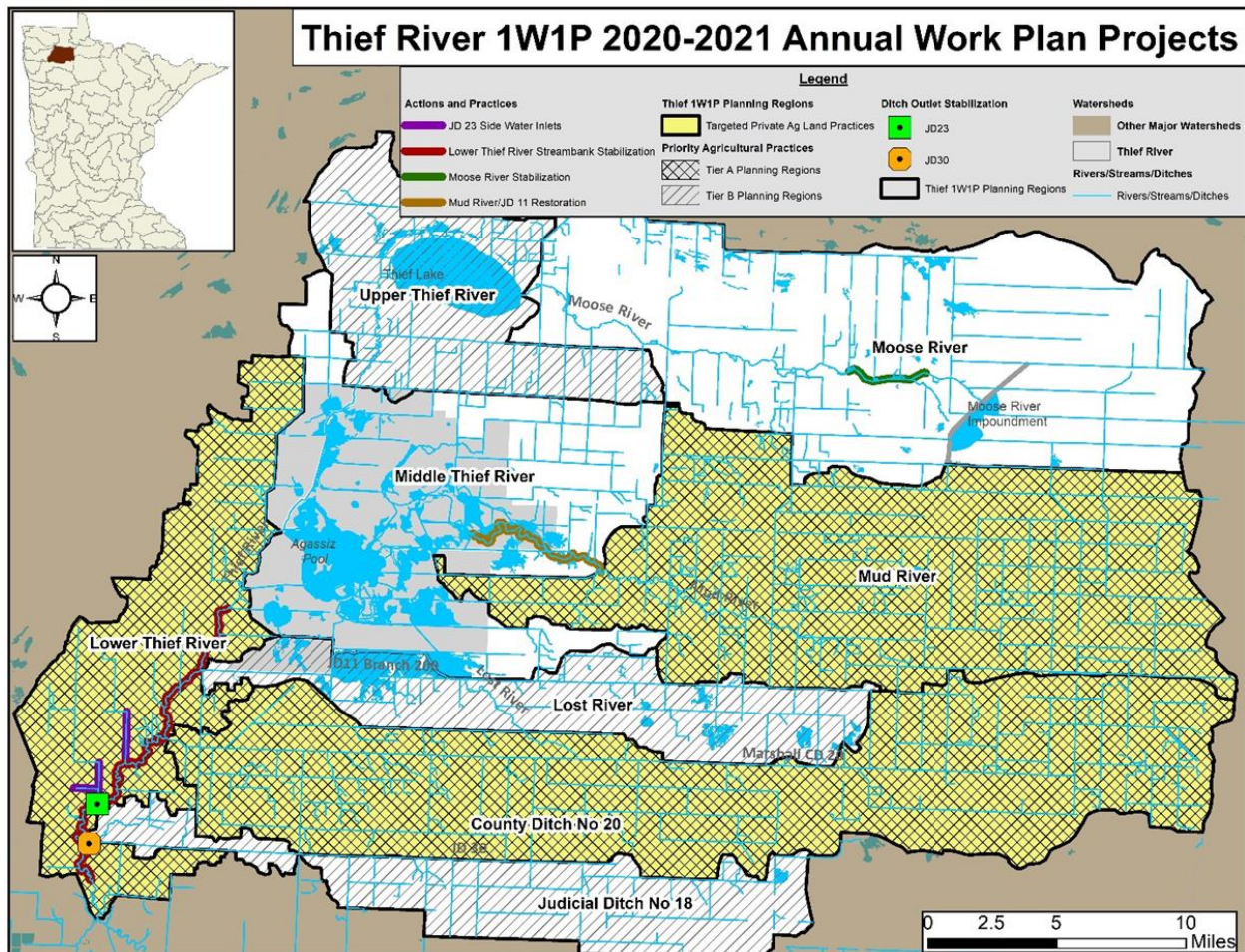
In June of 2016, the Red Lake Watershed District, Pennington, Marshall and Beltrami Soil Conservation Districts and their respective counties applied for and were approved to receive a grant from the Board of Water and Soil Resources (BWSR) through their One Watershed One Plan program, to develop a Ten-Year Comprehensive Plan for the Thief River Watershed. On July 11, 2017, the grant was approved and executed by the BWSR. Houston Engineering, Inc. was hired as the consultant to help facilitate the planning process and help with the creation of the plan document. The plan was developed through the intensive efforts of the Planning Work Group (resource professionals from local government units, or LGUs), official approval of plan components by the Policy Committee (representatives appointed by participating LGUs), and an Advisory Committee (citizens and experts from state agencies). The plan development continued into 2018 and 2019 with the draft plan being approved by the Policy Committee and partners in late 2019. The Thief River 1W1P Comprehensive Watershed Management Plan was approved by all the Local Governmental Units and submitted for final review by the agencies. The plan was reviewed and approved by the BWSR Northern Regional Committee meeting on March 4, 2020. A Memorandum of Agreement was approved by the seven local government units (LGUs).

The first round of funding for Thief River 1W1P from BWSR Watershed-Based Implementation Funding (WBIF) was \$529,892 (\$52,989 match requirement). A Policy Committee meeting was held on March 16, 2020 at the District office. Agenda items included a review of bylaws, deciding on a fiscal agent, deciding on a coordinator, and approving the 2020/2021 Work Plan. The Planning Work Group had put together a 2020-2021 work plan, including load reduction estimates. A map of proposed projects was created by District staff. District staff also helped create a presentation of those projects for the Policy Committee meeting. The policy committee approved the 2020-2021 work plan. The projects identified in the work plan include:

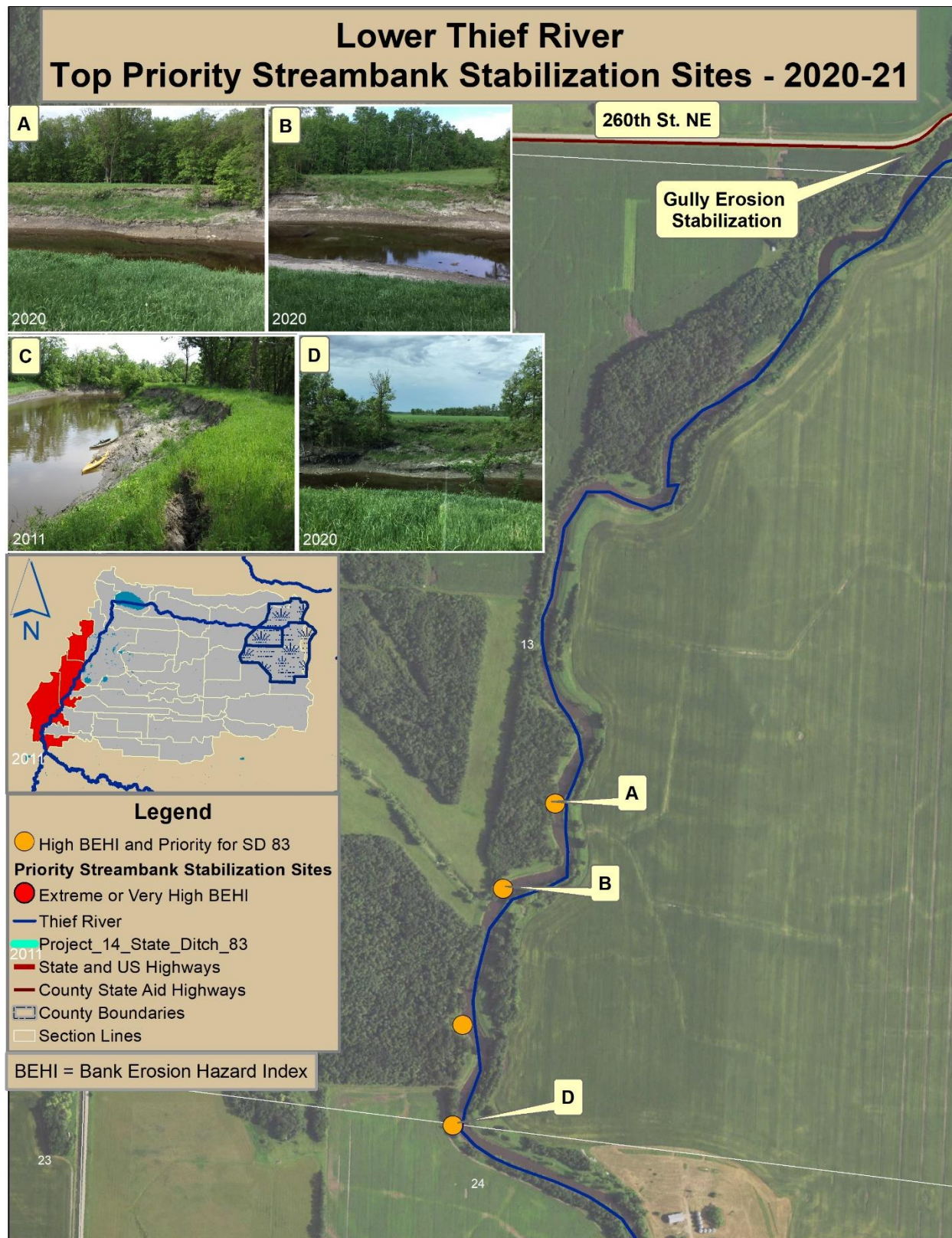
- \$150,000 from WBIF for Stabilization of the JD 23 outlet in Marshall County (completed in 2021)
- \$12,000 from WBIF to install 6 side water inlet grade stabilization structures within the JD 23 portion of the Lower Thief River subwatershed (partially completed in 2021)
- \$128,925 from WBIF to stabilize 1000 feet of streambank along the Lower Thief River (completed in 2021, with some funding remaining)
- \$20,000 from EQIP/CSP to implement 640 acres of cover crop in the Lower Thief River subwatershed
- \$5,000 from WBIF to conduct an education and outreach workshop (planned for 2021, but postponed until 2022 when harvest began sooner than anticipated)
- \$30,000 from BWSR Accelerated Implementation Grant funding to conduct a watershed-wide inventory for side water inlets and buffers
- \$75,000 from WBIF to implement priority agricultural practices within Tier A and Tier B priority planning area subwatersheds
- \$30,000 from an MPCA SSTS Upgrade Grant for septic system upgrades, watershed-wide



- \$256,666 from a Clean Water Fund grant (awarded to the Pennington SWCD) to implement grade stabilization and cover crops within the Lower Thief River and JD 30 subwatersheds
- Several Technical and Engineering Projects, as funding allows:
  - Priority 1: Feasibility study, survey, and design work on the Mud River/JD11 – USFWS been looking for money for this project. Most of the project lies within Agassiz National Wildlife Refuge (completed in 2021).
  - Priority 2: Survey and design work on the outlet of JD30 with the intent to stabilize the outlet pending future funding.
  - Priority 3: Survey and design work on the outlet of JD30 with the intent to stabilize the outlet pending future funding.







Priority stream bank stabilization sites were chosen where relatively high bank erosion hazard index (BEHI) ratings from the Thief River Watershed Fluvial Geomorphology study overlapped with State Ditch 83 jurisdiction (access easements) and priority stream bank stabilization sites identified by the Red Lake Watershed District ditch inspector. In late 2020, RLWD staff engineering technician and water quality staff



met with Houston Engineering to tour the project area. One of the banks (Site C on the map) had begun to stabilize itself, so we decided to leave that one alone. With approval from the RLWD Board of Managers, Houston Engineering designed projects to stabilize Site A, Site B, Site D, an eroding channel between a 260th Street NE culvert and the river (the four water quality projects are shown on the preceding map), and some access road repair near CSAH 7. In addition to re-sloping, the projects incorporated toe-wood sod mats to provide the toe protection that is important to the success of streambank stabilization projects. Houston Engineering designed the stabilization projects and Quality Spray Foam/Anderson Excavating (low bid of \$93,842.34) was hired to construct the projects. Construction began in early September and was completed in October. Separate from this project, the RLWD Ditch Inspector has been overseeing the installation of rock at the outlets of side water inlets along SD 83 to prevent future erosion.



Judicial Ditch 23 outlet stabilization construction was nearly completed, though some touch-up work (slopes were let in rough shape) and buffer planting must still be completed (in the spring or summer of 2022). In addition to the rock structures at the outlet of the ditch, the last 0.6 miles of the ditch were re-sloped and two side water inlets were installed.

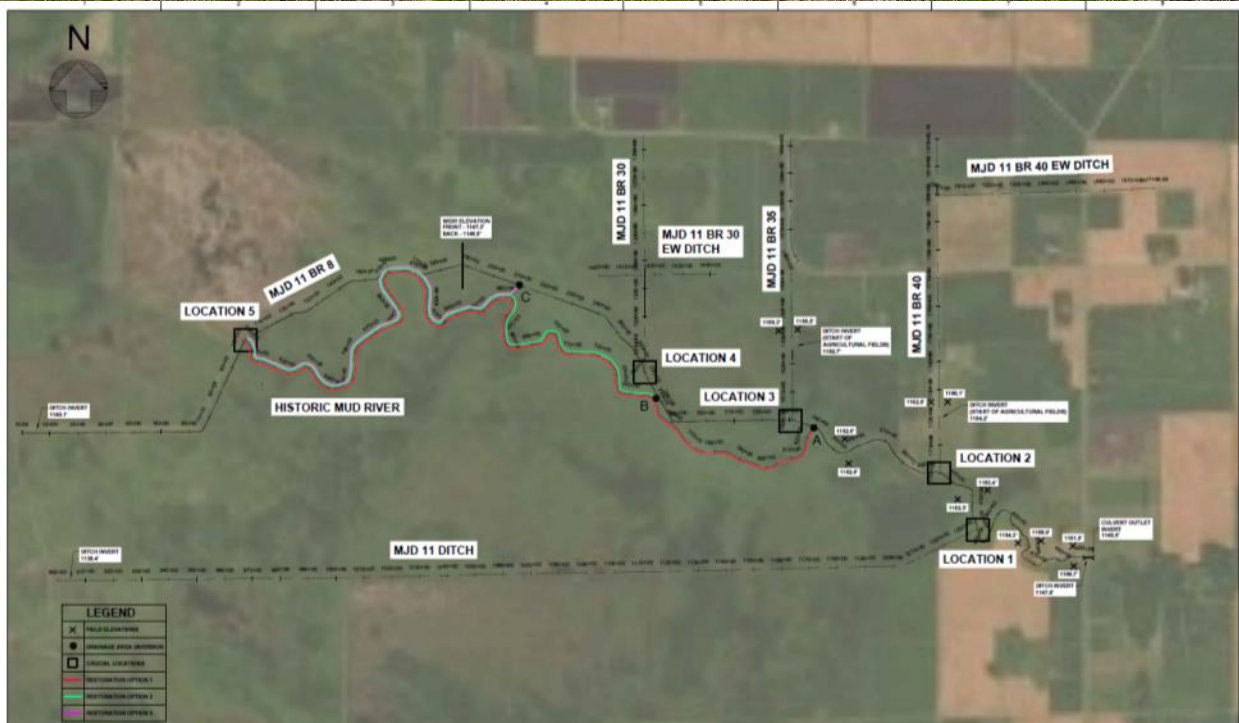




District staff worked with United States Fish and wildlife staff and HDR Engineering to begin the feasibility study for a potential Mud River Restoration Project. This first phase of work included data collection (survey and data processing), hydrologic analysis, and a concept report. HDR Engineering began surveying the meanders of the old Mud River channel in early January 2021 for the feasibility study phase of the Mud River Restoration project. They surveyed a total of 27 miles of river channel (current and historic portions). A meeting was held in May to discuss the Mud River Restoration project and the next steps that were needed to continue planning the project. The need for soil borings was discussed and plans were made to gather equipment and a team of staff from partner agencies to collect some data in early June. A team of 6 staff from the United States Fish & Wildlife Service, Minnesota Department of Natural Resources, Natural Resource Conservation Service, and the Red Lake Watershed District collected transects of soil boring information along the old channel of the Mud River to aid in planning a restoration project. Survey data and photos from the soil boring effort were provided to the engineer. Shells and coarse material were found in soil borings near the downstream (west) end of the old channel path. At the upstream end, however, Soil borings maxed-out at about a 5-foot depth and only produced decaying vegetation. Due to the insulating nature of the organic material, dense layers of frost remained a short distance from the surface. A flood damage reduction project team was assembled to begin an official process of planning a restoration project.

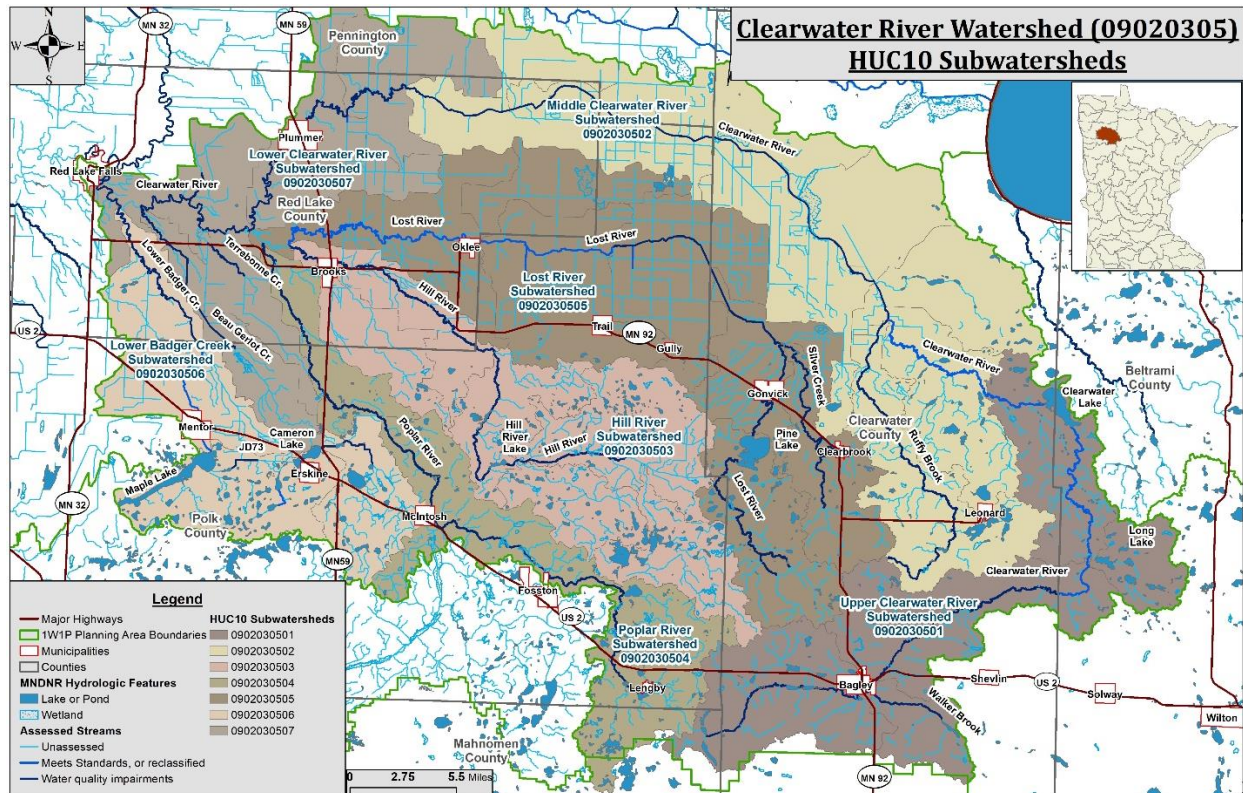


On-the-ground view of the old meanders of the Mud River that are visible in aerial photos.





## Clearwater River One Watershed One Plan (1W1P)



In early 2020, the Clearwater SWCD and project partners began the process of forming an application to acquire funding to begin the Clearwater River 1W1P process. The planning work group (or steering committee) included staff from the RLWD, Clearwater SWCD, East Polk SWCD, Red Lake SWCD, Pennington SWCD, and BWSR. Project partners assembled a work plan for the planning process in early 2021. The first Clearwater 1W1P Policy Committee meeting was held on February 24, 2021. The BWSR grant agreement and an agreement with Houston Engineering (consultant) were signed on March 18, 2021.

Project partners compiled a list of stakeholders (potential committee members and contacts to invite to attend public meetings and provide public comments). Each partner organization's planning work group staff created a list of people for the Clearwater 1W1P Advisory Committee and began contacting individuals to gauge their interest. The Policy Committee unanimously approved the list of Advisory Committee member that had been compiled by the Planning Work Group.

A 60-day notice comment period for the Clearwater River Watershed 1W1P began in March 2021. A letter was distributed to stakeholders to announce the comment period and the beginning of the planning process. The due-date from comments was May 24, 2021. The PWG reviewed a summary of letters received during the 60-day comment period that marked the initiation of the planning process.

District and Houston Engineering staff completed the hydrologic conditioning of a LiDAR-based digital elevation model (DEM) for the Clearwater River. An intensive culvert location inventory was conducted throughout the summer of 2020 and the first 6 months of 2021. The culvert locations were necessary to "burn" flow paths through digital dams in the LiDAR surface. Because LiDAR is acquired from the air, bridges, and crossings with culverts function as digital dams in raw LiDAR data. The hydrologically conditioned DEM was necessary to run the PTMApp (Prioritize, Target, and Measure Application) model



for the watershed. Houston Engineering, Inc. then completed development of the PTMApp model for the Clearwater River Watershed.

The Planning Work Group was informed that a portion of the Clearwater River Watershed planning area boundary was slightly changed as a result of the completion of the Wild Rice River Watershed 1W1P process. Because of the change, work plan maps were revised to include the altered planning boundary.

The PWG reviewed the draft Land and Water Resources Narrative document (a summary of background information about the Clearwater River Watershed. Public Open House events were held on June 10, 2021 at the Brooks Community Center and at the Trap in Gonvick. Planning Work Group (PWG) staff completed a baseline funding worksheet, which estimates and summarizes existing funding for projects in the Clearwater River.

District staff mapped known in-channel erosion problems in the Clearwater River watershed (streambank erosion, unstable ditches and ditch outlets, etc.). Information and assessments collected during the fluvial geomorphology study, ditch inspections, PTMApp groundtruthing, windshield surveys during the Watershed Restoration and Protection Strategy project, and examination of aerial photos were used to compile the map of erosion problems. District staff used the HSPF Scenarion Application Manager tool to create a spreadsheet that calculated load reduction goals for each anthropogenic source in each HUC 10 subwatershed of the Clearwater River Watershed. The Planning Work Group (PWG) reviewed a draft Section 3 of the 1W1P (Priority Issues) and draft measurable goals.

District staff created map of prioritized HUC 12 subwatersheds for projects that will reduce E. coli runoff. The priority subwatersheds were those that contained waters impaired by E. coli, waters that were nearly impaired by E. coli, and monitoring stations that exceeded water quality standards.

### **Red River Watershed Management Board Water Quality Funding**

The Red River Watershed Management Board (RRWMB) approved funding to encourage and financially support water quality projects implemented by member watershed districts. District staff participated in a Water Quality Monitoring Advisory Committee that assembled the application methods and requirements. The water quality funding was split into two “pots.” Each member watershed district could apply for up to \$100,000 of water quality base funding to fund a wide variety of water quality projects. The larger pot of water quality project funding was reserved for competitive applications for implementation (on-the-ground) projects.

The District completed the work planned for the RRWMB water quality base funding that was awarded to the District in 2020. This funding help pay for the installation of side water inlets along RLWD Ditch 16 (\$22,000) as well as side water inlets and rock grade stabilization structures along the diversion ditches that will be constructed for the Black River Impoundment Project (\$78,000).

In 2021, work was also completed on a project that the RRWMB approved for competitive water quality project funding in 2020. The RRWMB provided partial funding for the Thief River Falls Oxbow Restoration Project. The RRWMB approved a total of \$250,000 of water quality project funding for this project.

### **BWSR Clean Water Fund Grants Awarded to the RLWD and Local SWCDs**

The Red Lake Watershed District (RLWD) was awarded \$250,000 from BWSR Clean Water Funds for the Thief River Falls Oxbow Restoration and Stormwater Treatment Project in 2020.

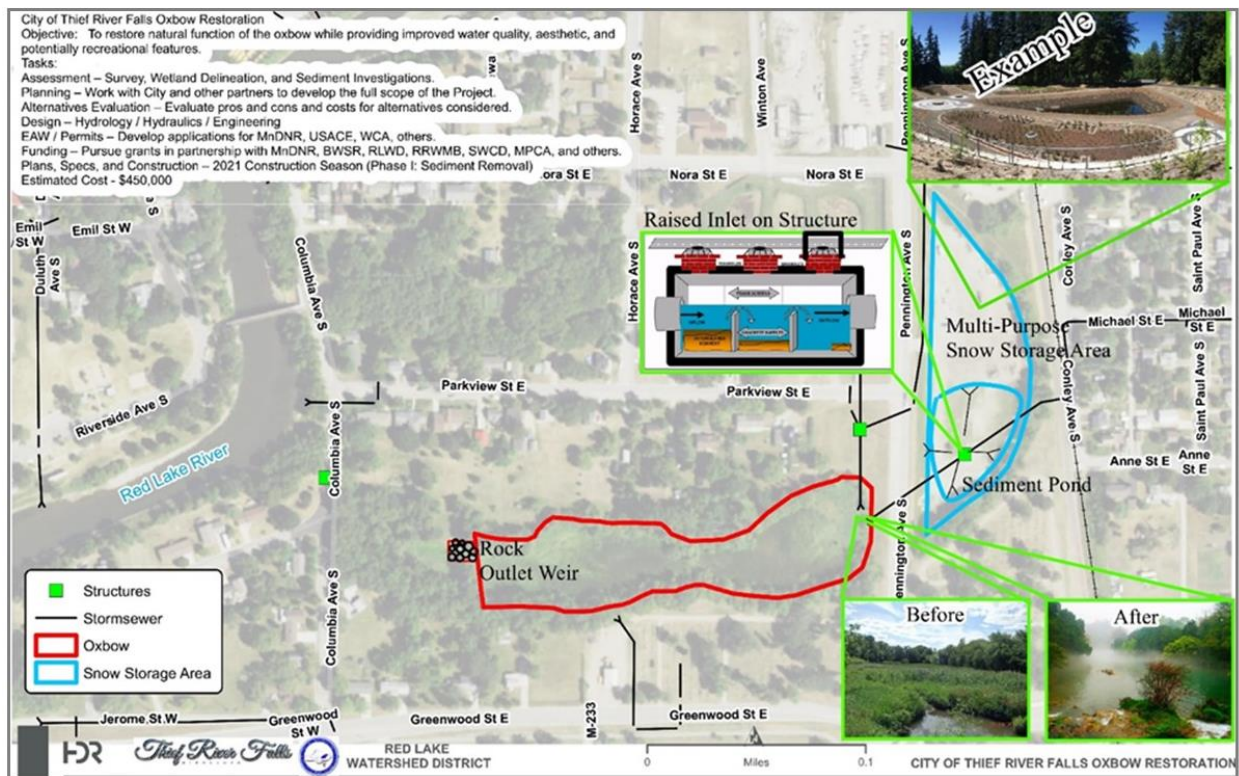
" The Minnesota Board of Water and Soil Resources (BWSR) approved [\\$12.7 million in Clean Water Fund grants](#) today to improve water quality in streams, lakes and groundwater across the state. Most of the grant funding is allocated for voluntary conservation projects across Minnesota, including funding for projects that focus on improving and protecting drinking water.... The \$12.7 million will fund 31 grants dedicated to specific projects and practices. Four grants will support multi-purpose drainage management, and four grants will focus on projects that specifically address drinking water issues." A total of \$326,200 in competitive grant funding out of that \$12.3 million has been awarded to projects within the Red Lake Watershed District.

The Red Lake SWCD was awarded a \$231,200 Fiscal Year 2022 Clean Water Fund Projects and Practices Grant for the 2022 Hill River Subwatershed Water Quality Agricultural Practices project. “The Red Lake County SWCD has targeted seven sites for implementation of structural agricultural practices based on data analysis obtained from multiple sources, including the Clearwater River Watershed Restoration and Protection Strategies and Total Maximum Daily Load (TMDL) reports, and the Water Quality Decision Support System tool. The data identified the Hill River subwatershed as a high contributor to the impairments on the Clearwater River, highlighted fields in the subwatershed with the highest sediment loading and showed specific locations in the field which were most vulnerable to erosion. Red Lake County SWCD conducted an Erosion Site Inventory in 2021, which verified the information and found landowners in these priority areas that were eager to fix the erosion problems on their fields. The structural agricultural practices will include, but are not limited to, grade stabilization structures, grassed waterways, and water and sediment control basins. The implementation of these practices is estimated to reduce sediment loading to the Clearwater River by 1,781 tons per year, or 25% of the TMDL annual load reduction. This will improve water quality, recreation, fish habitat, and aesthetics. Further downstream, the City of East Grand Forks pulls its drinking water from the Red Lake River, making these projects a regional concern as well.”

The Red Lake SWCD was awarded a \$95,000 Fiscal Year 2022 Multi-Purpose Drainage Management Clean Water Fund Grant. Red Lake County SWCD will continue to work cooperatively with the Red Lake County Ditch Authority, and the landowners involved to reduce erosion and sedimentation, reduce peak flows and flooding, improve water quality, and protect drainage system efficiency for priority Chapter 103E drainage systems by installing an estimated twenty-three multipurpose drainage management practices. The priority Chapter 103E drainage system is County Ditch 57, including the contributing ditch branches. These proposed Ag Practices are the strategies that will assist in achieving the sediment reduction goals. The estimated twenty-three priority County Ditch 57 locations were targeted from the information gathered from the 2014 & 2015 Drainage Ditch Inventory and Inspection grant. The estimated annual reduction in sediment being delivered to Clearwater River is 397 tons per year for the entire project.



## Thief River Falls Oxbow Restoration Project



The Thief River Falls Oxbow Restoration and Stormwater Treatment Project restored three acres of an oxbow wetland by removing 27,770 cubic yards of accumulated sediment to restore the wetland habitat, filtration, and retention qualities. A rock structure will be constructed at the outlet of the restored wetland to stabilize the outlet, improve detention, and oxygenate water as it flows out of the pond. In-line hydrodynamic separator structures will be installed to trap pollutants and trash from future stormwater runoff before it enters the wetland or the Red Lake River. A settling pond will be constructed to intercept runoff from a portion of the wetland's drainage area. This project will reduce loading rates for sediment by 4.4 tons/year and of phosphorus by 29.03 pounds/year from stormwater runoff as part of a coordinated effort to restore downstream impairments of the Red Lake River. This project is a cooperative effort between the city and the RLWD, with assistance from HDR Engineering. The Thief River Falls Water Quality Study, a stormwater study completed by the Pennington SWCD and Houston Engineering, Inc., provided information that helped with the planning of this project and the successful application.

A later phase of the project should also include stormwater runoff reduction strategies further upstream within the stormwater drainage system conveys runoff from east of the project area. A large source of sediment has been eliminated when the city removed the sludge ponds that were located near the oxbow wetland. Sediment samples revealed that much of the sediment in the wetland was lime sludge that came from those ponds.

The field investigation, concept development, and permitting-related work completed by the city and HDR Engineering, along with the previously completed stormwater study, was likely helpful in showing that the project was supported by local water planning, nearly "shovel-ready," and a good candidate for grant funding. The RRWMB has approved a total of \$250,000 in competitive water quality funding for the project (\$166,000 in 2020 plus \$84,000 to help fund 2021 additions to the project). The District was awarded \$250,000 from BWSR Clean Water Funds for the Thief River Falls Oxbow Restoration and Stormwater Treatment Project in 2020. The City of Thief River Falls paid for \$35,000 of engineering costs during the initial planning phase, before any grants were received, and will also contribute \$50,000 toward construction costs. The Board approved funding additional costs beyond the grant funding and contributions from the city.

During final engineering and design for the TRF Oxbow Restoration Project, there were some changes to the bid items which we increased the cost of the project:

- Increasing yards of excavation in the restored channel by >10,000 cubic yards which would allow more storage and water depths to assist in settling silt and other pollutants at the same time reducing chance of cattail growth future.
- Incorporating tile system in the oxbow east of the restored channel (settling pond in the snow storage area) to allow water to seep into the tile thus filtering out pollutants prior to getting into the restored channel.
- Adding a third structure to bypass high flows and make the hydrodynamic separator more effective to filter out trash, sediment, and pollutants.

A [website](#) and [Facebook](#) post were created to provide public information about the Thief River Oxbow Restoration and Stormwater Treatment project. Construction of the project began in the last week of August 2021 with mobilization and preparation for excavation of sediment in the oxbow wetland. The first task was excavation of the old oxbow wetland. The contractor created a clever system for navigating the wetland with equipment and hauling sediment. Mats (wooden beams) used for pipeline construction were used to create a path from the east end of the pond to the west end. A tracked, rotating dump truck was used to ferry sediment from the west end to the east end. At the east end of the project, the sediment was loaded onto Sidump'r trucks and hauled away.



The construction has been completed except for seeding, some site grading where trucks were being loaded, and potentially some rock weir work depending on how it looks in the spring/summer and if it settles. The structures are fully functioning, along with the drain tile, and all excavation of the oxbow area has been completed.





Dirt, sand and leaves will be captured in the continuous deflective separation ([CDS](#)) [hydrodynamic separator structure](#) that has been installed, so that it never gets to the west side of Pennington Ave in the oxbow. The City will need to skim out the floatables a few times a year, and the Contech representative said the sump should be vac'd out every few years. A cast iron screw gate will cover a 12-inch hole at ground level on the structure on the east side of Pennington Avenue. It will be used only if the water needs to be released quickly, likely in a frozen ground scenario. If the water is allowed to enter through the sluice gate it will still go through the separation chamber to help limit debris entering the pool. In addition to the structure that creates the settling pond on the east side of Pennington Avenue, the settling pond also features 2,056 feet of drain tile covered with a geotextile sock and embedded in aggregate filter. Any debris from the stored snow will be cleaned up in the spring by the City once the snow melts and the water infiltrates into the drain tile. The city has a tractor and box scraper that they can use to pull away any sediment over time that may build up near the structure. A CDS structure has also been installed on the west side of Pennington Avenue to filter pollutants from stormwater runoff that enters the oxbow from the north.



### **Water Quality Partnerships**

The District provides support to other organizations that are working on projects that will improve water quality and habitat within the District's boundaries. That support can come in the form of one watershed one plan collaboration, technical advice/information, financial support, and project administration support. The

District considers collaborations to be very important and encourage local governmental units to continue their request for assistance from the District wherever possible.

- The District continued to support the River Watch program.
- District staff participate in Water Resource Advisory Committee (SWCD water planning) meetings.
- The Red Lake River Corridor Enhancement Joint Powers Group has been revived and has successfully applied for funding to improve and create accesses along the Red Lake River. The Red Lake River Corridor Enhancement project made progress in improving public access along the Red Lake River, including a new road and canoe/kayak access ramp/path at the CSAH 11 Bridge, near Gentilly.
- One Watershed One Plan Planning Work Groups meet regularly to discuss progress on the current work plans and plan for the work plans.
- District staff participates in the Polk County AIS Task Force that meets several times each year to discuss appropriation of AIS funds.
- The Board approved the reimbursement of analysis expenses for water quality samples that were collected in Maple Lake by the Maple Lake Improvement District.
- The Board approved continuation of financial support for the analysis of lake samples collected by the East Polk SWCD. The East Polk SWCD will collect water quality samples on nine lakes within the District for a monitoring period of three years (2021-2023).
- The Board approved financial support for analysis of lake samples on Bartlett Lake, near Northome, MN.
- District staff met with MPCA and SWCD staff to review monitoring plans and site locations for Cycle II Intensive Watershed monitoring of the Thief River Watershed.
- The Board approved \$62,460 of 2021 Erosion Control Fund cost-share requests from SWCDs.
  - \$6,375 in cost-share funding to the West Polk SWCD for the \$8,500 grade stabilization project in Section 4 of Huntsville Township along the Red Lake River near East Grand Forks
  - \$7,350 in cost-share funding to the West Polk SWCD for a \$9,800 grade stabilization project in Section 29 of Huntsville Township, along Heartsville Coulee
  - \$2,000 in cost-share funding to the Red Lake SWCD for grade stabilization projects in Section 6 of Poplar River Township, along the Lost River near its confluence with the Clearwater River (\$13,600 total cost)
  - \$2,500 in cost-share funding to the Red Lake SWCD for two grade stabilization projects in Sections 18 and 19 of Gervais Township, along the Red Lake River east of Red Lake Falls (\$15,860.91 total project cost)
  - \$7,500 in cost-share funding to the Red Lake SWCD for ten grade stabilization projects in Sections 25, 35, and 36 of Red Lake Falls Township near the Clearwater River east of Red Lake Falls (\$89,201.26 total project cost)
  - \$5,250 in cost-share funding to the West Polk SWCD for a grade stabilization project in Sections 7 and 18 of Fisher Township, along the Red Lake River east of East Grand Forks (\$7,000 total project cost)
  - \$9,000 in cost-share funding to the West Polk SWCD for a grade stabilization project in Section 2 of Roome Township, along the Red Lake River east of East Grand Forks (\$12,000 total project cost)
  - \$1,100 in cost-share funding to the Red Lake SWCD for a \$9,170 grade stabilization project in Section 10 of Louisville Township along the Black River
  - \$1,000 in cost-share funding to the Red Lake SWCD for two grade stabilization projects in Section 28 of Gervais Township along the Clearwater River east of Red Lake Falls (\$9,110.50 total project cost)
  - \$3,000 in cost-share funding to the Red Lake SWCD for two grade stabilization projects in Section 32 of Browns Creek Township along Browns Creek (\$28,446 total project cost)
  - \$4,885 in cost-share funding to the Red Lake SWCD for a grade stabilization project in Sections 8 and 9 of Lake Pleasant Township along Cyr Creek (\$32,340.21 total project cost)



- \$12,500 in cost-share funding to the Marshall SWCD for the installation of side water inlets throughout the Thief River Watershed.
- The Board approved \$5,400 in cost-share funding to the Beltrami SWCD for a Beltrami County Forest Stewardship incentive program. A forest stewardship plan is largely a “foot in the door” for a landowner to become enrolled in one of two conservation incentive programs. These programs provide forest protection through the life of the contract. Aly Bergstrom, of the Beltrami SWCD, stated that there are scientific reports that point out the correlation between a catchment that is 75% protected and improved water quality. Forest stewardship plans and subsequent conservation incentive programs increase protected lands on the landscape. The approved cost-share will account for approximately 1,000 acres of forested property, with landowners paying a 60% cost share.

## **2022 Plans**

- Work with SWCDs and counties in the Clearwater River Watershed to complete the Clearwater River One Watershed One Plan process and then develop a workplan for the first round of WBIF for the watershed.
- Sampling for the District’s long-term monitoring program during the months of May, June, August, and September
- Continuous dissolved oxygen monitoring at a minimum of 5 locations.
- Collection of water quality samples and other data for the Thief River Surface Water Assessment Grant
- Blue-green algae monitoring
  - Monitoring Maple Lake for algal blooms and toxins
  - Watching for blue-green algae blooms on the Thief River during low flows
  - Temperature logging in the Thief River during low flows
  - Possible late-summer screening for algal toxins in shallow, eutrophic lakes
- Stage and flow monitoring
- Plan installation of real-time water level monitoring at two locations along the Clearwater River to assist water allocations for wild rice production.
- Implementation of projects in the Thief River 1W1P annual work plan (finishing the Judicial Ditch 23 outlet stabilization and additional streambank stabilization within the Lower Thief River subwatershed.
- Work with Thief River 1W1P partners to develop a work plan for Fiscal Year 2022 WBIF.
- Implementation of projects in the Red Lake River 1W1P annual work plans (grade stabilization projects, Demarais-Hanson gully stabilization construction, streambank stabilization prioritization/development/design/construction for the 2022 Red Lake River 1W1P Annual Work Plan).
- Partially funding the Phase II of the Pennington County Ditch 96 outlet stabilization project with 319 Grant funding
- Streambank stabilization project construction for the Red Lake River Small Watershed Focus 319 Grant.
- Public education
- River Watch
- Lake sampling at Long Lake, if recommended by the MPCA. Inform the MPCA that the lake has met water quality standards through another year of sampling and could still be eligible for delisting.
- Bartlett Lake: Work with the current volunteer sampler, and possibly find an additional volunteer to assist with 2022 sample collection.
- Work with the MPCA and other LGU stakeholders to identify sampling locations for the 2023-24 Red Lake River Intensive Watershed Monitoring and Surface Water Assessment Grant.
- Interim water quality assessment and prioritization/classification of waters in the Red Lake River and Grand Marais Creek watersheds.
- Detailed survey and feasibility study of the Moose River along the Moose River to identify feasible grade stabilization and erosion prevention projects.

- Work with the West Polk SWCD and/or Polk County to plan a stabilization project for the outlet of Polk County Ditch 99. Stabilization of that eroding outlet will likely be eligible for funding by the Red Lake River 1W1P and other sources (RRWMB water quality funding, 319 Grant).

## **GIS**

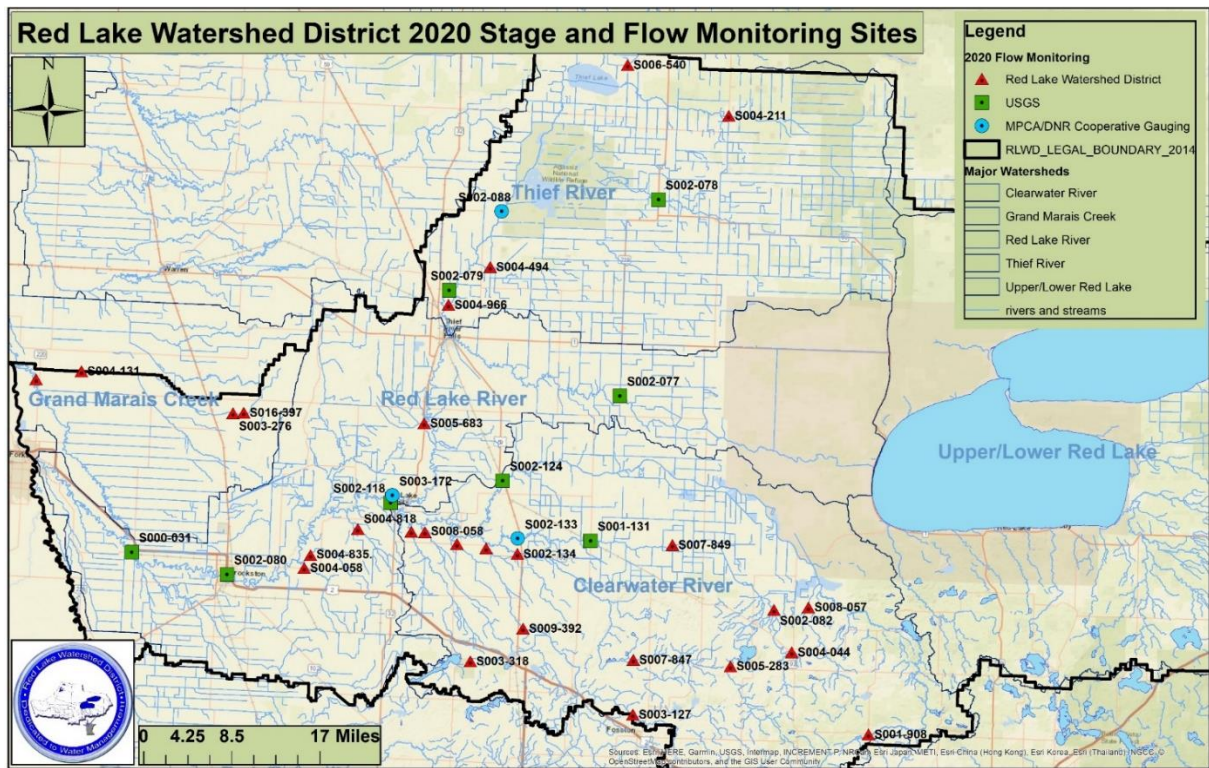
The work being done to develop PTMApp for the Clearwater River Watershed was transitioned from the former Natural Resource Technician (who left in mid-January for a new job with the NRCS) to the Water Quality Coordinator. An intensive culvert location inventory was conducted throughout the summer of 2020 and the first 6 months of 2021. Because LiDAR is acquired from the air, bridges, and crossings with culverts function as digital dams in raw LiDAR data. The culvert locations were necessary to “burn” flow paths through digital dams in the LiDAR surface. Software would use lines drawn on maps to create an altered version of the DEM with “burned” channels through culvert locations and digital walls to help prevent digitally simulated flows from straying off-course. The hydrologically conditioned DEM was necessary to run the PTMApp (Prioritize, Target, and Measure Application) model for the watershed. Progress was made on completing the lakes routing phase of the PTMApp development. Lake outlines, “burn lines,” and “wall lines” were edited to make sure that the PTMApp model correctly simulated flow through lakes. In PTMApp, a lake can have multiple inlets, but only one outlet. Some trial and error were needed to encourage the flow accumulation lines to exit convoluted lakes at a single location. Ground truthing and examining of LiDAR data was completed to make sure that the simulated, digital inlets and outlets matched reality as closely as possible. After each round of groundtruthing, wall-line edits, and creation of a new flow accumulation layer, the number of lakes needing additional edits incrementally dropped until flow properly entered and exited all lakes. At least one lake (Agnes Lake) had no natural outlet.

After the lakes routing process was completed, The Water Quality Coordinator worked on a section-by-section review of PTMApp outputs and culvert locations. A groundtruthing effort was initiated to check for culverts in locations where flow patterns appeared to be artificially altered in the digital model by roads, berms, approaches, etc. The PTMApp model simulates the accumulation of flow and flow directions based on elevations of pixels in the LiDAR elevation data. That simulation reveals patterns of flow. Areas where surface flow was halted and accumulated in the model were called non-contributing areas. The flow accumulation lines were examined to look for flow paths that seemed to have been artificially altered or diverted. Some of those diverted flows brought attention to culverts that were identifiable in aerial photos. Where flow seemed to be artificially diverted, but aerial photos did not clearly show a culvert or other drainage structure, a marker was placed on a Google Earth map so that the site could be visited, and the presence/absence of a drainage structure could be verified. The non-contributing areas were examined to see if the terrain and aerial photos suggested that there may be a drainage structure that hasn’t yet been marked as a burn line. While traveling throughout the watershed for groundtruthing work, the Water Quality Coordinator photographed notable erosion problems that were encountered. PTMApp files were shared with Houston Engineering, Inc. staff for a preliminary quality assurance review. The review generated a selection of areas to “double-check” for culverts and confirmation of flow direction (if possible). The ground-truthing process was completed in July 2022. Searching for culverts provided District staff an opportunity to explore portions of the watershed that are typically not seen when travelling to meetings or regular monitoring sites. The southern and eastern edges of the Clearwater River have scenic areas with hills and forests. The hills of the Hill River subwatershed provide some expansive vistas. On the other hand, private ditch digging and conversion of land to cultivation, discovered along township roads east of Hwy 59, have led to significant wind and water erosion problems.

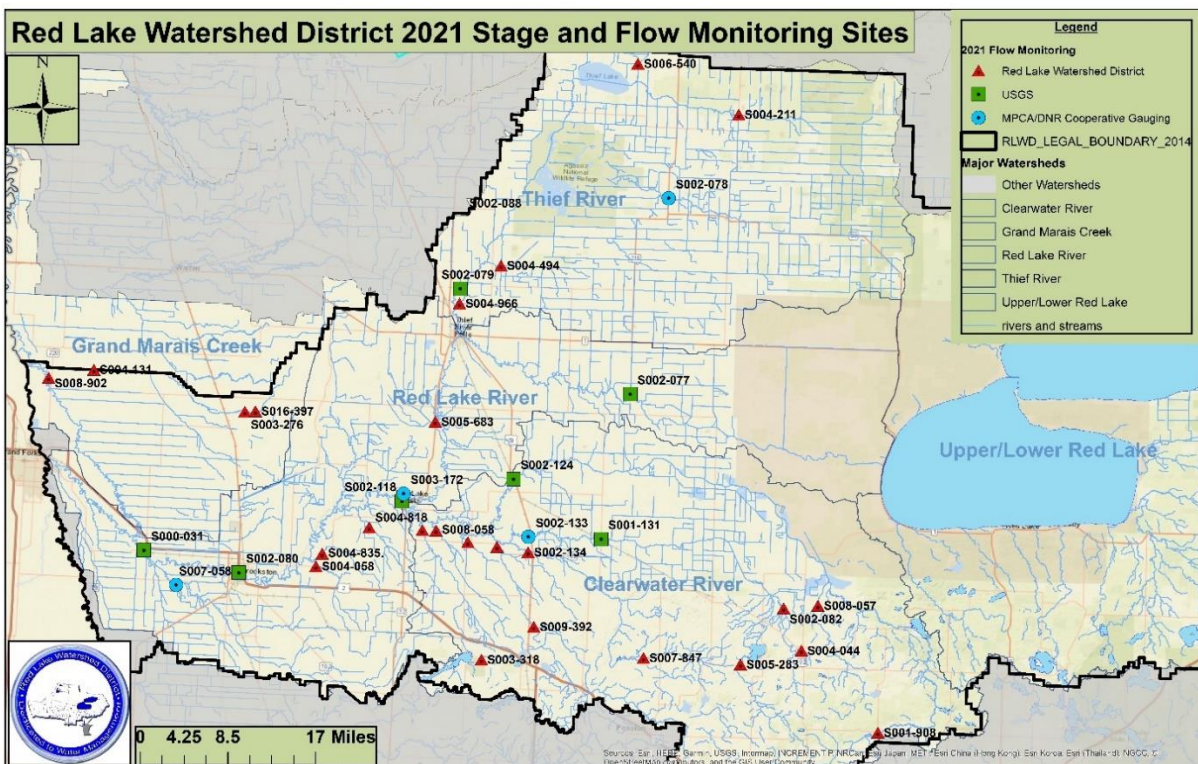








The District's HOBO water level loggers were all retrieved by early November, before streams began to freeze. The loggers were cleaned, and data was downloaded from each logger.





## River Watch

The year leading up to the 26<sup>th</sup> annual River Watch Forum began fall of 2020. Usually, the school year starts with an annual River Watch Kick Off Event, however due to COVID 19 we were not able to hold a kickoff event.

The 26<sup>th</sup> annual River Watch Forum was held virtually. River Watch teams were asked to complete three challenges based on a few activities in River Watch. The first challenge was called “Water Quality of the Red River.” An assortment of water quality data was collected at multiple spots along the Red River. Students were given the task of matching the data to the correct location on a map of the Red River. The second challenge was called “Macroinvertebrates of the Red River Basin.” Using a dichotomous key, students identified macroinvertebrates and determined the pollution tolerance rating for a stream. The third challenge was called “Sharing and Preparing.” Each team created a work plan for their upcoming year with their River Watch



*The Red Lake Falls Lafayette High School River Watch Team. They took first place at the 26th Annual River Watch Forum.*

Advisor, wrote a social media post and shared it on IWI’s Facebook and Instagram accounts.

The scores from each challenge were compiled to determine the forum winner. With an outstanding performance on the social media challenge, accumulating over 345 “likes” on Facebook and Instagram, Red Lake Falls Lafayette High School team received first place!

In February of 2021, former Natural Resource Technician, Ashley Hitt, took a job with the Natural Resource Conservation Services (NRCS). Ashley created a strong River Watch Program in the Red Lake Watershed District, which is apparent with RLWD schools taking first place at

the River Watch Forums the past three years. She has had a huge impact on the students and has built up their knowledge of the Red River basin and its water quality. She will be greatly missed by her former students. Former RLWD Ditch Inspector, Christina Slowinski, stepped into the position of Natural Resource Technician.

Once spring melt came, the River Watch teams were itching to get outside and be part of a team again. A few schools were active in the Spring, but most schools were active in the program in the fall of 2021. Most schools are participating in water quality sampling. Each month, each school goes to on average nine sites. Students become very familiar with their sites and learn observation skills of recognizing what is typical for a site to look like. This year was extremely dry. Many sites went completely dry, which was a first-time observation for many students and teachers! At each site they collect water samples and test for stage, water clarity, temperature, pH, conductivity, turbidity, and dissolved oxygen.



*RLF student looking for macroinvertebrates using equipment supplied by RLWD.*

When schools reconvened fall of 2021, Red Lake Falls Lafayette High School was able to macroinvertebrate sample in the Clearwater River near the Klondike Bridge in Red Lake Falls in October. During macroinvertebrate sampling, River Watch students learned how to follow invertebrate sampling protocol, identify different habitat types within a river/stream system, proper use of equipment for collecting, and sorting and identifying invertebrates using a dichotomous key. Students also learn which invertebrates are indicators of good and bad water quality. At the end of the day, they were able to calculate the pollution tolerance rating for the stream/river.

With cooling temperatures, early October brought perfect conditions for kayaking. The Clearbrook-Gonvick River Watch team participated in the River Explorers program. This program is an opportunity for River Watch teams to kayak local streams, allowing for a unique perspective of watershed health, recreation, and wildlife. For many students, this is their first time kayaking, creating a quick and intensive learning environment. The Clearwater-Gonvick team kayaked the Clearwater River. The trip started just

downstream of the dam on Clearwater Lake and kayaked west about 5 river miles ending at the intersection of County Road 14. Due to drought conditions, the water was very low and quick moving, making it tricky for students to learn to kayak as they had to learn to maneuver around down trees and other obstacles quickly. During the trip, students were encouraged to take notes and photos with waterproof cameras of anything they feel could be impacting the water quality of the river. From their photos and observations, a Story Map was created online at



*Clearbrook-Gonvick River Watch team learning some basic paddling maneuvers. Kayaks were supplied by IWI.*

<https://www.arcgis.com/apps/MapJournal/index.html?appid=2e15d707ce6d4604b310864a9c0273d2>. A few of the students managed to get completely soaked, but all the students agreed they would do it all over again, they had so much fun and couldn't wait to get back on the water.

## **River of Dreams**

The River of Dreams program engages elementary age students to better understand their watershed through reading, writing, art, and geography. River of Dreams is inspired by “Paddle-to-the-Sea” a 1941 children’s





*Student from Red Lake Falls launching their canoe into the Clearwater River.*

novel by Holling Clancy Holling that follows the journey of a wooden canoe through the Great Lakes, down the St. Lawrence Seaway and out to the Atlantic Ocean. River of Dreams students experience virtual tours of their watershed, see where their local rivers flow, and learn watershed terminology during the classroom visit by RLWD and/or IWI staff. The students then decorate a trackable 14” cedar canoe and write a dream for its river journey. Canoes are then launched into the local river students learned about during the classroom visit. A webpage is created for each canoe which includes the date and location of launch along with a picture of the canoe and its “dream”. Canoes found by area residents can report sightings into a database by following instructions and recording the unique ID number with accompanies each canoe. Anyone can view decorated canoes, read dream stories, and see where canoes are discovered at [www.riverofdreams.org](http://www.riverofdreams.org).

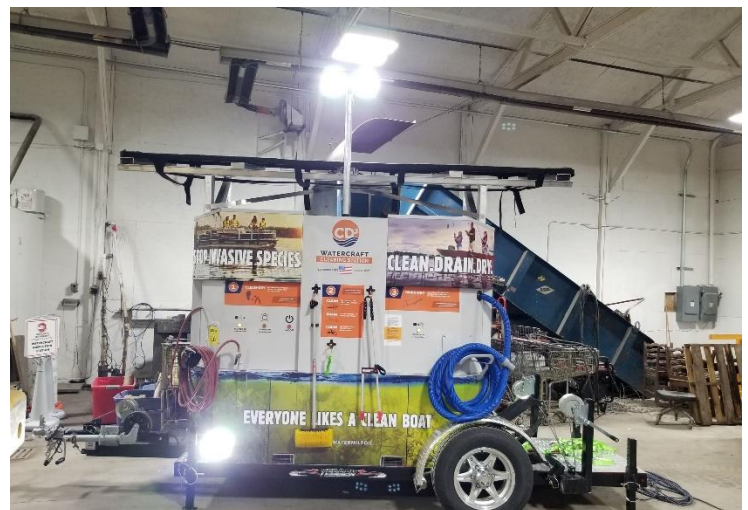
Participating schools that are located within the RLWD boundary include: Red Lake County Central, Win-E-Mac, Red Lake Falls, Clearbrook-Gonvick, Grygla, East Grand Forks, Sacred Heart (East Grand Forks), Thief River Falls, St. Bernards (Thief River Falls), and Fisher.

The River of Dreams classroom portion were completed virtually in February and early March of 2021. Canoe launches were held in person, launching canoes from the 2020 program along with canoes in the 2021 program.

### **Aquatic Invasive Species (AIS)**

Red Lake Watershed is a member of the Polk County Aquatic Invasive Species Taskforce. It was formed in 2015 to help fight against aquatic species with the County and consists of members from all around the County, representing several different entities.

The Taskforce works on many different projects, but the focus of the group is on education and public awareness. Billboards, public access signs, and some promotional items have been utilized to spread knowledge and awareness of AIS in Polk County and around the state. In 2021, the task force purchased a CD3 watercraft cleaning station to use during the boating season. The unit consists of tools that aid with cleaning prior to and after launching in access sites throughout Polk County. The cleaning system is equipped with a wet-dry vacuum, air hose for drying, grabber tools, and a brush to scrub off watercrafts. All of this is available for the public to use for free. It moved daily and has been seen at many different lakes throughout the County. In 2021, three seasonal interns were hired to help with AIS activities, mainly focusing on watercraft inspections at public water access sites around the County.



*CD3 Station purchased by Polk County.*

For more information on Polk County's AIS Taskforce, please visit <https://www.co.polk.mn.us/282/Aquatic-Invasive-Species-AIS-in-Polk-Cou>.

Within the Red Lake Watershed District a few lakes have been listed on the MN DNR's Infested Waters List. The Upper Red Lake has been listed for zebra mussels and starry stonewort, Lake Lomond has been listed for zebra mussels, Union Lake has been listed for eurasian watermilfoil and Blackduck has been listed for faucet snail. The Red Lake Watershed District and Pennington SWCD deployed stationary zebra mussel samplers in the Red Lake River upstream of Thief River Falls. The Watershed District also collected early detection zebra mussel veliger samples from the Red Lake River at 420<sup>th</sup> Ave SE during the months of August and September. No zebra mussels have been detected in the Red Lake River via the stationary samplers nor the water samples.



## Other Watershed Activities

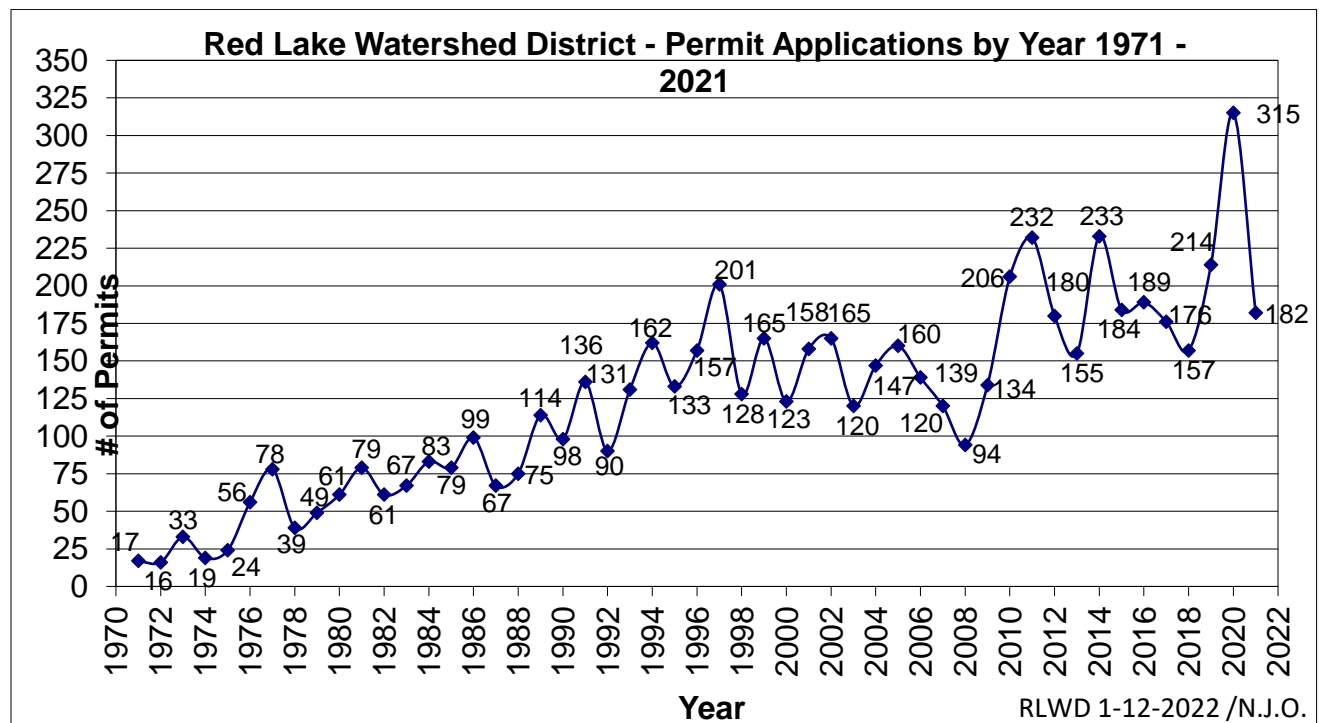
### Permits (RLWD Project No. 90).

In 2021, a total of 182 permit applications were received, 32 were for subsurface tile projects. This year was the sixth full year of the District's subsurface drain tile permitting policy. The numbers listed below indicate the permits and how they are categorized within our rules for permitting:

- 1 utility
- 6 re-grade
- 107 culvert/bridge
- 33 drainage
- 32 drain tile
- 2 grade Stabilization
- 1 denied

Applicants included state and county highway departments, railroads, townships, cities, utility & pipeline companies, State & Federal agencies, landowners, and private individuals. Permit applications are available on the District web site: [www.redlakewatershed.org](http://www.redlakewatershed.org)

Examples of permitted work consisted of road and bridge projects, wetland restorations, erosion control projects, culvert installations, and ditch cleaning. Work associated with permit review may involve, watershed delineations, detailed surveys, drainage area and culvert sizing recommendations, and meetings. Plan and profile surveys are provided at no cost to the applicant.



'72 - '81 10 Year Average	'82- '91 10 Year Average	'92 - '01 10 Year Average	'02 - '11 10 Year Average	'12 - '21 10 Year Average
45	88	145	152	199

The District also dealt with permit violations relating to unpermitted/unauthorized work. In those cases, written warnings are sent explaining that if there is a second offense, the responsible person or entity could possibly be subject to an administrative fee, re-storing the work to the original condition, and paying for any engineering and attorney's fees incurred by the District.

The District, at times, may perform surveys and establish proposed grades/elevations when necessary. Final approval for the work will be discussed with the proper public road authorities, whether it is the state, county, or township.

### **Wild Rice Water Allocation (RLWD Project No. 45)**

As a domesticated agricultural grain crop, wild rice is grown in paddies, flooded with water to an average depth of about 1 foot.

Wild rice production along the Clearwater River began in 1968. The water allocation project was petitioned by the growers in 1984. This involves the appropriation of water from the Clearwater River, for production of wild rice on approximately 12,000 acres of paddies. Spring flood storage capacity in the paddies is substantial, and amounts to about 23,000 acre-feet, which is equivalent to 1.1 inches of runoff. This storage helps to reduce downstream flood flows/peaks.

When there is substantial flow in the river, no water allocation is necessary. the growers may pump as needed. However, during periods of low flow, the District allocates water to the growers. The allocation program ensures that each grower receives their appropriate share of available flow and that the protected flow of 36 cubic feet per second (cfs) is maintained in the Clearwater River.

Paddies are typically drained during July and August to facilitate harvest. Some growers partially flood paddies in the fall season through freeze up. By doing this, it helps to reduce the need of pumping activity in the spring, at which time, water supplies may not be enough to meet all their needs.

For parts of 2021, flows in the Clearwater River were below the minimum flow that initiates allocation. Allocation was necessary for a period in March and then from September through November for fall flooding of the paddies. Normal duties include correspondence with growers and recording river levels at various sites. The growers also provide valuable information on river conditions and stream gage data.





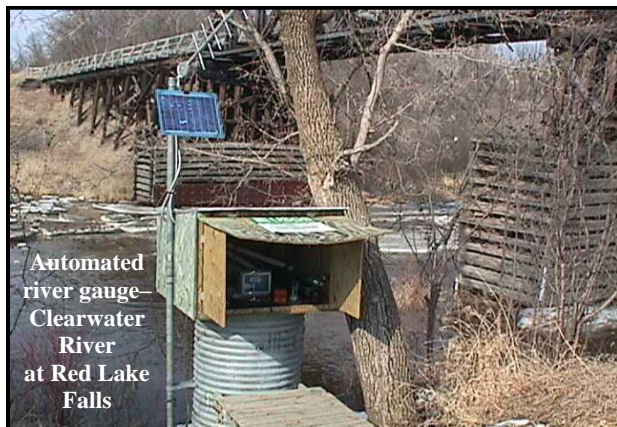
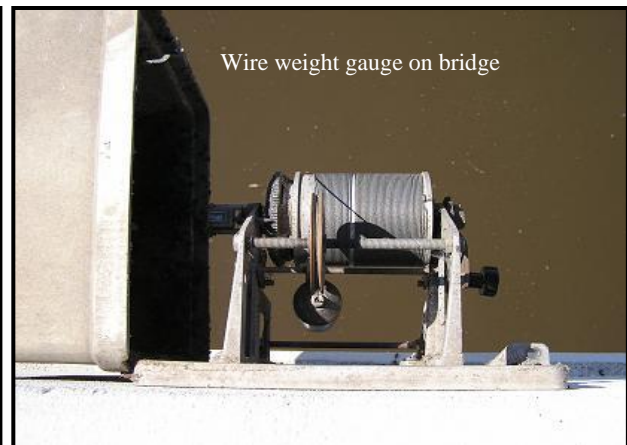
## **Stream Flow & Pool Elevation Monitoring (RLWD Project No. 21)**

Stream flow monitoring is a vital on-going activity. The District has an active stream gauging program and local volunteers assist us in recording gauge readings and monitoring river conditions during runoff events. Approximately 160 gauges of various types (staff, wire weight, automated) are located throughout the District. Many automated river level gauges within the district can be accessed via the internet and are extremely valuable to obtain “real time” data.

The District deploys autonomous water level loggers in tributary streams and other important locations that are not gauged by state or federal flow monitoring stations. HOBO water level loggers were deployed at 27 sites in 2021. Flow monitoring results can be viewed within monthly water quality reports.

District staff performs flow measurements and continues to develop stage (gauge height) and discharge (flow in cubic feet per second) curves at many locations. This data, in conjunction with records and cooperative efforts from other agencies such as the U. S. Geological Survey (USGS), National Weather Service, and the MnDNR will help everyone better understand drainage and runoff characteristics within the District.

With several years of recorded data, it is increasingly valuable for the Board of Managers and staff, in the operation and maintenance of existing projects and for the development of potential projects.



An In-Situ VuLink remote water level logging system was deployed in Pine Lake to give District staff the ability to check water levels in the lake from a computer at the office. The logger was installed on June 1, 2021.

## Snow Surveys

Each year, the District performs snow surveys which usually begin in mid-February and continues through the spring melt on an as needed basis if snow conditions change. Seven sampling sites are monitored throughout the District.



The locations of these sites are near impoundment facilities which are designed and operated for floodwater retention.

In 2021, due to the light snowpack conditions, no snow surveys were obtained. This year we received virtually no spring runoff.

Measuring Procedure: The depth of the snowpack is measured and a ‘core sample’ is obtained. The tube and snow core are weighed, and the “water content” of the snow is calculated. Five samples are taken at each site and averaged for the data.

**Obtaining snow depth and core sample**

This information is forwarded to the National Weather Service, the North Central River Forecast Center, and local officials. This helps them to estimate the amount of runoff and make flood forecasting predictions.

The relationship between snowpack and the amount of snowmelt runoff is complex and depends on many factors.

Some of the criteria used to determine flood potential of spring snowmelt are:

- Depth of existing snow cover and snow moisture content
- Existing soil moisture (was it wet or dry the previous fall?)
- Depth of frost - or, is there any frost?
- River ice and ice jams

Fast and slow thaws:

- Gradual or intermittent thawing may reduce the potential for serious flooding, especially in areas with minimal frost depths
- Flood potential usually increases with late season melting, when a rapid melt is more likely; and if additional precipitation occurs during the runoff event.

## Geographic Information Systems-GIS (RLWD Project No. 145)

**Mapping:** Maps are created as needed to accommodate requests by District staff. It should be noted that maps created are not to be used as legal survey maps, they are for reference use only.

A live working ArcGIS map that was created for tracking parcel splits for the Thief River Falls Water Management District, RLWD project 171A, is updated as new parcel splits occur.



**In-Situ VuLink**





## **Website**

The Red Lake Watershed District has been making improvements to their website, making it more user friendly and easier for viewers to access information. The biggest change on the site is the “What’s New in the Watershed?” section on the home page. This is where the District is sharing information about recently completed projects or other agencies projects that we are a part of. Please visit our website at <http://redlakewatershed.org/default.html>. Let us know if you would like to see certain information added!

# **Financial Report**

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**RED LAKE WATERSHED DISTRICT  
THIEF RIVER FALLS, MINNESOTA**

**AUDITED FINANCIAL STATEMENTS**

**FOR THE YEAR ENDED DECEMBER 31, 2021**



## TABLE OF CONTENTS

	Page
<b>OFFICIAL DIRECTORY</b>	<b>1</b>
<b>INDEPENDENT AUDITOR'S REPORT</b>	<b>2</b>
<b>MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)</b>	<b>5</b>
<b>BASIC FINANCIAL STATEMENTS</b>	
Statement of Net Cash Position	14
Statement of Activities Arising from Cash Transactions	15
Statement of Balances Arising From Cash Transactions - Governmental Funds	16
Statement of Cash Receipts, Disbursements, and Changes in Cash Fund Balances - Governmental Funds	17
Reconciliation of Changes in Fund Balances of Governmental Funds to the Statement of Activities	18
Statement Of Assets and Liabilities – Fiduciary Funds	19
Statement of Changes in Net Cash Position – Fiduciary Funds	20
Notes to the Basic Financial Statements	21
<b>SUPPLEMENTARY INFORMATION</b>	
Budgetary Comparison Schedule – General Fund	35
Note to the Budgetary Comparison Schedule	36
<b>SUPPLEMENTARY STATEMENTS</b>	
Statement of Receipts and Disbursements and Changes in Fund Balance – All Funds	37
Statement of Direct Expenditures by Classification – Governmental Funds	40
<b>INDEPENDENT AUDITOR'S REPORT ON MINNESOTA LEGAL COMPLIANCE</b>	<b>41</b>
<b>INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS</b>	<b>42</b>
Schedule of Findings and Responses	44
Corrective Action Plan	45

RED LAKE WATERSHED DISTRICT  
OFFICIAL DIRECTORY  
DECEMBER 31, 2021

Board of Managers

<u>Manager</u>	<u>County</u>	<u>Position</u>
Dale M. Nelson	Pennington	President
Gene Tiedemann	West Polk	Vice President
LeRoy Ose	Marshall	Secretary
Terry Sorenson	East Polk	Treasurer
Brian Dwight	Beltrami	Manager
Allan Page	Red Lake	Manager
Tom Anderson	Clearwater	Manager



## INDEPENDENT AUDITOR'S REPORT

Board of Managers  
Red Lake Watershed District  
Thief River Falls, Minnesota

### Report on the Audit of the Financial Statements

#### *Opinions*

We have audited the accompanying modified cash basis financial statements of the governmental activities, each major fund, and the remaining fund information of the Red Lake Watershed District as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective modified cash basis financial position of the governmental activities, each major fund, and the remaining fund information of the Red Lake Watershed District, as of December 31, 2021, and the respective changes in modified cash basis financial position for the year then ended in conformity with the basis of accounting described in Note 1.

#### *Basis of Opinion*

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of Red Lake Watershed District and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### *Basis of Accounting*

We draw attention to Note 1 of the financial statements, which describes the basis of accounting. The financial statements are prepared on the modified cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. Our opinions are not modified with respect to the matter.

### ***Responsibilities of Management for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the modified cash basis of accounting described in Note 1; this includes determining that the modified cash basis of accounting is an acceptable basis for the preparation of the financial statements in the circumstances. Management is also responsible for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for twelve months beyond the financial statements date, including any currently known information that may raise substantial doubt shortly thereafter.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the District's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.



### *Supplementary Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Red Lake Watershed District's basic financial statements. The budgetary comparison schedule, statement of receipts and disbursements and changes in fund balance, and the statement of direct expenditures by classification as listed in the table of contents as supplementary information are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the budgetary comparison schedule, statement of receipts and disbursements and changes in fund balance, and the statement of direct expenditures by classification are fairly stated in all material respects in relation to the basic financial statements as a whole as described in the basis of accounting described in Note 1.

### *Other Information*

Management is responsible for the other information included in the annual report. The other information comprises the official directory and the management's discussion and analysis but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

### *Other Reporting Required by Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated April 5, 2022 on our consideration of the Red Lake Watershed District's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to solely describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Red Lake Watershed District's internal control over financial reporting and compliance.



BRADY, MARTZ & ASSOCIATES, P.C.  
THIEF RIVER FALLS, MINNESOTA

April 5, 2022

**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
FOR THE YEAR ENDED DECEMBER 31, 2021**

Our discussion and analysis of the Red Lake Watershed District's financial performance provides an overview of the District's financial activities for the fiscal year ended December 31, 2021, within the limitations of the District's modified cash basis of accounting. Please read it in conjunction with the District's financial statements that begin on page 15.

**FINANCIAL HIGHLIGHTS**

- The District's governmental funds total expenditures exceeded total revenues, on the modified cash basis of accounting, by \$56,694 for the year ended December 31, 2021.
- The general fund showed an increase on the modified cash basis fund balance in the amount of \$32,031.
- The District's General Fund ended the year with a fund balance of \$241,269.
- The District's combined fund balance at the close of the current year was \$2,162,806.

**Overview of the Financial Statements**

This annual report is presented in a format consistent with the presentation requirements of the Governmental Accounting Standards Board (GASB) Statement No. 34, as applicable to the District's modified cash basis of accounting.

**Report Components**

This annual report consists of five parts as follows:

**Government—Wide Financial Statements:** The Statement of Net Cash Position and the Statement of Activities Arising from Cash Transactions on pages 15 and 16 provide information about the activities of the District government-wide (or "as a whole") and present a longer-term view of the District's finances.

**Fund Financial Statements:** Fund financial statements (starting on page 17) focus on the individual parts of the District government. Fund financial statements also report the District's operations in more detail than the governmental-wide statements by providing information about the District's most significant ("major") funds. For governmental activities, these statements tell how these services were financed in the short term as well as what remains for future spending.

**Notes to the Basic Financial Statements:** The notes to the basic financial statements are an integral part of the government-wide and fund financial statements and provide expanded explanation and detail regarding the information reported in the statements.

**Other Supplementary Information:** This Management's Discussion and Analysis and the General Fund Budgetary Comparison Schedule (starting on page 35) represent other financial information. Such information provides users of this report with additional data that supplements the government-wide statements, fund financial statements, and notes (referred to as "the basic financial statements").

**Other Supplementary Statements:** This part of the annual report (starting on page 37) includes other supplemental financial information which is provided to address certain specific needs of various users of the District's annual report. These statements and schedules include individual Fund Statements for Governmental units.



**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

**Basis of Accounting**

The District has elected to present its financial statements on a modified cash basis of accounting. This modified cash basis of accounting is a basis of accounting other than accounting principles generally accepted in the United States of America. Basis of accounting is a reference to when financial events are recorded, such as the timing for recognizing revenues, expenses, and their related assets and liabilities. Under the District's modified cash basis of accounting, revenues and expenses and related assets and liabilities are recorded when they result from cash transactions, except for the recording of depreciation expense on the capital assets in the government-wide financial statements.

As a result of the use of this cash basis of accounting, certain assets and their related revenues (such as accounts receivable and revenue for billed or provided services not yet collected) and certain liabilities and their related expenses (such as accounts payable and expenses for goods or services received but not yet paid, and accrued expenses and liabilities) are not recorded in the basic financial statements. Therefore, when reviewing the financial information and discussion within this annual report, the reader should keep in mind the limitations resulting from the use of the modified cash basis of accounting.

**Reporting the District as a Whole**

**The District's Reporting Entity Presentation**

This annual report includes all activities for which the Red Lake Watershed District Board of Managers is fiscally responsible. These activities, defined as the District's reporting entity, are operated within separate legal entities that make up the primary government. The District has no reportable component units.

**The Government-Wide Statement of Net Cash Position and the Statement of Activities Arising from Cash Transactions**

Our financial analysis of the District as a whole begins on page 7. The government-wide financial statements are presented on pages 15 and 16. One of the most important questions asked about the District's finances is, "Is the District as a whole better off or worse off as a result of the year's activities?" The Statement of Net Cash Position and the Statement of Activities Arising from Cash Transactions report information about the District as a whole and about its activities in a way that helps answer this question. These statements include all of the District's assets and liabilities resulting from the use of the modified cash basis of accounting.

These two statements report the District's net cash position and changes in them. Keeping in mind the limitations of the modified cash basis of accounting, you can think of the District's net cash position—the difference between assets and liabilities—as one way to measure the District's financial health or financial position. Over time, increases or decreases in the District's net cash position are one indicator of whether its financial health is improving or deteriorating. You will need to consider other nonfinancial factors, however, such as changes in the District's property tax base and the condition of the District's infrastructure, to assess the overall health of the District.

**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

In the Statement of Net Cash Position and the Statement of Activities Arising from Cash Transactions, the District has one type of activity:

**Government Activities** - The District's basic services are reported here, including the general administration and capital projects. Property taxes, state aids, and state and federal grants finance most of these activities.

#### **The Fund Financial Statements**

The fund financial statements begin on page 17 and provide detailed information about the most significant funds. Some funds are required to be established by state law and by bond covenants.

However, the Board of Managers establishes certain other funds to help it control and manage money for particular purposes or to show that it is meeting legal responsibilities for using certain taxes, grants, and other money. The District's two kinds of funds—governmental and fiduciary—use different accounting approaches.

**Governmental funds**— Most of the District's basic services are reported as governmental funds, which focus on how money flows into and out of those funds and the balances left at year-end that are available for spending. These funds report the acquisition of capital assets and payments for debt principal as a detailed short-term view of the District's general government operations and the basic services it provides. Governmental fund information helps you to determine (through a review of changes to fund balance) whether there are more or fewer financial resources that can be spent in the near future to finance the District's programs.

The District considers the General Fund, the Special Revenue Fund, and the Capital Project Fund as significant or major governmental funds. There are no other funds.

**Fiduciary funds**— These fund types are often used to account for assets that are held in a trustee or fiduciary capacity such as pension plan assets, assets held per trust agreements, and similar arrangements.

### **A FINANCIAL ANALYSIS OF THE DISTRICT AS A WHOLE**

#### **Net Cash Position**

The District's combined government-wide Net Position, resulting from modified cash basis transactions increased by \$2,535,755 between fiscal years 2021 and 2020. As noted earlier, net position - modified cash basis may serve over time as a useful indicator of a government's financial position. In the case of Red Lake Watershed District, assets exceeded liabilities by \$22,611,891 at December 31, 2021, which is an increase of \$2,535,755 over the year ended December 31, 2020; which is more than a 12.63% increase over the prior year.

A portion of Red Lake Watershed District's net position (\$20,449,085 or 90.44%) reflects its investment in capital assets. Red Lake Watershed District uses these capital assets to provide services to citizens; consequently, these are not available for future spending.

A portion of Red Lake Watershed District's net position (\$639,143) reflects a portion of net position that is restricted for ditch maintenance.



**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

	Governmental Activities		Change 20-21
	2021	2020	
<b>ASSETS</b>			
Total Current Assets	\$ 2,162,806	\$ 2,219,500	\$ (56,694)
Net Capital Assets	<u>20,449,085</u>	<u>17,856,636</u>	<u>2,592,449</u>
<b>Total Assets</b>	<b><u>\$ 22,611,891</u></b>	<b><u>\$ 20,076,136</u></b>	<b><u>\$ 2,535,755</u></b>
<b>Net Position</b>	<b><u>\$ 22,611,891</u></b>	<b><u>\$ 20,076,136</u></b>	<b><u>\$ 2,535,755</u></b>

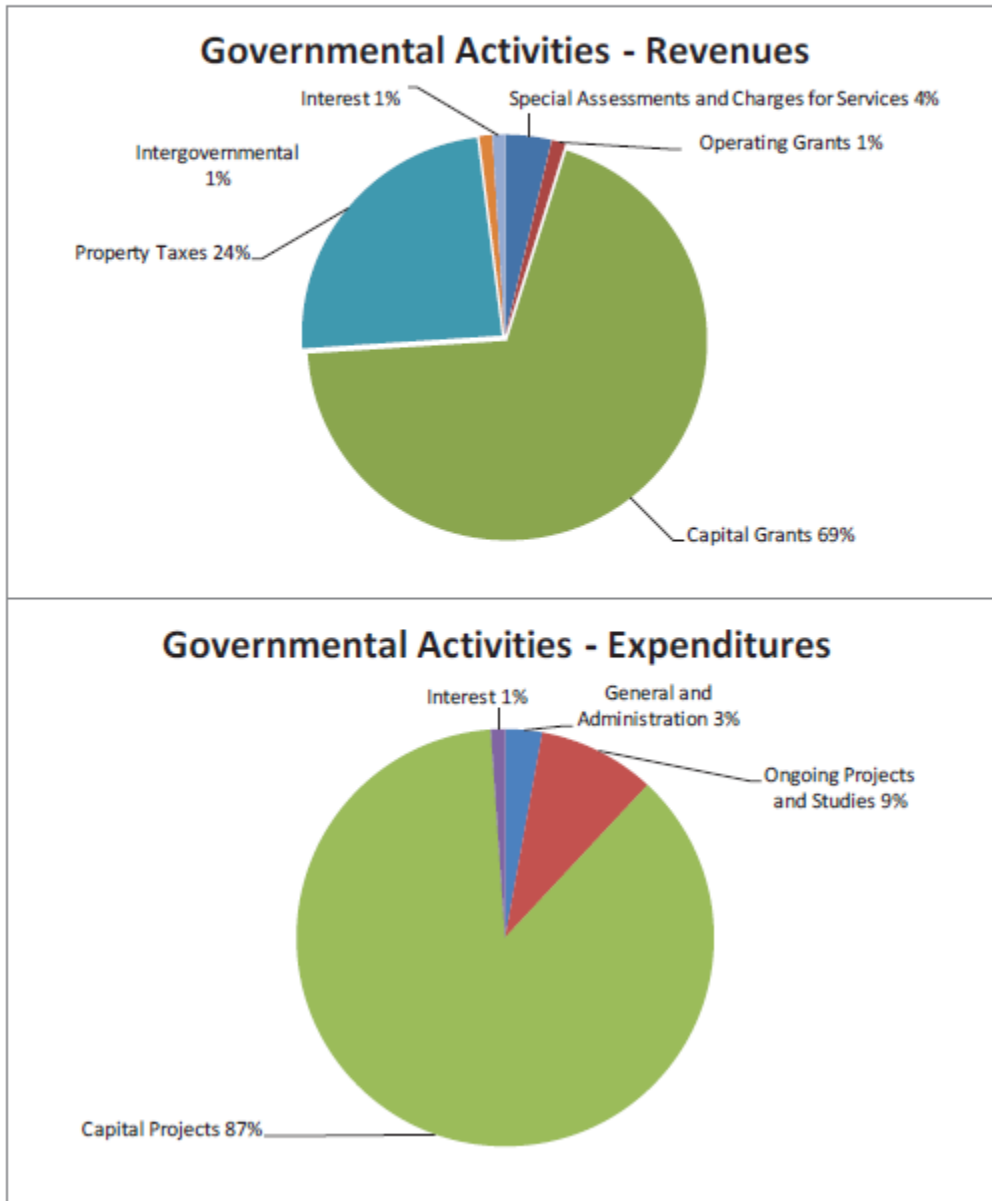
**Changes in Net Cash Position**

For the years ended December 31, 2021 and 2020, Net Position of the primary government (resulting from modified cash basis transaction) changed as follows:

	Governmental Activities		Change 20-21
	2021	2020	
<b>Revenues</b>			
Program Revenues			
Special Assessments and Charges for Services	\$ 263,544	\$ 264,834	\$ (1,290)
Operating Grants	77,015	94,783	(17,768)
Capital Grants	4,899,243	5,755,540	(856,297)
General Revenues			
Property Taxes	1,704,004	1,647,099	56,905
Intergovernmental	72,401	70,467	1,934
Interest	<u>68,276</u>	<u>166,300</u>	<u>(98,024)</u>
<b>Total Revenues</b>	<b><u>7,084,483</u></b>	<b><u>7,999,023</u></b>	<b><u>(914,540)</u></b>
<b>Expenses</b>			
General and Administration	129,744	46,816	82,928
Ongoing Projects and Studies	413,773	1,881,236	(1,467,463)
Capital Projects	3,954,965	8,298,524	(4,343,559)
Allocated Interest	<u>50,246</u>	<u>100,483</u>	<u>(50,237)</u>
<b>Total Expenses</b>	<b><u>4,548,728</u></b>	<b><u>10,327,059</u></b>	<b><u>(5,778,331)</u></b>
<b>Increase (Decrease) in Net Position</b>	<b><u>2,535,755</u></b>	<b><u>(2,328,036)</u></b>	<b><u>4,863,791</u></b>
<b>Net Position - January 1</b>	<b><u>20,076,136</u></b>	<b><u>22,404,172</u></b>	<b><u>(2,328,036)</u></b>
<b>Net Position - December 31</b>	<b><u>\$ 22,611,891</u></b>	<b><u>\$ 20,076,136</u></b>	<b><u>\$ 2,535,755</u></b>

**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

Below are specific graphs which provide comparisons of the governmental activities revenues and expenditures for the year ended December 31, 2021:





**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

**Governmental Activities**

To aid in the understanding of the Statement of Activities Arising from Cash Transactions on page 16, some additional explanation is given. Of particular interest is the format that is significantly different from a typical Statement of Revenues, Expenses, and Changes in Fund Balance. You will notice that expenses are listed in the first column, with revenues from that particular program reported to the right. The result is a Net (Expense)/Revenue. This type of format highlights the relative financial burden of each of the functions on the District's taxpayers. It also identifies how much each function draws from the general revenues or if it is self-financing through fees and grants or contributions. All other governmental revenues are reported as general. It is important to note that all taxes are classified as general revenue, even if restricted for a specific purpose.

**A FINANCIAL ANALYSIS OF THE DISTRICT'S FUNDS**

**General Fund Budgetary Highlights**

For the year ended December 31, 2021, General Fund expenditures were \$18,659 under final budget. The budget was not amended during the year.

**CAPITAL ASSET AND DEBT ADMINISTRATION**

**Capital Assets—Modified Cash Basis**

At December 31, 2021, the District had approximately \$20,449,085 (net of accumulated depreciation) invested in capital assets. This investment in capital assets consists of building, equipment, and infrastructure assets necessary for the District to carryout watershed and conservation management within its service area.

	2021		2020	
	Cost	Accumulated Depreciation	Cost - Less Accumulated Depreciation	Cost - Less Accumulated Depreciation
Building and Improvements	\$ 774,287	\$ 385,521	\$ 388,766	\$ 411,272
Infrastructure Improvements	13,134,433	4,885,722	8,248,711	8,770,154
Engineering Equipment	407,625	324,631	82,994	50,076
Office Equipment	166,366	138,218	28,148	38,905
Land and Permanent Easements	4,314,450	-	4,314,450	4,125,776
Construction in Progress	7,386,016	-	7,386,016	4,460,453
	<u>\$ 26,183,177</u>	<u>\$ 5,734,092</u>	<u>\$ 20,449,085</u>	<u>\$ 17,856,636</u>

**ECONOMIC FACTORS AND NEXT YEAR'S BUDGET**

As noted below, construction will begin on several projects as well as work on several water quality grants, flow through-grants, cooperative projects and grants with other agencies.

**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

**OTHER ITEMS OF INTEREST**

**Water Quality Projects**

Thanks to the Clean Water Land and Legacy Act, the Minnesota Pollution Control Agency (MPCA) has been able to provide the District with funding for four watershed restoration and protection strategy (WRAPS) projects ([Thief River](#), [Red Lake River](#), [Grand Marais Creek](#), and [Clearwater River](#) watersheds). Another WRAPS project, for the Upper/Lower Red Lakes Watershed, was completed by the Red Lake Department of Natural Resources. The WRAPS process and stakeholder involvement informed the 1W1P process, which has provided much funding for water quality projects. Expenses over and above the grants are expended from the Capital Projects Fund.

**Pine Lake Watershed**

After various hurdles were presented by the Minnesota Department of Natural Resources (DNR) concerning permitting, the proposed Pine Lake Watershed Project the District had been working on over the past two years, the Red Lake Watershed District Board of Managers made a request to the Natural Resource Conservation Service (NRCS) to move forward with a close-out agreement for this project thus canceling the agreement. In August of 2019, the RLWD filed all the paperwork with the NRCS to close out the account. On May 18, 2020, the RLWD received notification from the NRCS that all terms and conditions of the agreement had been met, and that they officially have closed out of the agreement.

As part of the work that was completed on the above-mentioned agreement, the District continued to work with the Minnesota DNR to find common ground in developing a project that would not only fit in the permitting guidelines of the DNR, but also accomplish some of the goals listed in the study which was completed. In 2021, the District's engineer completed the final plans and specifications for this project, solicited bids and started construction on a project which includes replacing the outlet structure of Pine Lake. Construction continued into late fall of 2021 and will be completed in 2022.

Another phase of this project will include investing the Lost River downstream of Pine Lake to assure channel is flowing free and all culverts allow safe passage of water as it moves downstream. The District hopes to complete this project in 2022 as well.

**Red Lake River One Watershed One Plan (1W1P)**

In 2018, funding through the BWSR Clean Water Fund in the amount of \$677,551 was awarded to this planning region to complete various projects identified in the workplan approved by the BWSR. It should be noted at the request of the Policy Committee formed to oversee the implementation of the plan the Red Lake Watershed District was appointed as the fiscal agent for the implementation of the plan. Implementation of the funds dispersed in the 2018 workplan started in 2019, continued into 2020 with 50% of the funds being spent. The reconciliation for the 2018 grant in the amount of \$667,551 was completed, closed and funds were dispersed in December 2021. In 2020, the second grant in the amount of \$1,071,149 was approved by BWSR using the funds appropriated from the 2020-2021 Clean Water Funds. The District and their partners will continue to complete water quality projects in accordance with the approved 2020 work plan. The Policy Committee formed to oversee the implementation of the plan, appointed the Red Lake Watershed District as the fiscal agent for the implementation of the plan.

**Thief River One Watershed One Plan (1W1P)**

In June of 2016, the Red Lake Watershed District, Pennington, Marshall and Beltrami Soil Conservation Districts and their respective counties applied for and were approved to receive a grant from the BWSR through their 1W1P program, to develop a Ten-Year Comprehensive Plan for



**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

the Thief River Watershed. On July 11, 2017, the grant was approved and executed by BWSR. The plan development continued into 2018 and 2019 with the draft plan being approved by the Policy Committee and partners in late 2019. In 2020, BWSR approved the Thief River Watershed plan and awarded a Watershed Base Grant in the amount \$529,892 for plan implementation. In 2021 the RLWD and partners started construction on various projects listed in the plan with the hope of completing projects in the plan by December 31, 2022 which is also the grant expiration date.

**Black River Impoundment**

On July 21, 2020, the RLWD presented the Red River Watershed Management Board (RRWMB) with a Step III submittal for funding of the Black River Impoundment Project with a revised estimated cost of \$8,883,000. Three funding alternatives were presented which included: (A) No outside cost-share from federal or state agencies; (B) Fifty percent funding cost-share from the State of Minnesota Flood Hazard Mitigation Program; and (C) \$3 million cost-share from a grant request through the USDA's NRCS fiscal year 2020 Regional Conservation Partnership Program (RCPP) Alternative Funding Arrangements.

At the July 21, 2020 RRWMB meeting, and due to no State Flood Hazard Mitigation funding available for the project, the RRWMB of Managers approved funding the Black River Impoundment Project in the amount of \$5,922,000. It was also agreed between the RLWD and the RRWMB to proceed with bids and specifications to start construction on this project as soon as possible. On September 24, 2020, the RLWD Board of Managers awarded the contract for construction to RJ Zavoral & Sons, Inc. in the amount of \$4,374,457.66 with notice to proceed being given on October 22, 2020. Construction started almost immediately and because of exceptional fall working conditions, nearly half the project was completed in the fall of 2020. Construction continued early summer of 2021 and was substantially completed in the fall. This project is project to be completed by mid-summer 2022.

**Thief River Falls Westside Flood Damage Reduction Project**

October 12, 2017 at their regular scheduled Board meeting, the RLWD Board of Managers received a petition from the City of Thief River Falls and Pennington County Commissioners requesting a project to divert waters, from Pennington County Ditch #70, as it enters from the north and west of the City of Thief River Falls.

In 2018, the RLWD, Minnesota Department of Transportation (MnDOT), City of Thief River Falls and Pennington County developed a partnership to move forward with this project in conjunction with a project MnDOT was designing near the west side of the city. The District retained HDR Engineering Inc. to develop a plan for the proposed project. On February 24, 2018, an application for a \$1,500,000 Flood Hazard Mitigation Grant was applied for through the Minnesota DNR. In May of 2018, the RLWD was informed that the grant application was approved and on September 7, 2018, the grant agreement in the amount of \$1,500,000 was executed. To assist in the 50% cost share match required by the State, on July 17, 2018, the RRWMB reaffirmed their Step I and II funding in the amount of \$1,000,000.

On March 20, 2020, bids were opened for this project with the low bid awarded to RJ Zavoral & Sons, Inc. in the amount of \$6,632,761.68. April 8, 2020, the Notice to Proceed was given with construction being substantially completed in 2020. The project was completed in summer of 2021 with Final Payment hearing held on November 24, 2021.

**Legal Drainage Petitions**

RLWD Ditch 16, RLWD Project 177 was a petitioned project requesting the establishment of a new public drainage system north of East Grand Forks. After completing all statutory requirements and

**RED LAKE WATERSHED DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS - CONTINUED  
FOR THE YEAR ENDED DECEMBER 31, 2021**

delays due to weather, construction of this 9.25-mile project started in 2020 and continued into 2021. On August 12, 2021, Final Payment Hearing for Burski Excavating was held with a total construction cost of \$1,723,031.10.

April 11, 2019, a Preliminary Hearing for the Improvement of Polk County Ditch #39, RLWD, Project 179, was held. Upon completion of the hearing, the Board of Managers by motion, approved moving forward with the appointment of viewers and instructed the engineer to proceed with the final detailed survey report. Due to the COVID19 pandemic, final hearing was delayed until July 24, 2020. Upon hearing testimony at the hearing held in July of 2020, the Board of Manager passed a resolution to move forward with construction of the project. On August 21, 2020, a Notice of Appeal of Order was presented to Michelle Cote, Polk County Taxpayer Service Center. To date the appeal is still pending with the hopes it is resolved in early summer 2022.

**Burnham Creek Wildlife Habitat Project**

During the summer of 2019, the RLWD was contacted by the Minnesota DNR Wildlife staff concerning the outlet structure for the Burnham Creek Wildlife Habitat project which was part of a multi-purpose flood control project completed in 1988 known as Burnham Creek BR6 Impoundment, Project 43A. It was brought to the Districts attention that the outlet structure was in need of repair. Per the agreement on file, it was stated that RLWD and the MnDNR are jointly responsible for maintenance and repair of the structure. In August of 2019, the RLWD and the MnDNR applied for a grant for the replacement of the outlet structure, through the MnDNR Division of Fish and Wildlife Conservation Partners Legacy Grant. On December 17, 2019, the District was informed that a grant in the amount of \$168,420 was awarded to this project. In 2020, bids were let, and the contract was awarded to Swingen Construction Company in the amount of \$148,400. Construction started late fall of 2020 with completion date of November 5, 2020. Due to extremely cold conditions and problems with delivery of steel for the structure, it was determined that the best alternative was to suspend construction until spring of 2021. Final payment hearing for the project was held August 12, 2021, with a total construction cost remaining at the original bid price of \$148,400.

**Thief River Falls Oxbow Restoration and Stormwater Treatment Project**

At their meeting held June 11, 2020, the City of Thief River Falls requested to the RLWD Board of Managers to partner with them in applying for a Clean Water Fund (CWF) Grant that could assist them with the cost of restoring the existing oxbow located within the city of Thief River Falls. Restoration of the oxbow would improve water quality, phosphorus, and chloride reduction with the installation of a sediment pond. At their meeting held October 18, 2020, the RLWD Board of Managers authorized President Nelson, the authority to sign the RRWMB Water Quality Program Grant Agreement for the Thief River Falls Oxbow Project, RLWD Project No. 46Q. In late December 2020, the RLWD was informed that they were approved for a grant in the amount of \$250,000 through a competitive grant from the 2021 Clean Water Funds. In the summer of 2021, low bid in the amount of \$597,272 was awarded to Spruce Valley Corporation Inc. Construction was substantially completed in the fall of 2021 and will be completed early 2022.

**CONTACTING THE DISTRICT'S FINANCIAL MANAGEMENT**

This financial report is designed to provide a general overview of Red Lake Watershed District's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Red Lake Watershed District, 1000 Pennington Avenue South, Thief River Falls, Minnesota 56701.



## BASIC FINANCIAL STATEMENTS

RED LAKE WATERSHED DISTRICT  
STATEMENT OF NET CASH POSITION  
DECEMBER 31, 2021

	Total
Assets	
Current Assets:	
Petty Cash	\$ 100
Pooled Cash and Investments	2,162,706
Total Current Assets	2,162,806
Capital Assets:	
Property and Equipment	26,183,177
Less: Accumulated Depreciation	(5,734,092)
Net Capital Assets	20,449,085
Total Assets	22,611,891
Net Position	
Investment in Capital Assets	20,449,085
Restricted for Ditch Maintenance	639,143
Unrestricted	1,523,663
Total Net Position	\$ 22,611,891

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF ACTIVITIES ARISING FROM CASH TRANSACTIONS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

Functions/Programs	Expenses			Program Receipts and Sources			Net Cash Sources (Uses) and Changes in Net Cash Position
	Direct	Allocated Salaries and Overhead	Total	Special Assessments and Charges For Services	Operating Grants and Contributions	Capital Grants and Contributions	
<b>Governmental Activities:</b>							
General and Administrative	\$ (863,871)	\$ 734,127	\$ (129,744)	\$ 10,907	\$ -	\$ -	\$ (118,837)
Ongoing Projects and Studies	(350,057)	(63,716)	(413,773)	198,829	77,015	-	(137,929)
Capital Projects	(3,284,554)	(670,411)	(3,954,965)	53,808	-	4,899,243	998,086
Allocated Interest	(50,248)	-	(50,248)	-	-	-	(50,248)
<b>Total Governmental Activities</b>	<b>\$ (4,548,728)</b>	<b>\$ -</b>	<b>\$ (4,548,728)</b>	<b>\$ 263,544</b>	<b>\$ 77,015</b>	<b>\$ 4,899,243</b>	<b>\$ 691,074</b>
<b>General Receipts:</b>							
Tax Levies							\$ 1,704,004
Intergovernmental (not restricted to specific programs)							72,401
State MV and Disparity Reduction Credits							68,276
Allocated Interest							<u>1,844,681</u>
<b>Total General Receipts</b>							<u>1,844,681</u>
Change in Net Position							2,535,755
Net Position - Beginning							<u>20,076,136</u>
Net Position - Ending							<u>\$ 22,611,891</u>



**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF BALANCES ARISING FROM CASH TRANSACTIONS – GOVERNMENTAL FUNDS**  
**DECEMBER 31, 2021**

<u>ASSETS</u>	General Fund	Special Revenue Fund	Capital Project Fund	Total Governmental Funds
Petty Cash	\$ 100	\$ -	\$ -	\$ 100
Pooled Cash and Investments	241,168	639,143	1,282,394	2,162,708
<b>Total Assets</b>	<b>\$ 241,269</b>	<b>\$ 639,143</b>	<b>\$ 1,282,394</b>	<b>\$ 2,162,806</b>
<b>Fund Balances:</b>				
Restricted for Ditch Maintenance	\$ -	\$ 639,143	\$ -	\$ 639,143
Committed for Capital Projects	-	-	1,282,394	1,282,394
Unassigned	241,269	-	-	241,269
<b>Total Fund Balances</b>	<b>\$ 241,269</b>	<b>\$ 639,143</b>	<b>\$ 1,282,394</b>	<b>\$ 2,162,806</b>

Amounts reported from governmental activities in the Statement of Net Cash Position are different because:

Total Fund Balance per Statement of Balances Arising from Cash Transactions, from above \$ 2,162,806

When capital assets (land, building, equipment and infrastructure) that are to be used in governmental activities are purchased or constructed, the cost of those assets are reported as expenditures in governmental funds. However, the statement of net cash position includes those capital assets among the assets of the District as a whole.

Cost of Capital Assets 26,183,177  
Accumulated Depreciation (5,734,082)

Total Net Position \$ 22,611,891

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF CASH RECEIPTS, DISBURSEMENTS, AND CHANGES IN CASH FUND BALANCES – GOVERNMENTAL FUNDS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

<u>RECEIPTS</u>	General Fund	Special Revenue Fund	Capital Project Fund	Total Governmental Funds
Property Taxes	\$ 149,615	\$ -	\$ 1,654,389	\$ 1,704,004
Special Assessments	-	187,401	-	187,401
Intergovernmental:				
Federal	-	80	56,211	56,291
State	-	32,000	1,217,828	1,249,828
Local	-	44,835	3,697,605	3,742,540
Other:				
Miscellaneous	10,907	11,428	53,808	76,143
Allocated Interest	3,187	4,675	60,414	68,276
<b>Total Receipts</b>	<b>163,709</b>	<b>280,519</b>	<b>6,640,255</b>	<b>7,084,483</b>
<u>DISBURSEMENTS</u>				
General and Administrative	129,744	-	-	129,744
Ongoing Projects and Studies	-	413,773	-	413,773
Capital Projects	-	-	6,547,414	6,547,414
Allocated Interest	1,834	1,080	47,232	50,246
<b>Total Disbursements</b>	<b>131,678</b>	<b>414,853</b>	<b>6,594,646</b>	<b>7,141,177</b>
<b>EXCESS OF RECEIPTS OVER (UNDER) DISBURSEMENTS</b>	<b>32,031</b>	<b>(134,334)</b>	<b>46,609</b>	<b>(66,694)</b>
<u>OTHER FINANCING SOURCES (USES)</u>				
Transfers In	-	118,078	-	118,078
Transfers Out	-	-	(118,078)	(118,078)
<b>Net Other Sources (Uses)</b>	<b>-</b>	<b>118,078</b>	<b>(118,078)</b>	<b>-</b>
<b>Net Change in Fund Balances</b>	<b>32,031</b>	<b>(16,256)</b>	<b>(72,469)</b>	<b>(66,694)</b>
<b>FUND BALANCE JANUARY 1</b>	<b>209,238</b>	<b>655,399</b>	<b>1,354,863</b>	<b>2,219,500</b>
<b>FUND BALANCE DECEMBER 31</b>	<b>\$ 241,269</b>	<b>\$ 639,143</b>	<b>\$ 1,282,394</b>	<b>\$ 2,162,806</b>

**RED LAKE WATERSHED DISTRICT**  
**RECONCILIATION OF CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE**  
**STATEMENT OF ACTIVITIES**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

Net Change in Fund Balances - Total Governmental Funds	\$ (56,694)
<p style="margin-left: 40px;">Governmental funds report capital outlay as expenditures, while governmental activities report depreciation expense allocating those expenditures over the life of the asset:</p>	
Capital Additions Less Net Book Value of Assets Disposed	3,168,507
Depreciation Expense	(576,058)
	2,592,449
Change in Net Position - Governmental Activities	\$ 2,535,755

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF ASSETS AND LIABILITIES – FIDUCIARY FUNDS**  
**DECEMBER 31, 2021**

<u>ASSETS</u>	<u>Custodial Fund</u>
Cash	\$ <u>1,351</u>
Total Assets	<u>1,351</u>
<u>LIABILITIES AND FUND BALANCES</u>	
Due To Red River Watershed Management Board	<u>1,351</u>
Total Liabilities	<u>\$ 1,351</u>



**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**DECEMBER 31, 2021**

**NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

The Red Lake Watershed District, (the "District"), was established under the Minnesota Watershed Act as an agency of the State of Minnesota. The purpose of the District is to carry out conservation of the natural resources of the State of Minnesota through land utilization, flood control, and other needs, upon sound scientific principles for the protection of the public health and welfare and the provident use of natural resources. The District serves an area in Northwestern Minnesota and includes all of Red Lake County and parts of the following counties: Beltrami, Clearwater, Itasca, Koochiching, Mahnomen, Marshall, Pennington, Polk, and Roseau. The District is governed by the Board of Managers, which is composed of seven members appointed by the county boards in accordance with Minnesota Statutes.

As discussed further in Note 1C, these financial statements are presented on a modified cash basis of accounting. This basis of accounting differs from accounting principles generally accepted in the United States of America (GAAP). Generally accepted accounting principles include all relevant Governmental Accounting Standards Board (GASB) pronouncements.

**A. FINANCIAL REPORTING ENTITY**

The financial statements of the District include all organizations, funds and account groups over which the District's Board exercises significant influence over and, or is financially accountable for organizations for which the nature and significance of their relationship with the District is such that exclusion would cause the Red Lake Watershed District's financial statements to be misleading. In addition, there are no component units as defined in Governmental Accounting Standards Board Statement 61 which are included in the District's reporting entity.

**B. BASIS OF PRESENTATION**

**GOVERNMENT-WIDE FINANCIAL STATEMENTS**

The Statement of Net Cash Position and Statement of Activities Arising from Cash Transactions display information about the reporting government as a whole. They include all funds of the reporting entity except for fiduciary funds. The statements distinguish between governmental and business-type activities. The District has only governmental activities which are generally financed through taxes, intergovernmental revenues, and other non-exchange revenues; because of this, all of the District's activities are reported as governmental activities.

**FUND FINANCIAL STATEMENTS**

Fund financial statements of the reporting entity are organized into funds, each of which is considered to be a separate accounting entity. Each fund is accounted for by providing a separate set of self-balancing accounts that constitutes its assets, liabilities, fund equity, revenues, and expenditures/expenses. Funds are typically organized into three major categories: governmental, fiduciary and proprietary. The District currently has no proprietary funds.

**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

An emphasis is placed on major funds within the governmental categories. A fund is considered major if it is the primary operating fund of the District or meets the following criteria:

- a. Total assets, liabilities, revenues, or expenditures/expenses of the individual governmental or enterprise fund are at least 10% of the corresponding total for all funds of that category or type, AND
- b. Total assets, liabilities, revenues, or expenditures/expenses of the individual governmental fund or enterprise fund are at least 5% of the corresponding total for all governmental and enterprise funds combined.

The funds of the financial reporting entity are described below and are all considered major programs for financial statement purposes.

**Governmental Funds**

**General Fund**

The General Fund is the primary operating fund of the District and always classified as a major fund. It is used to account for all activities except those legally or administratively required to be accounted for in other funds.

**Special Revenue Fund**

The special revenue fund is used to account for the proceeds of specific revenue sources (other than capital projects) where the expenditures are legally restricted for purposes specified in the grant or project agreements. The reporting entity includes the special revenue fund as a major fund.

**Capital Projects Fund**

The Capital Projects Fund is used to account for resources committed for the acquisition, construction and maintenance of specific capital projects or items. The reporting entity includes the capital projects fund as a major fund.

**Fiduciary Funds**

**Custodial Fund**

The reporting entity includes one custodial fund and does not involve the measurement of results of operations. The custodial fund is as follows:

<b><u>Fund</u></b>	<b><u>Brief Description</u></b>
Red River Water Management Board	Property Taxes are levied by the District on behalf of the Board and submitted to the Management Board.

**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

**C. MEASUREMENT FOCUS AND BASIS OF ACCOUNTING**

Measurement focus is a term used to describe “how” transactions are recorded within the various financial statements. Basis of accounting refers to “when” transactions are recorded regardless of the measurement focus applied.

**MEASUREMENT FOCUS**

In the government-wide Statement of Net Cash Position and Statement of Activities Arising from Cash Transactions, governmental activities are presented using the economic resources measurement focus, within the limitations of the modified cash basis of accounting as defined below.

In the fund financial statements, the “current financial resources” measurement focus or the “economic resources” measurement focus, as applied to the modified cash basis of accounting, is used as appropriate.

All governmental funds and the custodial fund utilize a “current financial resources” measurement focus. Only current financial assets and liabilities are generally included on their balance sheets. Their operating statements present sources and uses of available spendable financial resources during a given period. These funds use fund balance as their measure of available spendable financial resources at the end of the period.

**BASIS OF ACCOUNTING**

In the government-wide Statement of Net Cash Position and Statement of Activities Arising from Cash Transactions and the fund financial statements, governmental activities are presented using a modified cash basis of accounting. This basis recognized assets, liabilities, net position/fund equity, revenues, and expenditures/expenses when they result from cash transactions with the provisions for capital assets, deferred inflows of resources, deferred outflows of resources, and debt and depreciation in the government wide statements. This basis is a comprehensive basis of accounting other than accounting principles generally accepted in the United States of America.

If the District utilized the basis of accounting recognized as generally accepted, the fund financial statements for governmental funds would use the modified accrual basis of accounting. All government-wide financials would be presented on the accrual basis of accounting.

**D. ASSETS, LIABILITIES, AND EQUITY**

**CASH AND INVESTMENTS**

For the purpose of financial reporting, “cash and investments” includes all demand and savings accounts and certificates of deposit or short-term investments with an original maturity of one year or less. Cash balances from all funds are pooled and invested to the extent available in authorized investments authorized by Minnesota statutes. Earnings from such investments are allocated to the respective funds on the basis of average cash balance participation by each fund. Funds with deficit averages are charged with the investment earnings lost in financing the deficits.



RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

CAPITAL ASSETS

The District's modified cash basis of accounting reports capital assets resulting from cash transactions and reports depreciation where appropriate.

All capital assets are valued at historical cost, or if donated, recorded at its acquisition value. Infrastructure assets acquired prior to January 1, 2004 are not capitalized, but subsequent acquisitions are recorded at cost. Costs associated with infrastructure on property not owned by the District are immediately expensed.

In the government-wide financial statements, capital assets arising from cash transactions are accounted for as an expense in the Statement of Net Cash Position, with accumulated depreciation reflected in the Statement of Net Cash Position. Depreciation is provided over the assets' estimated useful lives using the straight-line method of depreciation. Capitalization thresholds of \$500 for equipment and building improvements of \$10,000 for infrastructure are used to report capital assets. Estimated useful lives being used are summarized below:

Building and Improvements	19-40 years
Equipment, Furniture and Fixtures	3-15 years

In governmental fund financial statements, capital assets arising from cash transactions acquired for use in governmental fund operations are accounted for as capital outlay expenditures of the governmental fund upon acquisition.

DEFERRED OUTFLOWS/INFLOWS OF RESOURCES

In addition to assets, the statement of net cash position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resource (expense/expenditure) until then. In addition to liabilities, the statement of net cash position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, *deferred inflows of resources*, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The District does not have any items that qualify for reporting in these categories.

LONG-TERM DEBT

All long-term debt arising from cash transactions to be repaid from governmental fund resources is reported as a liability only in the government-wide statements.

Long-term debt arising from cash basis transactions of governmental funds is not reported as liabilities in the fund financial statements. The debt proceeds are reported as other financing sources and the payment of principal and interest are reported as expenditures.

Currently the District does not have long-term debt.

RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

COMPENSATED ABSENCES

Full-time employees starting on the date of employment will accrue 80 hours per year of vacation for the first five years of employment. During the next five years of employment, an employee accrues 120 hours per year, after ten years of employment but less than twenty, an employee accrues 160 hours per year of vacation, and after 20 years of employment an employee accrues 200. Qualifying part-time employees are entitled to vacation based on the percentage of hours worked per pay period. The maximum accumulation of vacation leave is 200 hours. Unused vacation leave is paid only upon termination of employment.

Full-time employees employed with the District accrue eight hours of sick leave per month. Part-time employees who have worked 60% of the time for a period of nine months shall be entitled to sick leave based on the percentage of hours worked per pay period. The maximum accumulation of sick leave is 400 hours and does not vest upon termination of employment. As of January 1, 2014, half of the employee's remaining sick leave will be paid at the employee's current hourly rate to the employee upon retirement. If the employee quits or is terminated for any reason, no payment shall be made to the employee. District Office shall maintain leave records by posting leave earned and taken, and calculating a current balance for each employee. There will be no payment in lieu of sick leave, except when retirement of employment occurs. No vested or accumulated liability has been recorded for accumulated compensated absences.

PENSIONS

Plan contributions are recognized as of employer payroll paid dates and benefit payments and refunds are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

EQUITY

Government-Wide Statements

Equity is classified as Net Position and displayed in three components:

- a. Restricted Net Position – Consists of Net Position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws and regulations of other governments; or (2) law through constitutional provisions or enabling legislation.
- b. Unrestricted Net Position – All other Net Position that does not meet the definition of "restricted" or "invested in capital assets, net of related debt."
- c. Investment in Capital Assets – Consists of capital assets including restricted capital assets, net of accumulated depreciation.

It is the District's policy to first use restricted Net Position prior to the use of unrestricted Net Position when an expense is incurred for purposes for which both restricted and unrestricted Net Position are available.

RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

EQUITY CLASSIFICATION

Fund Financial Statements

Governmental fund equity is classified as fund balance.

**E. REVENUES, EXPENDITURES AND EXPENSES**

PROGRAM REVENUES

In the Statement of Activities Arising from Cash Transactions, modified cash basis revenues that are derived directly from each activity or from parties outside the District's taxpayers are reported as program revenues. The District has the following program revenues: direct project cost reimbursements and project special assessments, rental income and operating and capital grants specific to projects. All other governmental revenues are reported as general revenue. All taxes are classified as general revenue even if restricted for a specific purpose.

**F. USE OF ESTIMATES**

The preparation of financial statements in conformity with the other comprehensive basis of accounting (OCBOA) used by the District required management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

**G. FUND BALANCE CLASSIFICATIONS**

In the fund financial statements, governmental funds report fund balance in classifications that disclose constraints for which amounts in those funds can be spent. These classifications are as follows:

*Nonspendable* – consists of amounts that are not in spendable form, such as inventory and prepaid items.

*Restricted* – consists of amounts related to externally imposed constraints established by creditors, grantors or contributors; or constraints imposed by state statutory provisions.

*Committed* – consists of internally imposed constraints. These constraints are established by the Board of Managers.

*Assigned* – consists of internally imposed constraints. These constraints reflect specific purpose for which it is the District's intended use. These constraints are established by the Board of Managers and/or management.

*Unassigned* – is the residual classification for the general fund and also reflects negative residual amounts in other funds.

When both restricted and unrestricted resources are available for use, it is the District's policy to first use restricted resources, and then use unrestricted resources as they are needed.



**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

When committed, assigned or unassigned resources are available for use, it is the District's policy to use resources in the following order; 1) committed, 2) assigned and 3) unassigned.

**INTERFUND BALANCES**

In the process of aggregating the fund information for the government-wide Statement of Net Cash Position and Statement of Activities Arising from Cash Transactions, some amounts reported as interfund activity and balances in the fund financial statements have been eliminated or reclassified.

**H. NET POSITION**

Net position represents the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources in the District's financial statements. Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the outstanding balances of any long-term debt attributable to the acquisition, construction, or improvement of those assets. Restricted net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Unrestricted net position is the net amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

**NOTE 2 STEWARDSHIP, COMPLIANCE AND ACCOUNTABILITY**

By its nature as a local government unit, the District is subject to various federal, state, and local laws and contractual regulations. There are no instances of noncompliance that are considered material to the financial statements.

**NOTE 3 DETAIL NOTES-TRANSACTION CLASSES/ACCOUNTS**

The District maintains a cash account at its depository bank. Investments are carried at fair value and consist of Certificated of Deposits.

**Interest Rate Risk**

The District does not have a formal investment policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

**Credit Risk**

The District may invest idle funds as authorized in Minnesota Statutes, as follows:

- a. Direct obligations or obligations guaranteed by the United States or its agencies.
- b. Shares of investment companies registered under the Federal Investment Company Act of 1940 and whose only investments are in securities described in (a) above.
- c. General obligations of the State of Minnesota or any of its municipalities.
- d. Bankers Acceptance of United States banks eligible for purchases by the Federal Reserve System.
- e. Commercial paper issued by United States corporations or their Canadian subsidiaries, of the highest quality, and maturing in 270 days or less.

**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

- f. Repurchase or reverse repurchase agreements with banks that are members of the Federal Reserve System with capitalization exceeding \$10,000,000, a primary reporting dealer in U.S. government securities to the Federal Reserve Bank of New York, or certain Minnesota securities broker-dealers.
- g. Futures contracts sold under authority of Minnesota Statutes 471.56, Subd. 5.

The District has no investment policy that would further limit its investment choices.

**Concentration of Credit Risk**

The District places no limit on the amount the District may invest in any one issuer.

**Custodial Credit Risk - Deposits**

In accordance with Minnesota Statutes, the District maintains deposits at those depository banks authorized by the District's Board, all of which are members of the Federal Reserve System.

Minnesota Statutes require that all District deposits be protected by insurance, surety bond, or collateral. The market value of collateral pledged must equal 110% of the deposits not covered by insurance or bonds.

At December 31, 2021, the carrying amount of the District's deposits was \$2,164,157 and the bank balance was \$3,001,948. The bank balance was covered by Federal Depository Insurance and by collateral held by the District's agent in the District's name at December 31, 2021.

**Related-Party Investments**

As of December 31, 2021, the District held no related-party investments.

**NOTE 4 PROPERTY TAXES**

The District levies property taxes on property owners within the District, which becomes an enforceable lien as of January 1. Taxes are levied in September and are payable to counties on May 15 and October 15 (November 15 for farm property) of the following year. The District levies the tax, while the respective counties collect and remit the tax collections to the District. Property taxes are recognized when received from the counties under the modified cash basis of accounting.

The District also levies special assessments through the counties against property owners who obtain direct benefits from projects or property owners who request, through the petition process, to have a project undertaken. The special assessment collections are recorded in a manner similar to that for property taxes.

RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

**NOTE 5 DEFINED BENEFIT PENSION PLANS**

**Plan Description**

All full-time and certain part-time employees of the Red Lake Watershed District are covered by defined benefit plans administered by the Public Employees Retirement Association of Minnesota (PERA). PERA administers the General Employees Retirement Plan (accounted for in the General Employees Fund), which is a cost-sharing, multiple-employer retirement plan. This plan is established and administered in accordance with *Minnesota Statutes*, Chapters 353 and 356.

General Employees Plan members belong to either the Coordinated Plan or the Basic Plan. Coordinated Plan members are covered by Social Security and Basic Plan members are not. All new members must participate in the Coordinated Plan.

PERA provides retirement benefits as well as disability benefits to members and survivor benefits upon death of eligible members. Benefits are established by state statute. Benefits for members of the General Employees Plan vest after five years of credited service.

Two methods are used to compute benefits for PERA's Coordinated Plan members. Members hired prior to July 1, 1989, receive the higher of Method 1 or Method 2 formulas. Only Method 2 is used for members hired after June 30, 1989. Under Method 1, the accrual rate for Coordinated members is 1.2% for each of the first 10 years of service and 1.7% for each additional year. The rates are 2.2% and 2.7%, respectively, for Basic members. Under Method 2, the accrual rate for Coordinated members is 1.7% for all years of service, and 2.7% for Basic members. For members hired prior to July 1, 1989 a full annuity is available when age plus years of service equal 90 and normal retirement age is 65. For members hired on or after July 1, 1989 normal retirement age is the age for unreduced Social Security benefits capped at 66.

For all General Employees Plan members hired prior to July 1, 1989 whose annuity is calculated using Method 1, a full annuity is available when age plus years of service equal 90. Method 2 provides for unreduced retirement benefits at age 65 for members first hired prior to July 1, 1989 or age 66 (the age for unreduced Social Security benefits), for those first hired on or after that date. Early retirement may begin at age 55 with an actuarial reduction (about six percent per year) for members retiring prior to full retirement age.

There are different types of annuities available to members upon retirement. A single-life annuity is a lifetime annuity that ceases upon the death of the retiree—no survivor annuity is payable. There are also various types of joint and survivor annuity options available which will be payable over joint lives. Members may also leave their contributions in the fund upon termination of public service in order to qualify for a deferred annuity at retirement age. Refunds of contributions are available at any time to members who leave public service before retirement benefits begin.

The benefit provisions stated in the preceding paragraphs of this section are current provisions and apply to active plan participants.



**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

PERA issues a publicly available financial report that includes financial statements and required supplementary information for the General Employees Plan. That report may be obtained on the PERA's website at [www.mnpera.org/about/financial/](http://www.mnpera.org/about/financial/).

**Funding Policy**

Minnesota Statutes Chapter 353 sets the rates for employer and employee contributions. These statutes are established and amended by the state Legislature. In 2021, Coordinated Plan members were required to contribute 6.5 percent of their annual covered salary.

The Red Lake Watershed District's contributions to the General Employees Fund for the years ended December 31, 2021, 2020, and 2019 were \$36,147, \$35,138, and \$36,113 respectively.

**NOTE 6 RISK MANAGEMENT**

The District is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors and omissions; injuries to employees; employees' health and life; and natural disasters. The District manages these various risks of loss with the purchase of insurance through commercial insurance providers. The District carries commercial insurance coverage on its commercial property and for liability, personal and advertising injury, non-owned auto and a miscellaneous floater.

Management believes such coverage is sufficient to preclude any significant uninsured losses to the District. Settled claims have not exceeded this insurance coverage in any of the past three fiscal years.

**NOTE 7 INTERFUND TRANSFERS**

The composition of interfund balances as of December 31, 2021, is as follows:

	<u>Transfers In</u>	<u>Transfers Out</u>
Capital Projects Fund	\$ -	\$ 118,078
Special Revenue Fund	118,078	-
Total	\$ 118,078	\$ 118,078

The transfer made between funds is to recognize board actions to allocate funds to specific projects.

**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

**NOTE 8 CAPITAL ASSETS**

Capital assets activity resulting from modified cash basis transactions for the year ended December 31, 2021 was as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
<b>Capital Assets</b>				
Building and Improvements	\$ 775,504	\$ -	\$ 1,307	\$ 774,287
Infrastructure Improvements	13,134,433	-	-	13,134,433
Engineering Equipment	413,504	53,094	59,063	407,625
Office Equipment	165,896	2,597	1,927	166,366
Land and Permanent Easements	4,125,776	188,674	-	4,314,450
Construction in Progress	4,460,453	2,925,563	-	7,386,016
Total	<u>\$ 23,075,546</u>	<u>\$ 3,169,928</u>	<u>\$ 62,297</u>	<u>\$ 26,183,177</u>
<b>Accumulated Depreciation</b>				
Building and Improvements	\$ 364,322	\$ 22,506	\$ 1,307	\$ 385,521
Infrastructure Improvements	4,364,279	521,443	-	4,885,722
Engineering Equipment	363,518	19,455	58,342	324,631
Office Equipment	126,791	12,654	1,227	138,218
Total	<u>5,218,910</u>	<u>576,058</u>	<u>60,876</u>	<u>5,734,092</u>
	<u>\$ 17,856,636</u>	<u>\$ 2,593,870</u>	<u>\$ 1,421</u>	<u>\$ 20,449,085</u>

Depreciation expense of \$576,058 for the year ended December 31, 2021 is included in general and administrative program costs.

**NOTE 9 OVERHEAD COST ALLOCATION**

Overhead costs are allocated to all projects at 150% of direct salaries to projects. Overhead costs represent those costs incurred by the District for administration, employee benefits, engineering, and related operating expenditures, which are not charged directly to the project. The total overhead costs charged to projects in 2021 was \$734,127.

**NOTE 10 CONTINGENCIES**

**Grants**

The District participates in state and federal grant programs, which are governed by various rules and regulations of the grantor agencies. Costs charged to the respective grant programs are subject to audit and adjustment by the grantor agencies; therefore, to the extent that the District has not complied with the rules and regulations governing the grants, refunds of money received may be required and the collectability of any related receivable at December 31, 2021, may be impaired. The District is not aware of any significant contingent liabilities relating to compliance with the rules and regulations governing the respective grants.

**Claims and Litigation**

The District is not presently involved in any legal actions relating to projects undertaken or attempted to be undertaken that are deemed to be material to the financial statements.

RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

**NOTE 11 CONSTRUCTION COMMITMENTS**

The District had approximately \$525,000 in construction commitments for capital projects as of December 31, 2021.

**NOTE 12 NEW PRONOUNCEMENTS**

GASB Statement No. 87, *Leases*, establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. This Statement requires recognition of certain lease assets and liabilities for leases that were previously classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This Statement is effective for reporting periods beginning after June 15, 2021. Earlier application is encouraged.

GASB Statement No. 91, *Conduit Debt Obligations*, provides a single method of reporting conduit debt obligations by issuers and eliminates diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement clarifies the existing definition of a conduit debt obligation; establishes that a conduit debt obligation is not a liability of the issuer; establishes standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improves required note disclosures. This Statement also addresses arrangements—often characterized as leases—that are associated with conduit debt obligations. The requirements of this Statement are effective for reporting periods beginning after December 15, 2021. Earlier application is encouraged.

GASB Statement No. 92, *Omnibus 2020*, provides additional guidance to improve consistency of authoritative literature by addressing practice issues identified during the application of certain GASB statements. This statement provides accounting and financial reporting requirements for specific issues related to leases, intra-entity transfers of assets, postemployment benefits government acquisitions, risk financing and insurance related activity of public entity risk pools, fair value measurements and derivative instruments. The requirements of this Statement are effective for reporting periods beginning after June 15, 2021. Earlier application is encouraged.

GASB Statement No. 93, *Replacement of Interbank Offered Rates*, provides guidance to address accounting and financial reporting implications that result from the replacement of an interbank offered rate (IBOR), most notable, the London Interbank Offered Rate (LIBOR). As a result of global reference rate reform, LIBOR is expected to cease to exist in its current form at the end of 2021, prompting governments to amend or replace financial instruments for the purpose of replacing LIBOR with other reference rates, by either changing the reference rate or adding or changing fallback provisions related to the reference rate. This statement provides exceptions and clarifications regarding hedging derivative instruments for such transactions that result from the replacement of IBOR. The requirements of this Statement are effective for reporting periods beginning after June 15, 2021. Earlier application is encouraged.



RED LAKE WATERSHED DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED  
DECEMBER 31, 2021

GASB Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, improves financial reporting by addressing issues related to public-private and public-public partnership arrangements (PPPs) and also provides guidance for accounting and financial reporting for availability payment arrangements (APAs). The statement provides definitions of PPPs and APAs and provides uniform guidance on accounting and financial reporting for transactions that meet those definitions. A PPP is an arrangement in which a government (the transferor) contracts with an operator (a governmental or nongovernmental entity) to provide public services by conveying control of the right to operate or use a nonfinancial asset, such as infrastructure or other capital asset (the underlying PPP asset), for a period of time in an exchange or exchange-like transaction. An APA is an arrangement in which a government compensates an operator for services that may include designing, constructing, financing, maintaining, or operating an underlying nonfinancial asset for a period of time in an exchange or exchange-like transaction. The requirements of this Statement are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. Earlier application is encouraged.

GASB Statement No. 96, *Subscription-Based Information Arrangements* provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs). A SBITA is defined as a contract that conveys control of the right to use another party's (a SBITA vendor's) information technology (IT) software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time in an exchange or exchange-like transaction. Under this Statement, a government generally should recognize a right-to use subscription asset—an intangible asset—and a corresponding subscription liability. The requirements of this Statement will improve financial reporting by establishing a definition for SBITAs and providing uniform guidance for accounting and financial reporting for transactions that meet that definition. The requirements of this Statement are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. Earlier application is encouraged.

GASB Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32* provides additional guidance for determining whether a primary government is financially accountable for a potential component unit. This Statement requires that the financial burden criterion in paragraph 7 of Statement No. 84, *Fiduciary Activities*, be applicable to only defined benefit pension plans and defined benefit OPEB plans that are administered through trusts that meet the criteria in paragraph 3 of Statement No. 67, *Financial Reporting for Pension Plans*, or paragraph 3 of Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, respectively. This Statement (1) requires that a Section 457 plan be classified as either a pension plan or another employee benefit plan depending on whether the plan meets the definition of a pension plan and (2) clarifies that Statement 84, as amended, should be applied to all arrangements organized under IRC Section 457 to determine whether those arrangements should be reported as fiduciary activities. The requirements of this Statement that (1) exempt primary governments that perform the duties that a governing board typically perform from treating the absence of a governing board the same as the appointment of a voting majority of a governing board in determining whether they are financially accountable for defined contribution pension plans, defined contribution OPEB plans, or other employee benefit plans and (2) limit the applicability of the financial burden criterion in paragraph 7 of Statement 84 to defined benefit pension plans and defined benefit OPEB plans that are administered through trusts that meet the criteria in paragraph 3 of Statement 67 or paragraph 3 of Statement 74, respectively, are effective immediately. The requirements of this Statement

**RED LAKE WATERSHED DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS - CONTINUED**  
**DECEMBER 31, 2021**

that are related to the accounting and financial reporting for Section 457 plans are effective for fiscal years beginning after June 15, 2021.

Management has not yet determined what effect these statements will have on the District's financial statements.

**NOTE 13 SUBSEQUENT EVENTS**

No significant events occurred subsequent to the District's year end. Subsequent events have been evaluated through April 5, 2022, which is the date these financial statements were available to be issued.

SUPPLEMENTARY INFORMATION



**RED LAKE WATERSHED DISTRICT  
BUDGETARY COMPARISON SCHEDULE - GENERAL FUND  
FOR THE YEAR ENDED DECEMBER 31, 2021**

REVENUES	Original and Final Budget	Actual 2021	Variance
Tax Levies	\$ 150,337	\$ 149,615	\$ (722)
Miscellaneous	7,000	10,907	3,907
Allocated Interest	-	3,187	3,187
<b>Total Revenues</b>	<b><u>157,337</u></b>	<b><u>163,709</u></b>	<b><u>6,372</u></b>
<b>EXPENDITURES</b>			
General and Administrative	150,337	129,744	(20,593)
Interest	-	1,934	1,934
<b>Total Expenditures</b>	<b><u>150,337</u></b>	<b><u>131,678</u></b>	<b><u>(18,659)</u></b>
Expenditures Exceed Revenues	7,000	32,031	<u>25,031</u>
FUND BALANCE JANUARY 1	<u>209,238</u>	<u>209,238</u>	
FUND BALANCE DECEMBER 31	<b><u>\$ 216,238</u></b>	<b><u>\$ 241,269</u></b>	

**RED LAKE WATERSHED DISTRICT  
NOTE TO THE BUDGETARY COMPARISON SCHEDULE  
FOR THE YEAR ENDED DECEMBER 31, 2021**

**NOTE 1 – BUDGETARY COMPARISON**

The budget is prepared using the same method of accounting as the financial statements. The annual adopted budget is not legally binding on the District, with the exception of the revenue budget for the general fund, which is limited by state statute at \$250,000 and set by the Board for 2021 at \$150,337. All appropriations lapse at year-end.

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF RECEIPTS AND DISBURSEMENTS AND CHANGES IN FUND BALANCE – ALL FUNDS –**  
**MODIFIED CASH BASIS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

	Revenues				Expenses			Transfer	Fund Balance (Deficit) December 31	
	Fund Balance (Deficit) January 1	Assessments and Other Charges for Services	Operating/ Capital Grants and Contribution	Allocated Interest Earned	Taxes	Direct	Allocated Interest Charged	Allocated Salary and Overhead		In (Out)
<b>GENERAL FUND</b>	\$ 209,238	\$ 10,907	\$ -	\$ 3,187	\$ 149,615	\$ 863,871	\$ 1,934	\$ (734,127)	\$ -	\$ 241,269
<b>SPECIAL REVENUE FUND JOBS:</b>										
Red Lake River Project	69,072	7,706	1,776	417	-	-	-	-	-	78,971
Cleanwater River Project	40,713	4,241	-	244	-	-	-	591	-	44,607
Lost River Project	13,353	4,256	-	72	-	2,870	-	1,766	-	13,045
RLWD Ditch #1	(4,020)	8,551	-	-	-	-	1	423	-	4,107
RLWD Ditch #3	3,242	4,117	-	28	-	1,500	-	682	-	5,235
State Ditch #83	81,762	5,449	32,080	550	-	25,374	-	5,571	-	88,896
RLWD Ditch #7	6,788	7,044	-	36	-	8,171	-	2,592	-	3,105
Pine Lake Maintenance	(6,643)	7,175	-	-	-	632	42	5,852	-	(5,994)
RLWD Ditch #8	1,157	1,109	-	7	-	-	-	405	-	1,868
RLWD Ditch #9	(863)	1,545	-	-	-	350	1	208	-	223
J.D. Ditch #72	6,011	9,164	-	16	-	2,373	-	9,472	-	3,345
J.D. Ditch #100	-	2,232	-	-	-	-	-	1,537	-	695
J.D. Ditch #101	-	2,232	-	-	-	-	-	1,678	-	554
Burnam Creek Channel	(3,582)	-	21,159	-	-	11,719	9	1,868	-	3,981
Cleanwater/Wild Rice River	5,758	-	-	19	-	-	-	5,688	-	89
Branch A & 1, J.D. #2	(2,787)	1,919	-	-	-	300	14	1,588	-	(2,770)
Main J.D. #2 and Branch B&C	1,745	2,960	-	15	-	170	-	311	-	4,259
Main J.D. 2C, Esk	3,462	285	-	18	-	-	-	417	-	3,348
Krostue Petition	(6,187)	3,710	-	-	-	4,210	36	521	-	(7,244)
Cleanwater County Joint Ditch #4	3,845	933	-	23	-	-	-	-	-	4,801
Cleanwater County Joint Ditch #5	(12,263)	2,641	-	-	-	-	62	260	-	(9,944)
Cleanwater County Ditch #1	2,842	962	-	17	-	-	-	-	-	3,811
Clifford Anson Ditch	4,198	3,454	-	27	-	255	-	208	-	7,216
Winsor/Hanquard/Cleanwater County Petition	16,219	2,501	-	71	-	3,835	-	4,830	-	10,126
Equality RLWD Ditch #1, et C	(2,345)	5,445	-	-	-	1,512	5	1,954	-	(401)
K. Johnson Petition	787	2,286	-	5	-	940	-	1,054	-	1,034
Polk County Ditch #s 104, 61, 47, 94	(13,556)	12,312	-	-	-	460	53	2,239	-	(3,996)
TRF Drainage Ditch (Challenger Ditch)	(824)	1,916	-	-	-	-	3	-	-	1,089
Scott Bastz Petition	(284)	1,150	-	-	-	250	-	360	-	256
Polk County Ditch #83 Improvement	17,158	470	-	96	-	-	-	270	-	17,454
Polk County Ditch #33 Improvement	2,307	4,854	-	21	-	1,460	-	247	-	5,475
RLWD Ditch #10	84,666	3,180	-	451	-	4,565	-	1,077	-	82,655
RLWD Ditch #11	11,321	650	-	61	-	1,063	-	587	-	10,382
RLWD Ditch #12	(10,967)	22,997	-	-	-	9,683	39	2,969	-	(661)
RLWD Ditch #14	(6,697)	8,729	-	-	-	5,375	40	208	-	(3,591)
RLWD Ditch #15	47,591	2,667	-	249	-	6,891	-	1,469	-	42,147
RLWD Ditch #13	(1,612)	2,739	-	-	-	-	6	525	-	596
Thief River Falls Flood Damage Reduction Project	417	753	-	3	-	670	-	169	-	134
RLWD Ditch #16	425,860	44,385	22,000	2,229	-	233,693	-	3,496	118,078	379,161
Improv to Polk Co. #39	(126,225)	-	-	-	-	21,335	769	592	-	(148,922)
<b>TOTAL SPECIAL REVENUE</b>	<b>655,399</b>	<b>198,829</b>	<b>77,015</b>	<b>4,675</b>	<b>-</b>	<b>350,057</b>	<b>1,060</b>	<b>63,716</b>	<b>118,078</b>	<b>639,143</b>



**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF RECEIPTS AND DISBURSEMENTS AND CHANGES IN FUND BALANCE – ALL FUNDS –**  
**MODIFIED CASH BASIS – CONTINUED**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

	Revenues				Expenses			Transfer	Fund Balance (Deficit) December 31	
	Fund Balance (Deficit) January 1	Assessments and Other Charges for Services	Operating/ Capital Grants and Contribution	Allocated Interest Earned	Taxes	Direct	Allocated Interest Charged	Allocated Salary and Overhead		In (Out)
<b>CAPITAL PROJECT FUND JOBS:</b>										
Moose River Project	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,146	\$ 42	\$ 4,398	\$ 15,586	\$ -
Baird Beyer Dam	-	-	-	-	-	-	-	250	250	-
Stream Gauging	-	-	-	-	-	11,675	24	6,912	18,611	-
Culvert Sizing	-	-	-	-	-	-	11	3,215	3,226	-
Schirrick Dam	-	-	-	-	-	10,509	18	4,627	15,154	-
Pine Lake PWT	(467,156)	-	28,125	-	-	-	2,451	2,452	443,934	-
Little Pine Lake WWA	-	-	-	-	-	-	-	335	335	-
Pine Lake FDR	(76,166)	-	-	-	-	436,331	1,370	17,392	-	(531,259)
Hydrologic Analysis	-	-	-	-	-	240	203	51,526	51,969	-
Emergency Maintenance	115,802	-	-	638	-	-	-	-	-	116,440
RRWMB - Technical Com	-	-	-	-	-	-	29	8,229	8,258	-
Burnham Creek - BR6	(144,476)	-	163,097	-	-	36,946	134	4,316	-	(22,775)
Water Quality	-	-	-	-	-	44,484	362	93,039	137,885	-
TRF Onbow Restore	-	-	125,000	-	-	680,181	-	5,965	-	(561,166)
Water Quality- RL River 319 Grant	-	-	56,211	-	-	114,438	166	1,318	59,711	-
Maintenance Dams	-	-	-	-	-	19	2	1,214	1,235	-
Oohey Flat Dam	-	-	-	-	-	-	-	200	200	-
Lalandresse Dam	-	-	-	-	-	-	-	225	225	-
Miller Dam	-	-	-	-	-	-	1	350	351	-
Seeger Dam	-	-	-	-	-	-	-	150	150	-
Knudson Dam	-	-	-	-	-	-	-	332	332	-
Thibert Dam	-	-	-	-	-	-	1	462	463	-
Parnell Impoundment	-	4,244	-	-	-	5,827	16	2,383	3,982	-
Permits	-	-	-	-	-	4,089	316	109,385	113,790	-
Project Development	-	-	-	-	-	2,089	269	43,849	46,207	-
Louisville/Parnell Project	-	6,232	-	-	-	1,747	3	453	(4,029)	-
Challenger Ditch Realign	-	-	-	-	-	-	-	31	31	-
Ring Dike Program - General	(1,523)	-	-	-	-	-	16	2,695	4,234	-
Ring Dike Program - Shaumburg	(3,207)	-	-	-	-	-	18	-	-	(3,225)
Ring Dike Program - Threat	(14,190)	10,575	-	-	-	133,966	383	5,651	-	(143,635)
Ring Dike Program - Ste Marie	(668)	-	-	-	-	-	5	564	-	(1,237)
Ring Dike Program - P Nelson	(525)	-	10,165	-	-	22,743	20	4,748	-	(17,871)
Ring Dike Program - Larson	-	6,740	-	-	-	34,882	39	4,322	-	(32,503)
Ring Dike Program - Sorum	-	-	-	-	-	-	4	1,437	-	(1,441)
G.I.S.	-	-	-	-	-	600	130	56,861	57,591	-
Wetland Banking	-	-	-	-	-	259	4	1,917	2,180	-
Ten Year Overall Plan	299,618	-	271,020	1,582	-	604,979	-	41,934	-	(74,693)
Thief River 1W1P	184,877	-	-	447	-	195,382	-	33,672	-	(43,730)
PTMAPP Grant	-	-	6,056	29	-	-	-	899	(5,186)	-
Cleanwater River 1W1P	(3,688)	-	2,340	-	-	918	57	15,353	-	(17,676)
North Parnell Storage Site	-	-	-	-	-	3,499	11	670	4,180	-
Cleanwater River - TMDL	-	-	-	-	-	-	2	146	148	-

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF RECEIPTS AND DISBURSEMENTS AND CHANGES IN FUND BALANCE – ALL FUNDS–**  
**MODIFIED CASH BASIS – CONTINUED**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

	Revenues					Expenses			Transfer	Fund Balance (Deficit) December 31
	Fund Balance (Deficit) January 1	Assessments and Other Charges for Services	Operating/ Capital Grants and Contribution	Allocated Interest Earned	Taxes	Direct	Allocated Interest Charged	Allocated Salary and Overhead	In (Out)	
Erosion Control Projects	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 57,867	\$ 148	\$ 3,285	\$ 61,300	\$ -
Drainage- Inv & Insp	-	-	-	-	-	4,000	18	309	4,327	-
Black River Impoundment	(5,059,381)	22,456	3,423,972	-	-	2,514,403	22,278	55,115	-	(4,204,749)
Web Page Development	(1,065)	-	2,564	-	-	2,744	20	6,040	7,305	-
Administrative Construction	9,667,214	-	68,089	57,718	1,554,389	-	-	-	(1,292,243)	10,055,167
Euclid East Impoundment	-	3,561	-	-	-	65,762	176	10,531	72,908	-
Brandt Impoundment	-	-	-	-	-	2,426	9	1,474	3,909	-
Brandt Channel Restoration	-	-	-	-	-	1,054	5	169	1,228	-
Grand Marais - Restoration	-	-	-	-	-	-	6	2,134	2,140	-
Grand Marais Cut Channel Stabilization	-	-	-	-	-	75	1	228	304	-
Clearwater Public Education (River Watch)	-	-	-	-	-	1,063	66	27,399	28,528	-
Red River Basin Long Term Flood Control	-	-	-	-	-	-	15	4,905	4,920	-
BW SR Flood Storage Pilot Project	-	-	-	-	-	313	-	-	313	-
TRF Westside FDR	(3,135,055)	-	809,651	-	-	859,998	18,335	20,039	-	(3,223,766)
Agassiz NW/R Wetland	(5,548)	-	5,354	-	-	4,680	37	972	5,883	-
Agassiz Grant SILT	1	-	-	-	-	-	1	96	96	-
Mud River Project Work Team	-	-	-	-	-	5,559	10	3,818	-	(9,487)
<b>Total Capital Projects</b>	<b>1,354,863</b>	<b>53,808</b>	<b>4,971,644</b>	<b>60,414</b>	<b>1,554,389</b>	<b>5,877,003</b>	<b>47,232</b>	<b>670,411</b>	<b>(118,078)</b>	<b>1,282,394</b>
<b>Total All Funds</b>	<b>\$ 2,219,500</b>	<b>\$ 263,544</b>	<b>\$ 5,048,659</b>	<b>\$ 68,276</b>	<b>\$ 1,704,004</b>	<b>\$ 7,090,931</b>	<b>\$ 50,246</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,162,806</b>

**RED LAKE WATERSHED DISTRICT**  
**STATEMENT OF DIRECT EXPENDITURES BY CLASSIFICATION –**  
**GOVERNMENTAL FUNDS - MODIFIED CASH BASIS**  
**FOR THE YEAR ENDED DECEMBER 31, 2021**

<u>DIRECT EXPENDITURES:</u>	<u>2021</u>
Salaries -	
Inspection	\$ 51,247
Survey - Preliminary	17,032
Survey - Construction	1,149
Drafting	5,032
Engineering	22,970
Project Administration	289,219
Field Work - Water Programs	32,742
Other	55,785
Compensated Absences	62,081
Payroll Taxes and Benefits	109,536
Manager's Expense	13,882
Travel, Mileage, Meetings and Per Diems	7,518
Audit	9,450
Legal	38,446
Other Professional Fees	267,957
Office Supplies	14,916
Office Equipment	2,674
Dues and Subscriptions	13,088
Insurance and Bonds	42,270
Repairs and Maintenance	10,029
Utilities	8,688
Telephone	9,758
Advertising and Publications	19,817
Truck Expense	16,630
Land Acquisition and Easements	188,604
Construction	5,075,947
Engineering Costs and Fees	18,005
Engineering Fees	633,815
Engineering Equipment	52,644
	<hr/>
Total Expenditures	<u>\$ 7,090,931</u>



## INDEPENDENT AUDITOR'S REPORT ON MINNESOTA LEGAL COMPLIANCE

Board of Managers  
Red Lake Watershed District  
Thief River Falls, Minnesota

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to the financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the modified cash basis financial statements of the governmental activities, each major fund, and the remaining fund information of the Red Lake Watershed District of Thief River Falls, Minnesota as of and for the year ended December 31, 2021 and the related notes to the financial statements, and have issued our report thereon dated April 5, 2022.

### Legal Compliance

In connection with our audit, nothing came to our attention that caused us to believe that the District failed to comply with the provisions of contracting and bidding, deposits and investments, conflicts of interest, claims and disbursements, and miscellaneous provisions of the *Minnesota Legal Compliance Audit Guide for Political Subdivisions*, promulgated by the State Auditor pursuant to Minn. Stat. § 6.65, insofar as they relate to accounting matters. However, our audit was not directed primarily toward obtaining knowledge of such noncompliance. Accordingly, had we performed additional procedures, other matters may have come to our attention regarding the District's noncompliance with the above referenced provisions insofar as they relate to accounting matters.

### Purpose of the Report

The purpose of this report is solely to describe the scope of our testing of compliance and the result of that testing, and not to provide an opinion on compliance. Accordingly, this communication is not suitable for any other purpose.



BRADY, MARTZ & ASSOCIATES, P.C.  
THIEF RIVER FALLS, MINNESOTA

April 5, 2022

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF  
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH  
GOVERNMENT AUDITING STANDARDS**

Board of Managers  
Red Lake Watershed District  
Thief River Falls, Minnesota

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the modified cash basis financial statements of the governmental activities, each major fund, and the remaining fund information of the Red Lake Watershed District, as of and for the year ended December 31, 2021, and the related notes to the financial statements, which collectively comprise the Red Lake Watershed District's basic financial statements and have issued our report thereon dated April 5, 2022.

#### **Report on Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Red Lake Watershed District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Red Lake Watershed District's internal control. Accordingly, we do not express an opinion on the effectiveness of the Red Lake Watershed District's internal control.

*A deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a certain deficiency in internal control, described in the accompanying schedule of findings and responses as item 2021-001 that we consider to be a significant deficiency.

#### **Report on Compliance and Other Matters**

As part of obtaining reasonable assurance about whether Red Lake Watershed District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

#### **Red Lake Watershed District's Response to Finding**

*Government Auditing Standards* requires the auditor to perform limited procedures on the District's responses to the finding identified in our audit and described in the accompanying schedule of findings and responses. The District's response was not subjected to the other auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on the response.

#### **Purpose of this Report**

This purpose of this report is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.



**BRADY, MARTZ & ASSOCIATES, P.C.**  
**THIEF RIVER FALLS, MINNESOTA**

April 5, 2022



**RED LAKE WATERSHED DISTRICT  
SCHEDULE OF FINDINGS AND RESPONSES  
FOR THE YEAR ENDED DECEMBER 31, 2021**

**2021-001 Finding – Significant Deficiency**

**Criteria**

An appropriate system of internal control requires the District to prepare financial statements in compliance with the modified cash basis of accounting.

**Condition**

The District's personnel prepare periodic financial information for internal use that meets the needs of management and the Board. However, the District currently does not prepare the financial statements, including the accompanying note disclosures, as required by the modified cash basis of accounting. The District has elected to have the auditors assist in the preparation of the financial statements and notes.

**Cause**

The District elected to not allocate resources for the preparation of the financial statements.

**Effect**

There is an increased risk of material misstatement to the District's financial statements.

**Recommendation**

We recommend the District consider the additional risk of having the auditors assist in the preparation of the financial statements and note disclosures. As a compensating control, the District should establish an internal control policy to document the annual review of the financial statements and schedules and to review the financial statements disclosure checklist.

**Views of Responsible Officials and Planned Corrective Actions**

The District agrees with the recommendation and will review on an annual basis.

RED LAKE WATERSHED DISTRICT  
CORRECTIVE ACTION PLAN  
DECEMBER 31, 2021

**2021-001 Finding**

Contact Person – Myron Jesme, Administrator

Corrective Action Plan – Will establish a policy to document review of financial statements and notes.

Completion Date – Ongoing