# RED LAKE WATERSHED DISTRICT February 25, 2021, 9:00 a.m.

## **Agenda**

# The meeting has a Zoom option due to the current pandemic situation. Meeting Participation via Zoom Information:

## Join by Zoom Meeting

Telephone: 1-312-626-6799 Meeting ID: 925 6493 9925 Passcode: 986493

9:00 a.m.	Call to Order	Action
	Review and approve agenda	Action
	Requests to appear	Information
	February 11, 2021 Minutes	Action
	Financial Report dated February 24, 2021	Action
	Pine Lake FDR and Fish Habitat, RLWD Project 26B	Information
	Thief River Falls Oxbow Project, RLWD Project No. 46Q	Information
	Ring Dike Funding, RLWD Project No. 129	Information
	Black River Impoundment, RLWD Project No. 176 Utilities Meeting Easements Black River Church	Information
	Pine Lake Project, RLWD Project 35-Aeriation	Information
	Clearwater River 1W1P, RLWD Project No. 149A-Bylaws	Information
	Judicial Ditch 72, RLWD Project No. 41-Hearing-April 6, 2021	Information
	Equality/RLWD Ditch 1, RLWD Project No. 115 Wayne Vettleson Petition-RLWD Permit No. 19181	Info./Action
	Table RLWD Permit No. 21001-Rolandson Family LLP	Action
	Table RLWD Permit No. 21002-Red Lake County Highway Dept.	Action
	Permits: No. 21003-21005	Action

Well Interference Investigation, DNR-Red Lake County Information

RLWD Advisory Committee Meeting Information

Job Descriptions Info./Action

Job Postings Information

Administrators Update Information

Legal Counsel Update Information

Managers' updates Information

Adjourn Action

### **UPCOMING MEETINGS**

March 3, 2021 Moose River Interagency Meeting, 9:30 a.m.

March 11, 2021 RLWD Board Meeting, 9:00 a.m.

March 15, 2021 RLWD Advisory Committee Meeting, 9:30 a.m.

March 25, 2021 RLWD Board Meeting, 9:00 a.m.



## RED LAKE WATERSHED DISTRICT Board of Manager's Minutes February 11, 2021

President Dale M. Nelson called the meeting to order at 9:00 a.m. at the Red Lake Watershed District Office, Thief River Falls, MN.

Present: Managers Dale M. Nelson, Allan Page, LeRoy Ose, Terry Sorenson, Gene Tiedemann, and Tom Anderson. Absent: Brian Dwight. Staff Present: Myron Jesme and Tammy Audette, and Legal Counsel, Delray Sparby.

The Board reviewed the agenda. A motion was made by Page, seconded by Ose, and passed by unanimous vote that the Board approve the agenda. Motion carried.

The Board reviewed the January 28, 2021 minutes. Motion by Sorenson, seconded by Page, to approve the January 28, 2021 Board meeting minutes as presented. Motion carried.

The Board reviewed the Financial Report dated February 10, 2021. Motion by Sorenson, seconded by Anderson, to approve the Financial Report dated February 10, 2021. Motion carried.

Staff member Arlene Novak reviewed the 2020 General Fund Budget as of December 31, 2020.

Staff member Arlene Novak stated that the District's 2020 audit was completed February 5, 2021. Brady Martz and Associates plan to present the final audit report to the Board at the March 11, 2021 meeting.

Engineer Tony Nordby, Houston Engineering, Inc., stated that they will be meeting with staff from R.J. Zavoral & Sons to prepare for a project utility meeting, to be held on February 23, 2021, for the Black River Impoundment Project, RLWD Project No. 176.

Engineer Blake Carlson, Widseth, participating via Zoom, presented Plans and Specifications for construction of the Athena Threat Ring Dike, RLWD Project No. 129AS located south of Crookston, MN. Carlson stated that due to the location of the property, being near a floodplain, there is no borrow on site. Due to the limited area, a retaining wall will be erected and tied into an earthen dike. The existing septic system will also need to be replaced due to the location of the system. Carlson indicated that quotes were received for a concrete floodwall, however, they were extremely expensive. Motion by Ose, seconded by Tiedemann, and passed by unanimous vote, to approve the Plans and Specifications for the Athena Threat Ring Dike, RLWD Project No. 129AS, as presented. Motion by Tiedemann, seconded by Anderson, to set the bid opening for the Athena Threat Ring Dike, RLWD Project No. 129AS, for 9:30 a.m., March 11, 2021 at the District office. Motion carried.

Staff member Nick Olson stated that aeration at Pine Lake has not begun. MnDNR staff completed oxygen testing last week and the Gonvick Sportsman's Club will complete additional testing next week. Criteria has been met for notice publication in the local paper. Olson stated

Red Lake Watershed District February 11, 2021 Page 2 of 3

that the District is the MnDNR permit holder for the aeration, and the Gonvick Sportsman Club pays the cost to install and run the aeration system.

Administrator Jesme stated that he and Staff member Corey Hanson have been working with Chester Powell, Clearwater SWCD and other partners, on the Work Plan for Clearwater River 1W1P, RLWD Project No. 149B. Once a draft is completed, it will be presented to the Policy Committee for review and approval. Hanson is working on completing the editing on the PTMApp model before handing it off to Houston Engineering, Inc. Discussion was held on staff time spent on development of the PTMApp model. The Policy Committee meeting will be held on February 24, 2021 at 1:00 p.m. Notices for the meeting will come from Powell.

The annual Parnell Impoundment, RLWD Project No. 81, Advisory Committee meeting will be held on February 23, 2021 at 10:00 a.m. at the District office.

The annual Moose River, RLWD Project No. 13, Interagency Meeting will be held on March 3, 2021 at 9:30 a.m. via Zoom.

The Minnesota Board of Water and Soil Resources (BWSR) has a vacancy on its Board for a watershed representative.

### Administrators Update:

- Jesme and Manager Ose will attend the RRWMB meeting on February 16, 2021 via Microsoft Teams. Discussion will be held on the future of water quality funding. Included in the packet was the Red River Basin 2021 Spring Flood outlook and the recommitment of the 1998 Red River Basin Mediation Agreement signature page. The RRFDWG asked all original signatories of the 1998 agreement to recommit to the agreement.
- Jesme and staff member Hanson have been working with the Clearwater SWCD on the Clearwater River 1W1P.
- Jesme was asked by the MPCA to participate in their "Water Permitting Transparency Focus Group Meeting" held on February 5<sup>th</sup>. The meeting consisted of gathering various LGU employees who typically use the MPCA General MS4 Individual Permits.
- Jesme will participate in a virtual meeting for the Red Lake River 1W1P regarding the RCPP/BWSR funding agreement, and if it is a funding option for a 1W1P.
- Jesme will participate in a MN Association of Watershed District Administrators meeting following today's meeting.
- The District office will be closed on February 15, 2021 in observance of Presidents Day.

Legal Counsel Sparby stated that he had Secretary Ose sign the Certification of Record for the information to be submitted to the courts for the appeal on the Polk County Ditch 39 Improvement, RWLD Project No. 179.

Manager Ose asked about the future funding of ring dikes, as the District does have additional requests for ring dike construction. Rob Sip, RRWMB, who participated in the meeting via

Red Lake Watershed District
February 11, 2021
Page 3 of 3

Zoom, stated that the RRWMB is committed, along with the District, to complete the remaining projects.

Motion by Ose, seconded by Page, to adjourn the meeting.	Motion carried.
LeRoy	Ose, Secretary

## RED LAKE WATERSHED DISTRICT Financial Report for February 24, 2021

Ck#	Check Issued to:	Description	Amount
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	3,500.76
online	MN Department of Revenue	Withholding taxes	645.89
online	Public Employees Retirement Assn.	PERA	2,174.08
online	EFTPS	Withholding for FICA, Medicare, and Federal taxes	38.24
38681	Tammy Audette	Clean offices in January	320.00
38682	East Polk SWCD	Reimburse for RMB lab analysis of lake water quality samples	2,325.00
38683	Rinke Noonan	Legal fees-Improv. to Polk County Dt. 39,RLWD Ditch 17	773.00
38684	Brady Martz & Assoc., P.C.	Progress payment for 2020 audit	6,000.00
38685	Corporate Technologies	Monthly IT support and (16) Microsoft Office 365	1,085.00
38686	Farmers Union Oil Company	Gas for vehicles	101.97
38687	Further	FSA and HSA account fees	15.70
38688	HDR, Inc.	*See below for project explanation	35,039.40
38689	Marco	Telephone expense	349.20
38690	Northwest Beverage, Inc	H20 for office	23.50
38691	RMB Environmental Laboratories	Lab analysis of water quality samples	606.00
38692	Craig and Lisa Swanson	Temporary and permanent easements-Black River Impoundmen	14,262.12
38693	Universal Screenprint	Nameplate for Manager Tom Anderson	16.03
direct	Al Page	Mileage	58.24
online	Further	HSA account employee contribution (Feb.23)	177.50
online	Further	Medical FSA	138.49
online	Further	Medical FSA	20.32
online	Aflac	Staff paid insurances	541.74
online	Cardmember Services	**See below for explanation	4,245.97
	Payroll		
	Check #12163-12169		11,095.02
	Total Checks	\$	83,553.17

## \* HDR Engineering Inc.

Proj.129AU-Nelson Ring dike	551.00
Proj. 149A-Mud River Restoration	24,557.66
Proj. 178-TRF Westside FDR	<u>9,930.74</u>
Total	35,039.40

## \*\* Cardmember Services

Fozzies-Meeting expense	62.33
Amazon-Adobe Acrobat Pro software	449.00
Amazon-1099MISC tax forms	31.99
AT&T-Cell phone payments & expens	409.83
DLT-(2)Civil 3D annual subscriptions	<u>3,292.82</u>
Total	4.245.97

## Banking

Northern State Bank		
Balance as of February 10, 2021	\$	508,529.45
Total Checks Written		(83,553.17)
Receipt #989913 Transfer to American Federal Bank-Fosston		(300,000.00)
Balance as of February 24, 2021	\$	124,976.28
Current interest rate is .20%		
American Federal Bank-Fosston		
Balance as of February 10, 2021	\$	1,650,650.08
Receipt #989910 Pennington County-2020 Riparian Aid and 1/2 2021 Riparian Aid		9,498.50
Receipt #989911 Northwest Service Cooperative-Reimburse for 2020 health insurance cancellati	ions	3,820.00
Receipt #989912 Red Lake County-Delinquent tax settlement		447.86
Receipt #989913 Transfer in from Northern State Bank		300,000.00
Balance as of February 24, 2021	\$	1,964,416.44
Current interest rate is .65%		
Unity Bank-CD		
12 month CD @ .84% Mature July 2021 Interest paid quarterly	\$	200,000.00

## Red Lake Watershed District

President Dale M. Nelson

Vice President
Gene Tiedemann

Treasurer Terry Sorenson 1000 Pennington Avenue South Thief River Falls MN, 56701 218-681-5800 218-681-5839 FAX

E-mail: RLWD@redlakewatershed.org www.redlakewatershed.org

Secretary LeRoy Ose

Managers
Tom Anderson
Allan Page

Brian Dwight

## Pine Lake Flood Damage Reduction Project Red Lake Watershed District Public Project Hearing

Pursuant to Minnesota State Statute 103D.701, notice is hereby given that a Public Project Hearing to discuss and receive public input regarding a flood damage reduction and natural resource enhancement project for Pine Lake, located south of the City of Gonvick, Minnesota. The primary goal of the project is to reduce flood damage to cabins, properties, and shorelines adjacent to Pine Lake caused by minor and major floods as well as provide fish habitat improvements. The current Pine Lake outlet structure no longer provides adequate flood control, recreational or habitat benefits. The proposed project would modify the outlet structure, provide fish passage, and perform downstream conveyance improvements including Lost River channel maintenance and addition of culverts at roadway crossings.

The proposed project, referred to as the Pine Lake Flood Damage Reduction Project, Red Lake Watershed District Project No. 26B, located in Pine Lake Township (Township 149 North of Range 38 West), Clearwater County, MN.

This hearing has been scheduled for Thursday, March 11, 2021 at 10:30 a.m. at the Red Lake Watershed District office, 1000 Pennington Avenue South, Thief River Falls, MN.

The primary purpose of this project is reduction of Pine Lake flooding, other benefits would result from the project, including: flood damage reduction on the Lost River; improved operability of the new outlet structure with adjustable gates control; increased emergency outflow capacity by improving channel conveyance between Pine Lake and the control structure; improved fish passage and habitat between the Lost River and Pine Lake; improved operator safety of the structure; and increased water aeration.

Estimated costs of the project is \$1.86 million. Potential funding partners for the Project may include the Natural Resource Conservation Service's Regional Conservation Partnership Project, Red River Watershed Management Board, and the Red Lake Watershed District.

All interested parties, public or private, likely to be affected by the above-mentioned project are invited to attend.

Written comments may be submitted to the Red Lake Watershed District and will be publicly read at the hearing.

If you have a disability and need any accommodation to attend this Hearing, please contact the Red Lake Watershed District office as soon as possible or at least 3 working days in advance of the Hearing at 218-681-5800.

Due to the COVID 19 Pandemic, the Red Lake Watershed District will be taking measures to ensure public safety. Masks will be required to attend the hearing, with 6 feet of social distancing required. Crowd size will be in conformance with executive orders existing at the time of the hearing date.

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

Remaining Balance	\$83,333
BWSR CWF Competative Grants	\$250,000
Red River Watershed Management Board	\$166,667
Estimated Project Cost	\$500,000



Reference Invoice Number with Payment

HDR Engineering Inc. Minneapolis, MN 55416-3636 Phone: (763) 591-5400

> City of Thief River Falls Wayne Johnson 405 3rd St E

Thief River Falls, MN 56701-2100

Payment Terms **30 NET** Remit To PO Box 74008202

HDR Invoice No.

Invoice Amount Due

Invoice Date

Chicago, IL 60674-8202 ACH/EFT Payments Bank of America ML US

1200300311

\$3,435.96

09-OCT-2020

ABA# 081000032 Account# 355004076604

Oxbow Restoration

Project Manager: Nate Dalager

Professional Services

From: 30-AUG-2020 To: 26-SEP-2020

Professional Services Summarizat	ion	Hours	Billing Rate	Amount
Administrative Project Coordinator	Bistodeau, Laura Beth	0.25	93.92	23.48
Environmental Scientist Sr	Anderson, Nicole Christine	7.00	90.18	631.26
Environmental Scientist Sr	Garvey, Kelly S	12.00	177.57	2.130.84
GIS Analyst	Walter, Jennifer S	2.50	133.15	332.88
Project Accountant II	Jungers, Kristy Jo	1.25	102.00	127.50
Project Manager	Dalager, Nathan P	1.00	190.00	190.00
		24.00		\$3,435.96
		Total Profe	essional Services	\$3,435,96

Amount Due This Invoice (USD)	\$3,435.96
-------------------------------	------------

HDR Internal Referen	ce Only	
Client Number	3783	
Cost Center	10111	
Project Number	10168013	



HDR Invoice No. 1200300311 Invoice Date 1200300311

Professional Ser	vices and Expens	e Detail	W. I	C. G	ALM LIEST SERVICE HE	
Project Number: Task Number:	10168013 1.0	Project Description: Task Description:		City of TRF Oxbow Restoration Oxbow Restoration		
Professional Sen	vices		Но	urs	Billing Rate	Amount
Environmental Scie	ntist Sr	Anderson, Nicole Christine	7	7.00	90.18	631.26
<b>Environmental Scie</b>	ntist Sr	Garvey, Kelly S	12	2.00	177.57	2,130.84
Project Manager		Dalager, Nathan P	1.00 190.00		190.00	190.00
			20	0.00		\$2,952.10
			Total Professional Services		\$2,952.10	
		_				
					Total Task	\$2,952.10

Professional Ser	vices and Expense	Detail	14, 41-6	- " ·	Meletexactic and h	lani le la ferm
Project Number: Task Number:	10168013 2.1	Project Descri Task Descript	•		f TRF Oxbow Restoration ot Management/Meetings.	
Professional Ser	vices		Hours Billing Rate		Amount	
Administrative Project Coordinator Project Accountant II		Bistodeau, Laura Beth Jungers, Kristy Jo	0.25 1.25			23.48 127.50
				1.50		\$150.98
		7.= 9=		Total Professional Services		\$150.98
			-		Total Task	\$150.98

Project Number: Task Number:	10168013 2.2	Project Des Task Descr		TRF Oxbow Restoration Development		
Professional Services			Ho	ours	Billing Rate	Amount
GIS Analyst		Walter, Jennifer S		2.50 133.15		332.88
			-	2.50		\$332.88
			То	tal Profe	ssional Services	\$332.88
			1 <del>4</del>		Total Task	\$332.88



Reference Invoice Number with Payment

HDR Engineering Inc. Minneapolis, MN 55416-3636 Phone: (763) 591-5400

> City of Thief River Falls Wayne Johnson 405 3rd St E Thief River Falls, MN 56701-2100

HDR Invoice No. 1200305064 Invoice Date 03-NOV-2020 Invoice Amount Due \$13,384.75 Payment Terms 30 NET

Remit To

PO Box 74008202 Chicago,IL 60674-8202

ACH/EFT Payments Bank of

Bank of America ML US ABA# 081000032 Account# 355004076604

Oxbow Restoration

Project Manager: Nate Dalager

Professional Services

From: 27-SEP-2020 To: 24-OCT-2020

Professional Services Summarizati	ion	Hours	Billing Rate	Amount
Administrative Project Coordinator	Marthaler, Stephanie Jane	0.25	95.00	23.75
Environmental Scientist 2	Anderson, Nicole Christine	38.00	95.00	3,610.00
Environmental Scientist 2	Gust, Kimberly A	0.50	120.00	60.00
Environmental Scientist 2	Parsons, Michael J	4.00	200.00	800.00
Environmental Scientist 2	Swenson, Michael J	7.00	130.00	910.00
Environmental Scientist Sr	Brownlee, Sirena T	11.00	170.00	1,870.00
Environmental Scientist Sr	Garvey, Kelly S	13.00	190.00	2,470.00
Environmental Scientist Sr	Spores, Hong T	11.00	160.00	1,760.00
GIS Analyst	Walter, Jennifer S	9.00	140.00	1,260.00
Project Accountant II	Jungers, Kristy Jo	0.50	102.00	51.00
Project Manager	Dalager, Nathan P	3.00	190.00	570.00
		97.25		\$13,384.75
		Total Prof	essional Services	\$13,384.75

Amount Due This Invoice (USD) \$13,384.75
---

HDR Internal Reference	e Only	
Client Number	3783	
Cost Center	10111	
Project Number	10168013	



HDR Invoice No. 1200305064 Invoice Date 03-NOV-2020

Professional Sen	vices and Expens	e Detail				11 July 10
Project Number: Task Number:	10168013 1.0	Project Description: City of TRF Oxbow Restoration Task Description: Oxbow Restoration				
Professional Sen	vices		Ho	urs	Billing Rate	Amount
<b>Environmental Scien</b>	ntist Sr	Garvey, Kelly S	13	3.00	190.00	2,470.00
Project Manager		Dalager, Nathan P	3.00		190.00	570.00
			16	6.00		\$3,040.00
			To	tal Profe	ssional Services	\$3,040.00
			g <del></del>		Total Task	\$3,040.00

Professional Ser	vices and Expense	e Detail	i eli wi			
Project Number: Task Number:	10168013 2.1	Project Descript Task Descriptio			f TRF Oxbow Restoration of Management/M	
Professional Services			Hou	ırs	Billing Rate	Amount
Administrative Project Coordinator		Marthaler, Stephanie Jane	0.:	25	95.00	23.75
Project Accountant II		Jungers, Kristy Jo	0.50		102.00	51.00
		:	0.	75		\$74.75
		:-	Tota	al Profe	ssional Services	\$74.75
					Total Task	\$74.75

Professional Serv	vices and Expens	e Detail	Same and the		W. Wiles
Project Number: Task Number:	10168013 2.2	Project Descript Task Description		of TRF Oxbow Restoration Development	
Professional Serv	vices		Hours	Billing Rate	Amount
Environmental Scien	ntist 2	Anderson, Nicole Christine	38.00	95.00	3,610.00
Environmental Scien	ntist 2	Gust, Kimberly A	0.50	120.00	60.00
<b>Environmental Scien</b>	ntist 2	Parsons, Michael J	4.00	200.00	800.00
Environmental Scien	ntist 2	Swenson, Michael J	7.00	130.00	910.00
Environmental Scien	ntist Sr	Brownlee, Sirena T	11.00	170.00	1,870.00
Environmental Scien	ntist Sr	Spores, Hong T	11.00	160.00	1,760.00
GIS Analyst		Walter, Jennifer S	9.00	140.00	1,260.00
		:-	80.50		\$10,270.00
		( <del>-</del>	Total Prof	essional Services	\$10,270.00
		) <u>-</u>			
		55. 12		Total Task	\$10,270.00



Reference Invoice Number with Payment

HDR Engineering Inc. Minneapolis, MN 55416-3636 Phone: (763) 591-5400

> City of Thief River Falls Wayne Johnson 405 3rd St E Thief River Falls, MN 56701-2100

HDR Invoice No. 1200310553 Invoice Date 30-NOV-2020 Invoice Amount Due \$10,969.30 Payment Terms 30 NET

Remit To

ACH/EFT Payments

PO Box 74008202 Chicago,IL 60674-8202 Bank of America ML US

ABA# 081000032

Account# 355004076604

Oxbow Restoration

Project Manager: Nate Dalager

Professional Services

From: 25-OCT-2020 To: 21-NOV-2020

Professional Services Summarization		Hours	Billing Rate	Amount
Environmental Scientist 2	Anderson, Nicole Christine	28.00	95.00	2,660.00
Environmental Scientist 2	Gust, Kimberly A	0.25	120.00	30.00
Environmental Scientist 2	Swenson, Michael J	2.00	130.00	260.00
Environmental Scientist Sr	Garvey, Kelly S	22.00	190.00	4,180.00
Environmental Scientist Sr	Kessler, Adam S	8.00	160.99	1,287.92
Environmental Scientist Sr	Mayer, Michael Stone	3.00	238.46	715.38
	(Mike)			
GIS Analyst	Walter, Jennifer S	3.25	140.00	455.00
Project Accountant II	Jungers, Kristy Jo	0.50	102.00	51.00
Project Manager	Dalager, Nathan P	7.00	190.00	1,330.00
		74.00		\$10,969.30
		Total Profe	essional Services	\$10,969.30

Amount Due This Invoice (USD)	\$10,969.30
-------------------------------	-------------

HDR Internal Referen	ce Only	
Client Number	3783	
Cost Center	10111	
Project Number	10168013	



\$5,510.00

HDR Invoice No. 1200310553 Invoice Date 1200310553 30-NOV-2020

Total Task

Project Number: Task Number:	10168013 1.0	Project Description: Task Description:		City of TRF Oxbow Restorat Oxbow Restoration		
Professional Services			Н	ours	Billing Rate	Amount
Environmental Scientist Sr		Garvey, Kelly S	22.00		190.00	4,180.00
Project Manager		Dalager, Nathan P	7.00		190.00	1,330.00
				9.00		\$5,510.00
			То	tal Profe	ssional Services	\$5,510.00

Project Number:	10168013	Project Des	cription:	City of	TRF Oxbow Restoration	
Task Number:	2.1	Task Descri	iption:	Projec	t Management/M	
Professional Services		MARIE BARCHARDEN THROUGH	Н	ours	Billing Rate	Amount
Project Accountant II		Jungers, Kristy Jo	0.50		102.00	51.00
			-	0.50		\$51.00
			То	tal Profe	ssional Services	\$51.00
					Total Task	\$51.00

Professional Serv Project Number:	10168013	Project Descript		f TRF Oxbow Restoration	
Task Number:	2.2	Task Description	n: EAW	Development	
Professional Serv	rices		Hours	Billing Rate	Amount
<b>Environmental Scier</b>	ntist 2	Anderson, Nicole Christine	28.00	95.00	2,660.00
Environmental Scier	ntist 2	Gust, Kimberly A	0.25	120.00	30.00
Environmental Scier	ntist 2	Swenson, Michael J	2.00	130.00	260.00
Environmental Scier	ntist Sr	Kessler, Adam S	8.00	160.99	1,287.92
Environmental Scier	ntist Sr	Mayer, Michael Stone (Mike)	3.00	238.46	715.38
GIS Analyst		Walter, Jennifer S	3.25	140.00	455.00
		-	44.50		\$5,408.30
			Total Profe	ssional Services	\$5,408.30
		1 <del></del>		Total Task	\$5,408.30



Reference Invoice Number with Payment

HDR Engineering Inc. Minneapolis, MN 55416-3636 Phone: (763) 591-5400

> City of Thief River Falls Wayne Johnson 405 3rd St E Thief River Falls, MN 56701-2100

HDR Invoice No. 1200325347 Invoice Date 09-FEB-2021 Invoice Amount Due \$4,618.24 Payment Terms 30 NET

Remit To

PO Box 74008202 Chicago,IL 60674-8202

**ACH/EFT Payments** 

Bank of America ML US

ABA# 081000032

Account# 355004076604

Tasks: EAW, Final Design of Project Components, Plans & Specs

Oxbow Restoration

Project Manager: Nate Dalager

Professional Services

From: 27-DEC-2020 To: 30-JAN-2021

Professional Services Summar	ization	Hours	Billing Rate	Amount
Civil EIT	Nelson, Dillon R	3.00	125.00	375.00
Engineer	Huwe, Jacob R	1.00	135.00	135.00
Environmental Scientist 2	Anderson, Nicole Christine	7.00	105.00	735.00
Environmental Scientist Sr	Garvey, Kelly S	11.00	195.00	2,145.00
Project Accountant II	Jungers, Kristy Jo	0.50	116.48	58.24
Project Manager	Dalager, Nathan P	6.00	195.00	1,170.00
		28.50		\$4,618.24
		Total Prof	essional Services	\$4,618.24

Amount Due This Invoice (l	JSD) \$4,618.24
Alliount Due This invoice (c	JSD) \$4,010.24

HDR Internal Reference	e Only	
Client Number	3783	
Cost Center	10111	
Project Number	10168013	



HDR Invoice No. Invoice Date

1200325347 09-FEB-2021

Professional Sen	vices and Expens	e Detail			U. 1.1.22
Project Number: Task Number:	10168013 1.0	Project Description: Task Description:		of TRF Oxbow Restoration ow Restoration	
Professional Sen	vices		Hours	Billing Rate	Amount
Engineer		Huwe, Jacob R	1.00 135.00		135.00
Project Manager		Dalager, Nathan P	5.00	195.00	975.00
		<u> </u>	6.00		\$1,110.00
		<del></del>	Total Pro	fessional Services	\$1,110.00
		_		Total Task	\$1,110.00

Duningt Number	10100013	Desired Desired	£!	011	TERE O L D L L	
Project Number:	10168013	Project Descrip		City o	TRF Oxbow Restoration	
Task Number:	2.1	Task Description	on:	Projec	t Management/Meetings/	Coordination
Professional Ser	vices	START THE COURT OF THE PERSON	Hours Billing Rate		Amount	
Civil EIT		Nelson, Dillon R	3.0	00	125.00	375.00
Project Accountant II		Jungers, Kristy Jo	0.50		116.48	58.24
			3.9	50		\$433.24
			Tota	l Profe	ssional Services	\$433.24
					Total Task	\$433.24

Project Number: Task Number:	10168013 2.2	Project De Task Desc			f TRF Oxbow Restoration Development	
Professional Ser	vices		Ho	ours	Billing Rate	Amount
Environmental Scientist Sr		Garvey, Kelly S	11.00		195.00	2,145.00
			1	1.00		\$2,145.00
			То	tal Profe	ssional Services	\$2,145.00
					Total Task	\$2,145.00

HDR Invoice No. Invoice Date

1200325347 09-FEB-2021

Professional Sen	vices and Expense	e Detail	ele Grat	· · · · · · · · · · · · · · · · · · ·	FELLE BUNGER
Project Number: Task Number:	10168013 2.3	Project Description: Task Description:		City of TRF Oxbow Restoration Public Notice and Response to	
Professional Sen	vices	AND	Hours Billing Rate		Amount
Environmental Scientist 2		Anderson, Nicole Christine	7.0	00 105.00	735.00
		-	7.0	00	\$735.00
		=	Tota	Professional Services	\$735.00
				Total Task	\$735.00

	vices and Expense		CIL			THE STATE OF THE OWNER,
Project Number:	10168013	Project Description	on:	City of	TRF Oxbow Restoration	
Task Number:	2.4	Task Description:		Record	of Decision	
Professional Services			Hou	ırs	Billing Rate	Amount
Project Manager		Dalager, Nathan P	1.1	00	195.00	195.00
		_	1.0	00		\$195.00
		=	Tota	l Profes	sional Services	\$195.00
		=			Total Task	\$195.00



Reference Invoice Number with Payment

HDR Engineering Inc. Minneapolis, MN 55416-3636 Phone: (763) 591-5400

> **City of Thief River Falls** Wayne Johnson 405 3rd St E Thief River Falls, MN 56701-2100

HDR Invoice No. 1200319746 Invoice Date 08-JAN-2021 Invoice Amount Due \$10,361.00 Payment Terms **30 NET** 

Remit To PO Box 74008202

Chicago,IL 60674-8202 ACH/EFT Payments Bank of America ML US

ABA# 081000032 Account# 355004076604

Oxbow Restoration

Project Manager: Nate Dalager Tasks: Finalization of EAW

Professional Services

From: 22-NOV-2020 To: 26-DEC-2020

Professional Services Summarization		Hours	Billing Rate	Amount
Environmental Scientist 2	Anderson, Nicole Christine	48.00	95.00	4,560.00
Environmental Scientist 2	Gust, Kimberly A	10.50	120.00	1,260.00
Environmental Scientist Sr	Brownlee, Sirena T	1.00	170.00	170.00
Environmental Scientist Sr	Garvey, Kelly S	17.00	190.00	3,230.00
GIS Analyst	Walter, Jennifer S	1.00	140.00	140.00
Project Accountant II	Jungers, Kristy Jo	0.50	102.00	51.00
Project Manager	Dalager, Nathan P	5.00	190.00	950.00
		83.00		\$10,361.00
		Total Prof	essional Services	\$10,361.00

Amount Due This Invoice (USD)	\$10,361.00
-------------------------------	-------------

HDR Internal Reference	ce Only	
Client Number	3783	
Cost Center	10111	
Project Number	10168013	



HDR Invoice No. Invoice Date

1200319746 08-JAN-2021

Professional Sen	vices and Expens	e Detail	I NEW YEAR	ya arçı i	on the institute of the second installation	III) H (WU KEV)
Project Number: Task Number:	10168013 1.0	Project Desc Task Descrip	and the same of th		f TRF Oxbow Restoration w Restoration	
Professional Sen	vices	BE STUDY OF STUDY	Ho	ours	Billing Rate	Amount
<b>Environmental Scie</b>	ntist Sr	Garvey, Kelly S	10	0.00	190.00	1,900.00
Project Manager		Dalager, Nathan P		5.00	190.00	950.00
			15	5.00		\$2,850.00
			To	tal Profe	essional Services	\$2,850.00
					Total Task	\$2,850.00

Project Number:	10168013	Project D.	escription:	City	TRF Oxbow Restoration	
Task Number:	2.1	Task Des			et Management/M	
		1 d3k De3	onpuon.	Floje	t Management/M	
Professional Ser	vices		Ho	ours	Billing Rate	Amount
Project Accountant	II	Jungers, Kristy Jo		0.50	102.00	51.00
				0.50		\$51.00
			То	tal Profe	ssional Services	\$51.00
			***		Total Task	\$51.00

Professional Sen	vices and Expens	e Detail	TATAL TRANSPORT		
Project Number: Task Number:	10168013 2.2	Project Descripti Task Descriptio		f TRF Oxbow Restoration Development	
Professional Serv	vices		Hours	Billing Rate	Amount
<b>Environmental Scien</b>	ntist 2	Anderson, Nicole Christine	48.00	95.00	4,560.00
<b>Environmental Scien</b>	ntist 2	Gust, Kimberly A	10.50	120.00	1,260.00
<b>Environmental Scien</b>	ntist Sr	Brownlee, Sirena T	1.00	170.00	170.00
<b>Environmental Scien</b>	ntist Sr	Garvey, Kelly S	7.00	190.00	1,330.00
GIS Analyst		Walter, Jennifer S	1.00	140.00	140.00
		9.5	67.50		\$7,460.00
			Total Profe	essional Services	\$7,460.00
		19		Total Task	\$7.4C0.00
		-		TOTAL TASK	\$7,460.00

#### RED LAKE WATERSHED DISTRICT

Board of Manager's Minutes November 12, 2020

President Dale M. Nelson called the meeting to order via conference call at 9:00 a.m. at the Red Lake Watershed District Office, Thief River Falls, MN.

Present in person: Terry Sorenson and Brian Dwight. Present via conference call: Dale M. Nelson, Gene Tiedemann, LeRoy Ose, Allan Page and Les Torgerson. Staff Present: Myron Jesme and Tammy Audette. Legal Counsel, Delray Sparby was present via conference call.

The Board reviewed the agenda. President Nelson requested the addition of a pay estimate for the Burnham Creek Wildlife Pool Structure Replacement Project, RLWD Project No. 43A. Motion by Ose, seconded by Torgerson, and passed by unanimous vote that the Board approve the agenda with the addition of a pay estimate for the Burnham Creek Wildlife Pool Structure Replacement Project. Motion carried.

The Board reviewed the October 22, 2020 minutes. Motion by Sorenson, seconded by Torgerson, to approve the October 22, 2020 Board meeting minutes. Upon roll call vote, motion carried unanimously. Motion carried.

The Board reviewed the Financial Report dated November 10, 2020. Motion by Tiedemann, seconded by Page, and passed by unanimous vote to approve the Financial Report dated November 10, 2020. Upon roll call vote, motion carried unanimously.

Staff member Arlene Novak reviewed the General Fund Budget as of October 31, 2020.

Administrator Jesme stated that Engineer Jerry Pribula, Pribula Engineering, Inc., is working with Burski Excavating, Inc., on construction quantities for payment. Construction on the project is substantially complete with final completion of the project occurring in spring of 2021.

The Board reviewed Pay Estimate No. 13 in the amount of \$132,735.76 to R.J. Zavoral & Sons, Inc. for construction of the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Motion by Sorenson, seconded by Dwight, to approve Pay Estimate No. 13 in the amount of \$132,735.76 to R.J. Zavoral & Sons, Inc., for construction of the Thief River Falls Westside Flood Damage Reduction Project, RLWD Project No. 178. Upon roll call vote, motion carried unanimously. It was also noted that very little additional work will occur on this project until the Spring of 2021.

The Board reviewed Pay Estimate No. 1 in the amount of \$525,310.58 to R.J. Zavoral & Sons, Inc. for construction of the Black River Impoundment, RLWD Project No. 176. Motion by Torgerson, seconded by Tiedemann, to approve Pay Estimate No. 1 in the amount of \$525,310.58 to R.J. Zavoral & Sons, Inc., for construction of the Black River Impoundment, RLWD Project No. 176. Upon roll call vote, motion carried unanimously. Engineer Tony Nordby, Houston Engineering, Inc., stated that the contractor plans to complete the outlet

Red Lake Watershed District November 12, 2020 Page 2 of 3

channel yet this year. Next week, a subcontractor for the project will begin construction on the outlet structure. Nordby discussed the various aspects of construction inspection due to the cold weather. Administrator Jesme stated that the NRCS is still in the review process and have yet to determine the timeline as to the determination of a federal contribution.

The Board reviewed Pay Estimate No. 1 in the amount of \$113,924.00, to Swingen Construction Company, for construction of the Burnham Creek Wildlife Pool Structure Replacement, RLWD Project No. 43A. Motion by Ose, seconded by Dwight, to approve Pay Estimate No. 1 in the amount of \$113,924.00 to Swingen Construction Company, for construction of the Burnham Creek Wildlife Pool Structure Replacement, RLWD Project No. 43A. Upon roll call vote, motion carried unanimously.

Administrator Jesme requested a recommendation from the Board, for submittal to the RRWMB, to request a funding partnership for construction of two ring dikes. Motion by Ose, seconded by Sorenson, to request a 50/50 funding breakdown between the District and RRWMB for construction of two ring dikes and that landowner costs will be responsible for 12.5% of the 50% of the District's portion. Upon roll call vote, motion carried unanimously.

Staff member Nick Olson updated the Board on the operation of the District's impoundments. The north and south pools of the Moose River Impoundment are down to winter target elevations. All boards have been pulled out of the Pine Lake Dam and it is slowly being drawn down to winter target elevation. The boards will need to be installed prior to December 1. Olson will test operate the gates on the Schirrick Dam next week. The gates on the Parnell, Euclid East, and Brandt Impoundments are open 2.5 feet for the winter, to prevent it from freezing closed.

Staff member Nick Olson updated the Board on RLWD Permit No. 2006-062, Dale Newton, Valley Township, Marshall County. Olson discussed the conditions of the original permit application which was approved in 2006 and recent activity in the permit area. Olson will continue to work with the two landowners to resolve the present conflict.

Motion by Sorenson, seconded by Dwight, to grant a one-year extension for RLWD Permit No. 2019-201, FSMN Agri Partners, Cloverleaf Township, Pennington County. Upon roll call vote, motion carried unanimously.

The Board reviewed the permits for approval. Motion by Dwight, seconded by Sorenson, to approve the following permits with conditions stated on the permit: No. 20159, William Langlois, Gentilly Township, Polk County; No. 20161, William Langlois, Kertsonville Township, Polk County; No. 20252, Kevin Malwitz, Emardville Township, Red Lake County; No. 20274, Dyr-Valley Enterprises, LTD, Norden Township, Pennington County; No. 20275, Douglas Peterson/Folson Farms, Huntsville Township, Polk County; No. 20276, Tom Scholin, Bray Township, Pennington County; No. 20278, Ron Salentine, Euclid Township, Polk County; No. 20279, Rodney Hoffman, Goodridge Township, Pennington County; No. 20280, Rodney Hoffman, Reiner Township, Pennington County; No. 20281, Brian Vatthauer, Lake Pleasant Township, Red Lake County; No. 20282, Proulx Brothers, Polk Centre Township, Pennington

Red Lake Watershed District November 12, 2020 Page 3 of 3

County; No. 20283, Daniel Caillier, Gentilly Township, Polk County; No. 20284, Eric Samuelson, Andover Township, Polk County; No. 20285, Altepeter Brothers, Fanny Township, Polk County; No. 20287, Pennington County Highway Department, Reiner Township, Pennington County; No. 20288, Randy Krebechek, Highlanding Township, Pennington County; No. 20290, Brian Espeseth, Black River Township, Pennington County; No. 20292, David Joseph Philipp, Grand Plain Township, Marshall County; No. 20293, Don Dyrdal, Norden Township, Pennington County; No. 20294, Gary Novak, Browns Creek, Red Lake County; No. 20295, Neal and Earl Pederson/Pederson Brothers, Badger Township, Polk County; No. 20296, Gerald Forgit, Onstad Township, Polk County; No. 20297, Josh & Fred Barrett, Sullivan Township, Polk County; No. 20298, Jacob Faugstad, Fisher Township, Polk County; No. 20299, JoAnn Hoselton, Browns Creek Township, Red Lake County; and No. 20300, Onstad Township, Polk County. Upon roll call vote, motion carried unanimously.

The 2020 MAWD Annual Conference will be held on December 1-4, 2020. The entire conference will be held virtually due to the Covid19 pandemic.

Legal Counsel Sparby stated that he received a request from the Clearwater County Court Administrator's office for a signed order for the JD 5 (Four-Legged Lake), RLWD Project No. 102.

Manager Tiedemann asked about the status of the appeal for Ditch 17, RLWD Project No. 179. Legal Counsel Sparby stated that Attorney John Kolb's office is putting together an affidavit for submission. Tiedemann stated that he will be attending the December 1, 2020 Polk County Commissioners meeting.

A July 2020 Water Quality Report was included in the packet.

Motion by Dwight, seconded by Ose, to adjourn the meeting. Motion carried.

LeRoy Ose, Secretary

Te Poy Osl



## FEBRUARY 11, 2021 HISTORY OF RRWMB RING DIKE DECISIONS

**Document Purpose:** The purpose of this document is to share information about historic decisions made by the RRWMB Managers about ring dikes. RRWMB meeting minutes may also be referred to on-line at the RRWMB website for viewing detailed discussions by the RRWMB Managers and the decisions that have been made. Additional historic information about ring dikes may still exist in the RRWMB historic record. However, additional research has not been conducted at this time.

- Ring Dikes November 17, 2020: The RRWMB Managers approved reviewing future farmstead ring dike requests on a case-by-case basis with cost-share up to 50 percent of the total project costs. The decision was based on information provided by the Red Lake Watershed District (RLWD).
- 2. Flood Property Acquisition/Demolition Request November 17, 2020: The RRWMB Managers approved cost-share in the amount of \$214,000.00 to the Wild Rice Watershed District (WRWD) for matching funds focused on seven properties in the WRWD. Some of the properties focused on have existing rig dikes.
- 3. Ring Dike Cost-share May 19, 2020: The RRWMB Managers approved to increase the RRWMB's cost-share to cover the cost overrun of \$30,000 for the Threatt ring dike project for a total of \$46,350. This project is being developed by the RLWD.
- 4. Ring Dikes June 18, 2019: The RRWMB Managers affirmed that current RRWMB policies regarding ring dikes should remain in place and that no changes should be implemented. Funds in the amount of \$17,500 were approved for the WRWD for a farmstead ring dike. It was Manager consensus to use the remaining grant funds as first come first served as has been in the past.
- **5. Ring Dikes March 20, 2019:** The RRWMB adopted prioritization criteria for ring dikes. Refer to the attached policy.
- **6. Ring Dikes May 18, 2010:** The amended cost-share policy approved on April 20, 2010 was amended. Refer to the attached policy.
- 7. Ring Dikes April 20, 2010: The original cost-share policy adopted on June 16, 2009 was amended.
- **8. Ring Dikes June 16, 2009:** The original RRWMB cost-share policy was adopted by the RRWMB Managers.

### **Policy Committee Bylaws Template**

This bylaws template contains all the basic elements for meeting the *One Watershed, One Plan* requirement to have a clearly outlined decision-making process between the participating local units of government.

Please consider the following in adapting these bylaws to your watershed partnership decision-making body:

- This template assumes that a Memorandum of Agreement (MOA) has been used to define the relationship between the participating local units of government during the Planning Phase of the One Watershed, One Plan process. Depending on the content of that MOA, or of any other formal agreement between the participants, some of the items in the bylaws may be unnecessary because:
  - The type of partnership agreement may or may not necessitate some items (e.g. a joint powers agreement that describes the functions of a Board with fiscal authorities would have different requirements than a memorandum of agreement that establishes a partnership);
  - An item in the template is included in the formal agreement and the redundancy is unnecessary.
- The term "Policy Committee" is used throughout and signifies the decision-making body established by a MOA. If a different type of formal agreement established a decision-making body with a different name, that name must be substituted for "Policy Committee."
- A blank line indicates where information specific to the particular watershed partnership must be entered. Text in italics is explanatory material that must be deleted from the final bylaws.
- Participants are strongly encouraged to obtain the review of the draft bylaws by the appropriate local government legal counsel before adoption.
- This template includes an Advisory Committee that must meet the membership requirements of Minnesota Statutes §103D.331 if the partnership includes a watershed district(s).



## Policy Committee Bylaws of the Clearwater River Watershed

The Counties of Clearwater, Pennington, Polk, and Red Lake by and through their respective County Board of Commissioners,

The Clearwater, East Polk, Pennington, and Red Lake County Soil and Water Conservation Districts, by and through their respective Soil and Water Conservation District Board of Supervisors, and

the Red Lake Watershed District, by and through their respective Board of Managers;

ADOPTED	
	(date adopted)

These bylaws establish rules governing the conduct of business by the Policy Committee of the Clearwater River Watershed

#### **ARTICLE I: PURPOSE**

1. The purpose of the Policy Committee is: The Parties to this Agreement recognize the importance of partnerships to plan and implement protection and restoration efforts for the Clearwater River Watershed (Attachment A). The purpose of this Agreement is to collectively develop and adopt, as local government units, a coordinated watershed management plan for implementation per the provisions of the Plan. Parties signing this agreement will be collectively referred to as Clearwater River Planning Partnership

This Agreement does not establish a joint powers entity but set outs the terms and provisions by which the parties "may jointly or cooperatively exercise any power common to the contracting parties or any similar powers, including those which are the same except for the territorial limits within which they may be exercised." Minnesota Statutes Section 471.59. As is permitted under the joint exercise of powers statute, Minnesota Statutes Section 471.59, the parties agree that under this Agreement, and as agreed upon and directed by the Policy Committee, one or more of the parties may exercise any power common to them on behalf of the other participating units, such as they have done under the Memorandum of Agreement where Clearwater SWCD is the fiscal agent and provides the day-to-day administrative duties of the Clearwater River Planning Partnership.

1. The Policy Committee operates under a Memorandum of Agreement

The Counties of Clearwater, Pennington, Polk, and Red Lake by and through their respective County Board of Commissioners,

The Clearwater, East Polk, Pennington, and Red Lake County Soil and Water Conservation Districts, by and through their respective Soil and Water Conservation District Board of Supervisors, and

the Red Lake Watershed District, by and through their respective Board of Managers

#### **ARTICLE II: MEMBERSHIP PROVISIONS**

- 1. The membership of the Policy Committee shall be comprised of at least nine members as designated by the governing board of each member local unit of government.
- Members of the Policy Committee shall serve until the expiration of the Memorandum of Agreement to run concurrently with each Policy Committee member's term on his/her respective board.
- 3. In the event that a member of the Policy Committee resigns or is otherwise unable to complete his or her term, the member shall notify his or her appointing authority of the vacancy as soon

- as practicable. The local unit of government shall appoint a replacement member as soon as possible.
- 4. A Policy Committee member shall not take any action that may materially benefit the financial interest of that member, a member's family member, or a member's close associate, unless and until that member first discloses that interest for the record. The member who so discloses an interest may be present to answer questions related to that interest but shall not advocate for nor vote on the action. If a Policy Committee member concludes that his or her interest does not create a conflict, but that there may be an appearance of a conflict, he or she shall disclose the interest for the record before participating in discussion or voting on an action.

#### **ARTICLE III: OFFICERS**

- 1. The Officers of the Policy Committee shall consist of a Chairperson, Vice Chairperson, and a Secretary elected by members of the Policy Committee at their first meeting (Note: some formal agreements may establish an entity legally able to receive and disburse funds, in which case the Policy Committee shall also elect a Treasurer. The duties of the Treasurer will be similar to those of the Secretary in item c below, except will apply to financial records of the organization.)
  - a. The Chairperson shall:
    - i. Serve as Chairperson for all meetings; and
    - ii. Sign and deliver in the name of the Partnership any correspondence pertaining to the business of the Partnership.
  - b. The Vice Chairperson shall:
    - i. Discharge the Chairperson's duties in the event of the absence or disability of the Chairperson.
  - c. The Secretary shall:
    - i. Maintain records of the Partnership.
    - ii. Certify records and proceedings of the Partnership.
    - iii. Ensure that minutes of all Policy Committee meetings are recorded and made available in a timely manner to the Policy Committee, and maintain a file of all approved minutes including corrections and changes.
    - iv. Provide for proper public notice of all meetings.
    - v. The Secretary may delegate a representative to record the minutes and perform other duties of the Secretary. The elected Secretary will sign the official minutes of all meetings following approval by the Policy Committee.
- 2. An Officer will serve until replaced by the election of a successor. No Policy Committee member may hold more than one office at a time.

- 3. In the event that an Officer cannot complete his or her term of office, the Policy Committee shall immediately elect from among its members an individual to fill the vacant position. The individual to be elected may not already be serving as an officer of the Policy Committee.
- 4. The Policy Committee will request the respective local unit of government participant to replace their representative member if that representative member misses two (2) consecutive meetings without notice to the Chairperson.

#### **ARTICLE IV: MEETINGS**

- 1. All meetings of the Policy Committee will comply with statutes and rules requiring open and public meetings.
- 2. The conduct of all meetings of the Policy Committee shall be generally governed by the most recent edition of Robert's Rules of Parliamentary Law.
- 3. A quorum of the Policy Committee shall consist of a simple majority of the members.
- 4. Votes by Policy Committee members shall be made in person, phone, or via video conference and no member may appoint a proxy for any question coming before any meeting for a vote.
- 5. Notice of Policy Committee meetings and a proposed agenda shall be mailed to all Policy Committee members not less than two weeks prior to the scheduled meeting date of the Policy Committee.
- 6. The minutes of any meeting shall be made available to all Policy Committee members prior to the next meeting.

#### ARTICLE V - VOTING

- 1. A motion or resolution shall be approved by a favorable vote of a simple majority of the members present, provided enough members are present to make a quorum.
- 2. A supermajority vote of 75 percent of those members present shall be required for final plan approval for submittal to review.
- 3. Include additional voting or decision-making requirements, such as actions that may require consensus only, a supermajority, or an absolute majority.

#### **ARTICLE VI – COMPENSATION**

- 1. Policy Committee members may be compensated by the member local unit of government they represent for meetings and expenses incurred, according to the policies of the local unit of government.
- 2. Policy Committee members may not be compensated for meeting time and expenses using funds granted by the state for the purpose of developing the *One Watershed, One Plan*.

#### ARTICLE VII – SUBCOMMITTEES OF THE POLICY COMMITTEE AND OTHER COMMITTEES

- 1. The Policy Committee may appoint subcommittees for the purpose of assisting the Policy Committee in the performance of its duties. Except for a Policy Committee member appointed to a subcommittee, no other member of a subcommittee shall be able to make motions for consideration to the Policy Committee, or vote on matters put before the Policy Committee.
- 2. The Policy Committee shall appoint an Advisory Committee and act to approve all Advisory Committee members. The Advisory Committee will routinely advise the Policy Committee on the content and development of the *One Watershed, One Plan,* on plan implementation, and on issues of policy and administration related to the plan.
  - a. A member of the Policy Committee or an alternate will be assigned by the Chairperson to meet with the Advisory Committee as an ex-officio member.
  - b. Each Partnership member local government unit shall be allowed to designate up to three representatives to the Advisory Committee.
  - c. The Advisory Committee shall also include representatives from Minnesota's principal water management or plan review state agencies (Board of Water and Soil Resources, Department of Agriculture, Department of Health, Department of Natural Resources, and Pollution Control Agency). Each agency will designate a lead contact person from its agency to participate on the Advisory Committee. Additional agency or other persons may participate as Advisory Committee members depending on the desire of the Policy Committee or the needs of the Advisory Committee.
  - d. The term of membership of the Advisory Committee shall be the life of the planning grant. Policy Committee reserves right to remove or replace Advisory Committee members.
  - f. The Advisory Committee may form subcommittees to increase Advisory Committee effectiveness or to address specific topics or project areas. Each subcommittee shall report to the Advisory Committee.
  - g. Once the policy committee motions and accepts the advisory committee list, additional members may not be added to the list for the remainder of the planning process without policy committee approval.

#### ARTICLE VIII: MEETING LOCATION

1. All regular meetings of the Policy Committee will be held at a location decided upon by policy meeting prior.

#### **ARTICLE IX: MISCELLANEOUS**

- 1. Portions of these bylaws may be suspended temporarily by three quarters vote of the Policy Committee.
- 2. Addition to, alteration, or repeal of any part of these bylaws by the Policy Committee may be made at any meeting by a majority of the full membership, provided that thirty (30) days advance written notice of the proposed change has been given to each member of the Policy Committee.
- 3. The Policy Committee's official records and the requirements of the BWSR grant agreement shall be maintained by the fiscal agent, Clearwater SWCD. The maintenance and disposition of these records shall be in accordance with applicable laws.
- 4. All expenses incurred by the Policy Committee or the Advisory Committee must have prior approval of the Policy Committee and include a signed claim form itemizing expenses that is submitted to the Policy Committee for approval at their next meeting. All claims must be submitted no more than thirty (30) days after the month in which they were incurred.
- 5. These bylaws are intended to be consistent with applicable provisions of Minnesota Statutes Chapters 103B, 103C, and 103D. In all cases of omission or error, Minnesota Statutes Chapters 103B, 103C, and 103D will govern.

#### **ARTICLE X - CERTIFICATION**

1.	These By-laws were adopted by a vote of	f ayes and	nays by the members
	of the Policy Committee on	, 20	
Secre	tary signature & organization)		

Page 6

# Petition for Use of Red Lake Watershed Ditch 1, Project 115 Drainage System as an Outlet

To: Red Lake Watershed District 1000 Pennington Avenue South Thief River Falls, MN. 56701

WHEREAS, Wayne and Debra Vettleson are seeking authority to use the established drainage system of the Red Lake Watershed District Ditch 1, Project number 115, drainage system as an outlet and requests that the Red Lake Watershed District grant its express authority to allow usage of the same.

Wayne and Debra Vettleson request that the drainage authority, in consultation with the proper County Auditor, set a time and location for a hearing on this petition and to give notice by mail and publication of said hearing.

The property sought to be included is the W 1/2 SE ¼, Section 26, and the SE ¼, of Sec 35, Equality Township, Red Lake County.

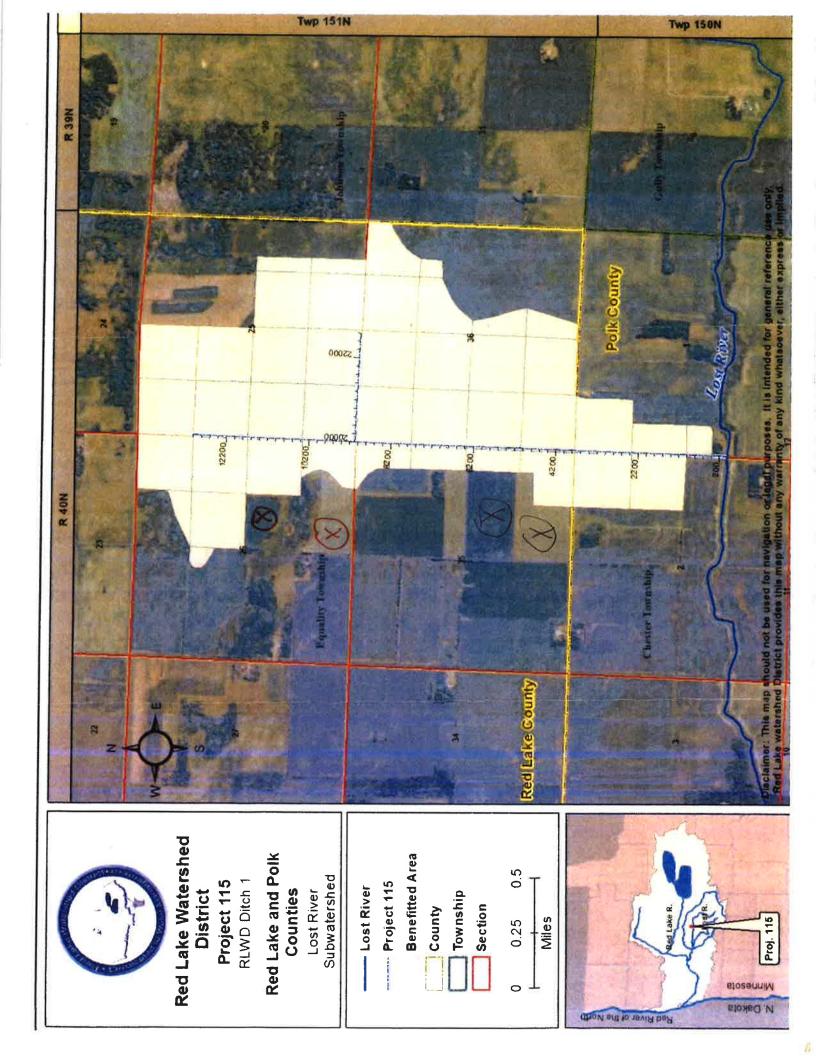
Wayne Vettleson

02/10/2021

Debra Vettleson

02/10/2021







### Permit # 21-001

Status Report: Tabled

### **Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Kenneth Rolandson	Rolandson Family LLP	14742 State Higwhay 220 SW East Grand Forks, MN 56721		tel:218-773-9767 mobile: 218-779-6718 fax:

### **General Information**

(1) The proposed project is a:

#### Culvert Installation / Removal / Modification

- (2) Legal Description
- (3) County: Pennington Township: Smiley Range: 42 Section: 23 1/4: SW1/4
- (4) Describe in detail the work to be performed. Install field crossing with culvert.
- (5) Why is this work necessary? Explain water related issue/problem being solved. Access to field.

#### **Status**

Status	Notes	Date
Tabled		Feb. 25, 2021
Received		Jan. 4, 2021

### Conditions

I recommend this permit be "Tabled" until after the 2021 spring run-off. This will allow for adequate time to observe runoff conditions, water elevations, and existing flow patterns. RLWD staff will then determine the proper culvert size. N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

## APPLICATION FOR PERMIT RED LAKE WATERSHED DISTRICT

1000 Pennington Avenue South, Thief River Falls, MN 56701 RLWD@redlakewatershed.org 218-681-5800

TO THE BOARD OF MANAGERS:
Landowner Name:  Rolandson Family LLP.  O, KGNNGTH Rolandson S/fartner C- 218-779-6718
Address (Street, RFD, Box No., City, State, Zip):
14742 STATE Huy 220 S.W. E.C. Focks, Mn. 56721
Project Location: ? Government Lot Quarter Section(s) _S \w \forall 4 Section(s) _ Z 3
Township (Name & #) 153/Sm;164 Range # 042 County PENNING TIM
Type of Work Proposed:  [ ] Excavate
Be sure to attach all necessary reports, maps, drawings, photos, other data, etc., to support permit application.
Description of work to be done:  TNSTAILING A COLUGAT FOR A ACCESS/CROSSING TO ENTER A FIELD
Estimated drainage area: acres or sq. mile(s)
Estimated drainage area: acres or sq. mile(s)  Work is necessary because: ALLOW LARGER EGOISMENT TO ENTER THE FIELDS
I hereby make application for a permit to proceed with the proposal described above and have attached all supporting maps plans, and other information submitted with this application. The information submitted and statements made concerning the application are true and correct to the best of my knowledge. Obtaining a permit from the Managers does not relieve the applicant from the responsibility of obtaining any other additional authorization or permits required by law.
Signature of landowner:  O. Kemith Rhule  Date: 1-1-21
DECEIVED  JAN 4 2021  For Office Use Only P.A. No. 21-001



### Permit # 21-002

Status Report: Tabled

## **Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
		204 7th Street SE Red Lake Falls, MN 56750		tel:218-253-2697 mobile: fax:

### **General Information**

(1) The proposed project is a:

Culvert Installation / Removal / Modification

- (2) Legal Description
- (3) County: Red Lake Township: Garnes Range: 41 Section: 29 1/4:
- (4) Describe in detail the work to be performed. West culvert-add extra line of 24"x30 CSP culvert East culvert-remove and replace same size
- (5) Why is this work necessary? Explain water related issue/problem being solved. West culvert needs more capacity during heavy floods East culvert needs replacement

### **Status**

Status	Notes	Date
Tabled		Feb. 25, 2021
Received		Feb. 11, 2021

### **Conditions**

I recommend this permit be "Tabled" to provide time to address potential downstream concerns.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

# APPLICATION FOR PERMIT RED LAKE WATERSHED DISTRICT

1000 Pennington Avenue South Thief River Falls, MN 56701 218-681-5800

TO	THE	ROA	RD	OF	MA	NA	GER	S٠

TO THE BOARD OF MANAG	ERS:			
Landowner Name:		Telepho	one Number:	
RED LAKE COUNTY	HIGHWAY DEPARTM	ENT	(718) 253	-2697
Address (Street, RFD, Box No	., City, State, Zip):			
204 7TH ST.	SE RED LAKE !	ALLS , MN	56750	
Project Location: Government Lot				
Township (Name & #) GARA  Type of Work Proposed:	Range	RHIW	County/	RED LAKE
Type of Work Proposed: [ ] Excavate [ ] Fill [ ] Drain [ ] Construct	Install []  Remove []  Other []  N INSTALL NEW UNE	Channel Culvert (Size Bridge (Size	<i>\</i> } →)	[ ] Dike [ ] Erosion Control [ ] Tile [ ] Other
Be sure to attach all necessary re	ports, maps, drawings, photo	os, other data, etc	e., to support pen	mit application.
Description of work to be done  WEST CULV, AOO EX  EAST CULV, REMOVE	TRA LINE OF 24" x	TO (S PIPE	CUWERT (S	Supporting Docs Attached
Estimated drainage area: acres	or sq. mile(s)			
Work is necessary because:  WEST CHLVERT NEE  EAST CHLVERT NEE			HEAVY FLOC	ηe
I hereby make application for a plans, and other information subapplication are true and correct applicant from the responsibility	nitted with this application. to the best of my knowled;	The information ge. Obtaining a	submitted and a permit from the	statements made concerning this Managers does not relieve the
Signature of landowner:	- (0)		Date:	2.1
In to			1-11-	41



For Office Use Only



# Permit # 21-003

Status Report: Approved

# **Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
		204 7th Street SE Red Lake Falls, MN 56750		tel:218-253-2697 mobile: fax:

# **General Information**

(1) The proposed project is a:

Culvert Installation / Removal / Modification

- (2) Legal Description
- (3) County: Red Lake Township: Emardville Range: 42 Section: 28 1/4:
- (4) Describe in detail the work to be performed. Three culvert replacements along CSAH 26. Section 29/30 remove and replace culvert north intersection 190th Avenue SE and CSAH 26. Section 28/33 replace centerline culvert 1/2 mile east of TH 59. Section 34/35 replace approach pipe at CSAH 26 and 220th Avenue SE
- (5) Why is this work necessary? Explain water related issue/problem being solved. Culverts in needs of replacement will be replaced with same size culverts as removed.

# **Status**

Status	Notes	Date
Approved		Feb. 24, 2021
Received		Feb. 11, 2021

# **Conditions**

Site 1 – RLWD approval to remove and replace an 81" span CMP-Arch centerline culvert, in kind. Site 2 – RLWD approval to remove and replace a 24" CMP centerline culvert, in kind. Site 3 – RLWD approval to remove and replace a 30" CMP centerline culvert, in kind. Applicant shall ensure that all disturbed areas are seeded and that rock riprap with filter fabric is placed at the outlet end of the permitted culverts. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.



# Permit # 21-004

Status Report: Approved

# **Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
		204 7th Street SE Red Lake Falls, MN 56750		tel: <b>218-253-2697</b> mobile: fax:

# **General Information**

(1) The proposed project is a:

#### Culvert Installation / Removal / Modification

- (2) Legal Description
- (3) County: Red Lake Township: Garnes Range: 41 Section: 23 1/4: SW1/4 SW1/4
- (4) Describe in detail the work to be performed. Remove existing 11'7"x7'5" steel arch culvert and replace with a 12x6 RC box culverts.
- (5) Why is this work necessary? Explain water related issue/problem being solved. Existing culvert conditions warrant replacement.

# **Status**

Status	Notes	Date
Approved		Feb. 25, 2021
Received		Jan. 11, 2021

# **Conditions**

Red Lake Watershed District (RLWD) approval to remove existing 139"X89" steel arch culvert and replace it with a single line of 12'X6' box culvert. Engineering has been completed by Houston Engineering Inc. Applicant shall ensure that all disturbed areas are seeded and that rock riprap with filter fabric is placed at the outlet end of the permitted culvert. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.



# Permit # 21-005

Status Report: Approved

# **Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Curtis Swanson		10370 160th Avenue NW Thief River Falls, MN 56750		tel: mobile: 218-686-3974 fax:

# **General Information**

(1) The proposed project is a:

Culvert Installation / Removal / Modification

- (2) Legal Description
- (3) County: Pennington Township: Bray Range: 45 Section: 36 1/4: SW1/4
- (4) Describe in detail the work to be performed. Add crossing
- (5) Why is this work necessary? Explain water related issue/problem being solved. Secondary access to land and building site for my renters.

# **Status**

Status	Notes	Date
Approved		Feb. 25, 2021
Received		Jan. 19, 2021

# **Conditions**

Red Lake Watershed District (RLWD) approval to install a 24" diameter culvert; as per approval of Pennington County Highway Department; proposed work is within County Road #68 Right-of-Way. Applicant shall ensure that all disturbed areas are seeded and that rock riprap with filter fabric is placed at the outlet end of the permitted culvert. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) N.J.O.

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.



Ecological and Water Resources - Groundwater Technical Analysis

# **Snegirev Well Interference Investigation Report**

Date	:

1/29/2021

To:

Bob Guthrie, Region 1 North District Groundwater Hydrologist

Carmelita Nelson, Well Interference Coordinator

From:

Michele Walker, LPG#30096, Groundwater Specialist,

Amanda Yourd, Hydrogeologist,

Jennifer L. Rose, PG #56562, Groundwater Specialist

Subject:

Snegirev Well Interference Complaint Investigation, Red Lake County

Reviewed by:

Ellen Considine, Groundwater Technical Unit Supervisor

Jay Frischman, Groundwater and Hydrogeology Unit Supervisor

CC:

Nathan Kestner, Northwest Regional Manager Tom Groshens, Region 1 North District Supervisor

#### **PROFESSIONAL GEOLOGIST**

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 Geologist under the Laws of the State of Minnesota.

Print Name: Signature:	Ellen	J Considine Da	gitally signed by Filen I Considine ate: 2021.01.29 11:02:10 -06'00'	
Date: 1/29/	/2021	License #:_	50027	_

# **Executive Summary**

The Fedor Snegirev well interference complaint is valid. Cumulative high capacity well pumping reduced water levels in the Complainant well such that there was not enough water for domestic use during the 2019 and 2020 irrigation seasons. Based on the available information, pumping from the following five authorized irrigation wells within three miles of the Complainant well likely contributed to this well interference (listed in order according to permit number):

- 2014-1853 Bill Hess
- 2015-0699 David Bachand and Mary Lynn Bachand Inc.
- 2015-2249 Brent Strand
- 2016-0375 Jeffrey Bachand
- 2019-3035 Brent Strand

It is recommended that a new, deeper well be installed in order to provide adequate water supply for domestic use. Depending on the existing pump specifications, a new pump may also be required.

# Introduction

On August 20, 2020, the Minnesota Department of Natural Resources (DNR) was notified of a potential well interference at a home owned by Fedor Snegirev (referred to as "Complainant" in this report). There are four people living at the house in addition to six horses, four dogs, and four cats. The location of the home is in Lambert Township (Section 33) of Red Lake County, approximately five miles southeast of the City of Brooks (Figure 1). DNR mailed the Water Well Information and Complaint Questionnaire (well interference form) to the Complainant on August 20, 2020. The completed form was submitted to the DNR on August 28, 2020.

DNR sent letters to permitted groundwater appropriators within three miles of the Complainant's residence on September 2, 2020. The letters notified the permit holders of the well interference in the area, and requested that they submit monthly water use records to DNR for the 2020 irrigation.

On September 23, 2020, a seven-day aquifer pumping test was conducted on well 829001 for a groundwater appropriation permit amendment 2014-1853 (Bill Hess), located approximately 1.3 miles to the southeast of the Complainant well (Figure 1). The aquifer test Production well (829001) is unpermitted, but was used to appropriate water in 2018 and 2019 before the permit amendment for 2014-1853 was submitted to DNR. The original well associated with the Hess permit 2014-1853 (803608) is no longer is use, but was used as a monitoring location. The aquifer test on well 829001 was planned before the DNR received this well interference complaint, and the aquifer test plan was modified slightly in order to collect more data relevant to this investigation. DNR sent another letter to the groundwater appropriators on October 7, 2020. This letter informed the irrigators that the well interference report would take approximately three months to complete because DNR needed time to analyze the aquifer test, and that no further action was needed from them at this time.

The Complainant reported to DNR on January 20, 2021 that water supply issues had persisted at least throughout December of 2020.

This report summarizes the well interference complaint, reviews the 2014-1853 aquifer test results within the context of the Complainant well, and investigates the connection between nearby high capacity pumping wells and the domestic well. Conclusions and technical recommendations are provided. As of the date of this memo, the interference has not been resolved and the Complaint continues to have water supply problems.

# **Complaint Information**

During the August 20, 2020 initial complaint telephone call, the Complainant stated that when he used water from his well (no unique well number – in process) for the horses on site, there would be no water in the house. In addition, he said that if the garden sprinklers were on, pressure was low and there was generally not enough pressure to run the sprinklers. The Complainant stated that this water supply problem began in August 2019, but went away in the fall of 2019. The water supply issues began again in late May or early June of 2020.

According to the Complaint Questionnaire (Appendix A) and information collected on site, the Complainant purchased the property in 2015. The Complainant reported that there were taste and odor problems with the well a few years ago (possibly sometime in 2018). A well driller (Leslie Berg of Berg Well Drilling), used chlorination to resolve the problem at

that time. Mr. Berg noted that the well appeared fine at that time and was able to provide sufficient water. He was unable to find water level information from this visit.

The Complainant stated in the August 20, 2020 telephone call that he feels that the nearby irrigators to the east are causing the well issues based on the timing of irrigation and when they experience water supply issues.

On January 20, 2021, the Complainant reported to the DNR that as recently as late December 2020, the well still had domestic supply problems. He reported that when the outside hydrant is used, there is not enough water to supply the house. Additionally, the Complainant said that the water pressure in the outside hydrant is low, and pulsates with changes in water pressure.

# **Initial Site Visit**

On August 28, 2020, DNR staff met the Complainant and his well driller, Leslie Berg, on-site to investigate the out-of-water complaint. The Complainant had not submitted the well interference forms before the site visit. The DNR brought the forms to the site and the Complainant requested to dictate the answers to a DNR staff person. After the forms were completed via dictation, the Complainant reviewed, verified, signed, and submitted the forms to DNR on-site (Appendix A). Mr. Berg also verified that the well driller portion of the forms was completed with the correct information.

During this site visit, the well driller removed the pump from the well to allow DNR to take water levels and to determine the well depth (Appendix B; Figure B-1 and B-2). The well information collected on this site visit is shown in Table 1. The well bottom felt hard, indicating that the well screen was not filled with sediment. The well driller confirmed this. DNR examined the pump and drop pipe after it was removed from the well. The well drop pipe had significant iron deposits, but the well driller stated that the pump and drop pipe were in good condition and did not appear to be obstructed (Figure B-2 and B-3). The well driller noted that the pump is located just above the well screen and cannot be lowered any further. Although there is no well log for this well, and no available previous water level measurements, the iron deposits on the drop pipe suggest that water levels were previously at 8.5 feet below top of casing long enough for iron deposits to accumulate (Figure B-3). This suggests that the static water level collected August 28, 2020 is approximately 4 feet lower than in the past when the iron staining occurred.

After DNR measured the well depth and depth to water, the well driller chlorinated the well and replaced the pump. He then turned the water on at the nearby hydrant to remove the sediment from the well that was agitated by the pump work. The hydrant pumped for approximately 10 to 15 minutes before a 'sucking sound' was heard in the well. Mr. Berg noted that he can hear when the water level drops below the pump intake in the well because it sucks air. The hydrant flow rate reduced significantly at this point. The rate varied after this with surges of higher and lower pumping rates. Measurements of the flow rate were completed after the surging in rates started (Table B-1). These observations indicate the water level in the domestic well drops to near the pump intake when pumping (approximately 30 feet). The well driller said that the pump could not be lowered in the well any further because the pump was already just above the well screen (near bottom of the well). Mr. Berg said that there were no well construction issues, so the only solution was to drill a new, deeper well.

**Table 1: Complainant Domestic Well Construction Information** 

Unique Well Number	To be assigned		
UTM Location <sup>+</sup>	Easting 281569 meters		
O I W Location	Northing 5295412 meters		
Measuring Point (MP)	1.43 feet above land surface		
Measured Well Depth	48.15 feet below MP		
Ground Elevation <sup>+</sup>	1175.41 feet		
Static Water Level	12.73 feet below MP on 8/28/2020		
Drop Pipe Depth	45.78 feet below MP Submersible		
Pump Type			
Well Diameter	4 inches		
Screen Depth	Approximately 46-48 feet (based on well depth and drop pipe length)		
Well Casing Type	PVC		
Obstructions	Sealed pitless unit approximately 7 to 8 feet below MP		
Iron staining on Drop Pipe	8.5 feet below top of casing which is approximately equal to MP		
Department of Aguifan	Quaternary Buried Artesian (Shallow Confined) based on well depth and		
Penetrated Aquifer	nearby well lithology		

<sup>\*</sup> measuring point is top of casing south side

Based on the descriptions by the Complainant and Mr. Berg and the field observations made by DNR, there is water in the well and the well screen is not plugged. Iron staining on the drop pipe indicates the water level collected during this visit is approximately four feet lower than in the past. Additionally, pumping of the well during the field visit showed that the water level in the well can drop significantly (approximately 30 feet) due to domestic use alone.

# **Setting**

The Complainant's residence is located in a rural setting used predominantly for agricultural farming. The nearest public water feature is the Hill River located approximately 1.75 miles to the east of the residence. The topography for the area is predominantly level or flat terrain with some gently rolling terrain created by former Glacial Lake Agassiz.

# Hydrogeology

Glacial deposits consisting of unconsolidated sand, gravel, silt, and clay cover the entire area, and range in thickness from 100 to 350 feet (Lindgren, 1996). Groundwater aquifers composed of unconsolidated sand and gravels are found within these glacial deposits. Local hydrogeologic cross-sections showing the aquifers in this area from available well logs are attached in Appendix C (Figure C-1 to C-4).

Surficial water table (unconfined) aquifers are not known to be laterally extensive and are typically limited to the Glacial Lake Agassiz beach ridge deposits (Lindgren, 1996) or river sediment (Harris, 2007). Water table aquifers are observed locally near the Hill River and along nearby beach ridge deposits (Figures C-2 to C-4).

The deeper unconsolidated sand and gravel deposits encompass a buried aquifer system consisting of collapsed channel deposits that are typically confined by glacial till (Lindgren, 1996 and Harris, 2007). The groundwater flow direction is generally to the northwest (Figure C-3). A topographically high glacial moraine area containing several surface water bodies is mapped approximately three miles to the south and east. The moraine likely serves as a groundwater recharge area (Figures C-2 to C-4).

<sup>+</sup>well was surveyed by DNR on 10/20/2020

Lindgren (1996) classifies the aquifers within the buried aquifer system based on the depth to the top of each aquifer. These aquifers are referred to as Shallow, Intermediate, Deep, and Basal Confined aquifers (Appendix C). The Intermediate and Deep Confined aquifers are mapped as laterally extensive in the area within ten miles of the Complainant well (Lindgren, 1996). The hydrologic connectivity between the aquifers varies (Lindgren, 1996). In some locations, the Shallow and Intermediate Confined aquifers or Intermediate and Deep Confined aquifers appear to be interconnected as the thickness of the sand and till deposits varies (Figure C-2). In areas where the sand layers are thick (channel deposits), the aquifers are connected vertically.

Recent aquifer testing within ten miles of Complainant well (Rose, 2020; Rose and Nelson, 2018; Rose and Nelson, 2019; and Walker, 2018) demonstrates that the area's multiple unconsolidated buried aquifers are leaky confined and are strongly interconnected when pumped. High capacity wells that have been tested in this area reduce water levels in buried aquifer wells at least one mile away and up to around two miles away. Pumping the deeper aquifers can reduce water levels in the Shallow Confined aquifer. Aquifer tests have shown that recharge to the Shallow Confined aquifer comes partially from the deeper aquifers, so recharge is often limited in the Shallow Confined aquifer when the deeper aquifers are pumped (Rose and Nelson, 2019). This causes water levels in the some of the shallower aquifers to decline further or take a long time to recover following pumping events in deep aquifers.

Local aquifer test results (Table D-1) within three miles of the Complainant well confirmed the following:

- Water levels in the water table wells did not appear to respond due to pumping in the Shallow/ Intermediate Confined aquifer as seen during the 2015-0699 Bachand aquifer test (Rose, 2015a). This indicates the connection between surface water features and buried aquifers is limited.
- Buried channel aquifers with geologic barrier boundary conditions have been documented in this area. Barrier boundaries occur in areas where there is a change in geology, such as aquifer thinning or change in sediment size that is significant enough to restrict the flow of groundwater. These boundaries limit the extent of aquifers and prevent groundwater from flowing freely between aquifers (limit aquifer connection). For example, pumping the 2019-3035 Strand irrigation well during a well test did not lower water levels in the 2012-1282 Yaggie irrigation well, even though they are one mile apart and appear to be screened at a similar depth (Rose, 2020b). This indicates that there is a geologic barrier boundary between the two wells, which prevents groundwater from flowing from one well to the other.

Based on the Complainant's well depth and available well lithology, the Complainant's well is completed in the Shallow Confined aquifer (Figures C-2 and C-3). The Shallow Confined aquifers are not horizontally extensive and vary in thickness. Previous aquifer tests have shown that pumping from deeper aquifers can lead to drawdown and limit recovery in Shallow Confined aquifers (Rose and Nelson, 2019).

# **Groundwater Users**

Groundwater is used for agricultural irrigation and domestic water supply in this area. Domestic wells in this area typically source water from the water table or Shallow Confined aquifers (Figures C-2 to C-4). Irrigation wells are typically screened in the deeper aquifers (Intermediate or Deep Confined) because the aquifers are thicker (Figure C-2). There are six groundwater agricultural irrigation permits within three miles which source water from deeper aquifers (Figure 1; Table 2).

Since 2012, both the number of permitted agricultural irrigation appropriators and the volume of water that the appropriators use have increased (Figure 2). Agricultural irrigators within three miles of the Complainant well reported using more groundwater in 2018 than previous years.

The volume of water that each appropriator uses varies depending on how much land is irrigated. Some appropriators have up to three pivots connected to the one well (2015-2249 Strand, 2015-0699 Bachand, and 2014-1853 Hess).

**Table 2: Groundwater Appropriators** 

Permit Number and Land Owner	Permitted Rate, Volume, and Acres	Unique Well Number and Depth	Pumped Aquifer and Thickness	Distance to Complainant Domestic Well
2014-1853 Bill Hess (DNR reviewing permit amendment)	850 gpm, 48 MGY, 300 acres	803608; 148 feet and 829001; 236 feet	Intermediate/Deep Confined	1.1 to 1.3 miles Southeast
2015-2249 Brent Strand	1600 gpm, 76 MGY, 420 acres	817065; 226 feet	Intermediate/Deep Confined	2.2 miles Southwest
2012-1282 Michael Yaggie	800 gpm, 51.5 MGY, 135 acres	788660; 148 feet	Intermediate	2.6 miles West
2016-0375 Jeffrey Bachand	800 gpm, 37 MGY, 112 acres	818220; 265 feet	Deep Confined	2.8 miles North
2019-3035 Brent Strand	1100 gpm, 45 MGY, 265 acres	847224; 180 feet	Intermediate Confined	2.9 miles Southwest
2015-0699 David Bachand and Mary Lynn Bachand Inc. (DNR reviewing permit amendment)	1500 gpm, 99 MGY, 405 acres	805423; 161 feet	Shallow/Intermediate Confined	3 miles East

# **Groundwater Level Monitoring**

Recent expansion of groundwater use for irrigated agriculture in Red Lake and Polk counties has led to seasonal groundwater level declines and domestic water supply problems (Krog and Rose, 2020). Groundwater levels are monitored within three miles of the Complainant's well by permit holders in dedicated observation wells (811826 Bachand, 849218 Strand, and 849219 Strand) and by DNR in private wells during the recent 2014-1853 Hess aquifer test (marked as purple squares in Figure 1). Water levels collected as part of the recent aquifer test are discussed in the Data Collection and Results section of the report.

Since aquifer testing in 2015, groundwater levels have been monitored in the Bachand observation well (811826, Shallow/Intermediate Confined aquifer). Figure 2 shows that groundwater levels in the Bachand observation well decline during the irrigation season. In 2015, a six foot irrigation season decline was observed. During the past three irrigation seasons, a 10 to 12 foot irrigation season decline was observed. Groundwater levels typically recover in the fall, decline again during the winter by one to three feet, and rise again from spring snowmelt and precipitation by 1.5 to three feet.

Seasonal pumping signatures due to the nearby (0.25 miles south) pumping from well 805423 (Bachand 2015-0699) are illustrated in the hydrograph (Figure 2). However, groundwater trends recorded in the Bachand observation well from 2015-2020 also show that cumulative pumping from all permitted users, not just the 2015-0699 Bachand irrigation well, impacts water levels. For example, the lowest water level in observation well 811826 was recorded in 2018, which is when *all* permitted users reported higher use (Figure 2). The highest groundwater levels in this well were recorded in

2016 irrigation season, a season when use from permitted users was lower and there were fewer permitted users in the area.

Groundwater level monitoring in the two Strand dedicated observation wells began in August 2020 as part of 2019-3035 permit conditions. The Strand Intermediate/Deep Confined observation well (849218) screen was found to be plugged therefore the data is not presented in this report. The Strand Shallow Confined observation well (849219) groundwater levels (Figure 2) indicates water levels were lowest in August and began recovering following the irrigation season.

As described in the Hydrogeology Section above, a well test for permit 2019-3035 (Strand) showed that there is a barrier boundary that limits flow between the 2019-3035 Strand and 2012-1282 Yaggie irrigation wells. Additionally, groundwater levels in the 2012-1282 Yaggie irrigation well are approximately 20 feet lower than other wells in the area (Figure 3). This evidence suggests that the 2012-1282 Yaggie irrigation well sources water from a different aquifer system and is not directly connected to the Strand irrigation wells.

# **Data Collection and Results**

#### Permit Holder Water Use Records

DNR requested 2020 water use records from groundwater appropriators with irrigation wells completed in confined aquifers within three miles of the Complainant's well (Figure 1). A three-mile radius was applied because DNR has observed that high capacity wells in this area typically reduce water levels in wells around two miles of the appropriation and multiple appropriators pumping at the same time would increase this distance. Water appropriation records were not requested from surface water appropriators (dug pits and Hill River) because, as noted above, there is a lack of connectivity between the water table aquifers and the buried confined aquifers. All of the permit holders use water at similar times throughout the irrigation season. Water use records provided show that the 2020 irrigation season began in April with primary use occurring in June through August (Table 3 and Figure 4). This corresponds to the time when the Complainant began to have water supply issues in 2020. Three irrigation wells pumped in September and one irrigation well pumped in October 2020 (Figure 4). The Complainant reported that water supply issues persisted at least through winter of 2020.

A review of the 2019 monthly use data from the same irrigators show a similar pattern of use with no appropriation after September 2019 (Figure 4). Only one appropriator, Brent Strand (2015-2249), had a small use in September of 2019. The remaining appropriators ceased after August 2019. The cessation of irrigation in 2019 coincides with when the Complainant noted that his water issues ceased in the fall of 2019.

The total volume used by appropriators in the area was similar in 2019 and 2020 (Figure 2 and Table 3).

Table 3. Nearby Groundwater Appropriators and Water Use Information

Permit Number and Land Owner	Pumped Aquifer	2019 Irrigation Season Total Use (gallons)	2020 Irrigation Season Total Use (gallons) 59,222,000	
2015-0699 David Bachand and Mary Lynn Bachand Inc.	Shallow/Intermediate Confined	55,999,900		
2015-2249 Brent Strand	Intermediate/Deep Confined	26,650,300	31,255,618	
2016-0375 Jeffrey Bachand	Deep Confined	16,027,600	19,304,500	
2019-3035 Brent Strand	Intermediate Confined	0	14,408,860	
2012-1282 Michael Yaggie	Intermediate Confined	15,048,000	6,312,000	
2014-1853 Bill Hess	Intermediate/Deep Confined	18,000,000	0	

# Hess 2014-1853 Aquifer Test

An aquifer test was conducted in late September through early October 2020, for the Bill Hess permit amendment (2014-1853). The 2014-1853 new irrigation well (829001) is located approximately 1.3 miles to the southeast of the Complainant well (Figure 1). The well was pumped for seven days from September 23 to September 30, 2020 at variable rate between 700 and 800 gpm. Other wells that were monitored prior to, during, and after the pumping phase of the aquifer test are indicated by the purple squares in Figure 1. The DNR aquifer test report is in production and will be available on MPARS permit file 2014-1853 (Yourd, 2021 – in production).

The Hess aquifer test was planned before the DNR received this well interference complaint. However, due to the close proximity of the 2014-1853 new irrigation well and Complainant well, the aquifer test plan was modified to gather more information relevant to this investigation.

# Proxy well

The DNR visited the Complainant well on September 16, 2020 to take a manual water level measurement in the well prior to starting the aquifer test. A data logger could not fit in the Complainant well, so the well was not monitored with a data logger during the test. Furthermore, the Complainant had concerns about the DNR visiting the well when they were not home. The Complainant well was therefore not visited at any point during or after the Hess aquifer test. However, the DNR noted that an unused domestic well (unique number 758848) was located approximately 500 feet west of the Complainant well and obtained permission from the owner to evaluate and eventually monitor this well. This well is referred to as the "County Road 7 well" in this report.

The County Road 7 well was used as a proxy for the Complainant well during the test since it is a similar depth (68 feet). The well log indicates that the County Road 7 well is screened in the Shallow Confined aquifer (24 feet thick and composed of gravel). Table 4 shows additional construction information for the County Road 7 well. DNR instrumented the County Road 7 well with a logger on September 23, 2020, approximately three hours before pumping of the Hess Production well began. The data logger in the County Road 7 well was set to record water levels once every minute during the aquifer test.

**Table 4: Proxy Well Construction Information** 

758848				
Easting 281400.24 meters				
Northing 5295404.28 meters				
1.91 feet above land surface				
68 feet below MP as recorded on well log				
1171.68 feet				
9.53 feet below MP on 9/23/2020 (DNR visit)				
5 feet below MP on 4/17/2008 (well installation date)				
25 feet below MP				
Submersible				
4 inches				
60-68 feet				
PVC				
Quaternary Buried Artesian (Shallow Confined) based				
on well depth and nearby wells				

<sup>\*</sup> measuring point is top of casing south side; +well was surveyed by DNR on 10/20/2020

The DNR visited the County Road 7 well twice more to collect manual measurements (9/30/20 and 10/15/20). The data logger was removed from this well on October 15, 2020.

Figure 5 shows the water levels in the County Road 7 well during aquifer test pumping and after the pump was shut off. Static water level measurements from the Complainant well are also shown in Figure 5.

Hess Aquifer Test Results

Pre-test water level monitoring began in the Hess irrigation wells (829001 and 803608; Intermediate/Deep Confined) in late November 2019 (Figure 6) as the test was originally planned to start in December 2019, but was delayed. As described previously, water levels were also being collected in the 811826 Bachand observation well (Shallow/Intermediate Confined) and 849219 Strand observation well (Shallow Confined). The following is observed in the pre-test water level monitoring data (Figure 6):

- Water levels in the monitored wells show similar trends and are similar in elevation, indicating that the wells are hydrologically connected and are screened within the same groundwater system.
- The 2016-0375 Bachand Irrigation well groundwater level is at a lower elevation than the Hess, Bachand, and Strand monitored wells, indicating 2016-0375 Bachand is down gradient from these wells.
- Water levels decreased in the Hess irrigation wells by approximately four feet during the 2020 irrigation season even though the Hess irrigation wells were not pumped. This indicates hydrologic connection to nearby high capacity wells that were in use during the 2020 irrigation season.
- The lowest water elevations occurred in August 2020 then began to increase again when the majority of the irrigators in the area ceased or greatly reduced water use.

Pumping the new Hess irrigation well (829001; Intermediate/Deep confined aquifer) reduced water levels in the source aquifer wells up to 2.2 miles away (803608 Hess Old Irrigation well, Hess Shop well, and 811826 Bachand observation well), and shallower wells up to 1.4 miles away (758848 County Road 7 well and 529341 Fish well). This confirms the Intermediate/Deep Confined is connected to shallower aquifers in the area through vertical leakage. This is consistent

with previous aquifer test results described above. Water level declines were not observed in wells further away (including the Bachand 2016-0375 Irrigation well).

Following the pumping phase of the aquifer test, water levels recovered quickly in the Hess irrigation wells (Intermediate/ Deep Confined aquifer) while water levels in the more distal monitored wells in the source and shallower aquifers (including the County Road 7 well and 811826 Bachand observation well) continued to decline. Water levels partially recovered in 811826 Bachand Deep Observation well but then water levels began to decline again when 2015-0699 Bachand irrigation well pumped again on October 7, 2020. The water levels in the County Road 7 well did not recover at all during the monitored period as they continued to decline but the rate of decline slowed (Figure 5). This is consistent with the results from other aquifer tests in this general area.

# **Data Analysis**

To determine if pumping by each of the appropriators listed in Table 2 could have caused drawdown at the Complainant well during the 2019 or 2020 irrigation seasons when water supply problems were reported, it was necessary to combine and analyze multiple sources of data. These data sources include the water level monitoring and geology information described above, as well as predictive modeling in AQTESOLV (Duffield, 2007). Model inputs include aquifer parameters calculated from previous nearby well tests (Appendix D), and simulated pumping cycles based on reported irrigator pumping monthly records for the 2020 irrigation season. This data analysis is described below for each of the appropriators investigated.

#### 2014-1853 Hess

The 2014-1853 Hess aquifer test showed that pumping the Hess irrigation well (829001) caused drawdown in the County Road 7 well (758848), the proxy for the Complainant well. This shows that the 2014-1853 Hess irrigation well and the Complainant well, both completed in the Shallow Confined aquifer, are connected via vertical leakage to the pumped aquifer (Intermediate/Deep Confined). This vertical connection between aquifers is consistent with other results in the area as described in the Setting section of this report.

Hess reported using water from well 829001 during the 2019 irrigation season, but not during the 2020 irrigation season. Pumping of the Hess 2014-1853 irrigation well 829001 therefore contributed to Complainant well water supply issues in 2019.

# 2015-0699 David/Mary Lynn Bachand

The 2015-0699 Bachand irrigation well (805423) is screened in the Shallow/Intermediate confined aquifer, and is 0.25 miles from the 2015-0699 observation well (811826), which is screened in the same aquifer. Approximately one foot of drawdown was recorded in the 2015-0699 observation well during the 2014-1853 Hess aquifer test (Figure 6), which indicates that the 2014-1853 Hess and 2015-0669 Bachand irrigation wells are connected. This connection is also supported by groundwater monitoring data and hydrogeologic cross sections (Figure C-2). Since the 2014-1853 Hess irrigation well is connected to the Complainant well, and is also connected to the 2015-0699 Bachand irrigation well and the Complainant well.

In order to predict if pumping the 2015-0699 well causes drawdown at the Complainant well, aquifer parameters calculated from the 2015-0699 Bachand aquifer test, and a simulated irrigation season based on reported 2020 pumping

cycles were used in a forward model. The forward model predicted approximately two feet of drawdown at the Complainant well after one irrigation season of pumping the 2015-0699 Bachand irrigation well.

Bachand 2015-0699 reported using water in 2019 and 2020. Pumping of the 2015-0699 Bachand irrigation well therefore contributed to Complainant well water supply issues in 2019 and 2020. No water use has been reported from Hess well 803608, so it did not contribute to water supply problems.

#### 2015-2249 Strand and 2019-3035 Strand

Water levels were collected during the 2019-3035 Strand well test (Figure 3; Rose, 2020b) and subsequent monitoring during the 2020 irrigation season. This data indicates that the irrigation wells associated with 2019-3035 Strand and 2015-2249 Strand are connected to each other and pumping them causes drawdown in the Shallow Confined aquifer. Therefore, these two wells were examined together for this analysis.

There are no documented barrier boundaries between the Strand irrigation wells and the Complainant well. Simulated pumping cycles and the aquifer parameters calculated from the 2019-3035 test (Appendix D) were used to estimate drawdown at the Complainant well from pumping the two Strand wells. The simulated pumping cycles were calculated based on reported 2020 pumping information from both wells. The forward model predicted one to two feet of drawdown at the Complaint well due to pumping both Strand irrigation wells for the simulated 2020 irrigation season.

The 2015-2249 Strand irrigation well used water during the 2019 and 2020 irrigation season, and the 2019-3035 Strand irrigation well reported using water in 2020. The 2015-2249 Strand irrigation well contributed to water supply issues in the Complainant well in 2019 and 2020. In addition, the 2019-3035 Strand irrigation well contributed to water supply issues in 2020.

# 2016-0375 Bachand

There are very few well logs available near the 2016-0375 Bachand irrigation well, and no aquifer tests were conducted at this well. Based on available information, it was determined that the 2016-0375 Bachand irrigation well is likely connected to the Complainant well via vertical leakage. The following points outline how the DNR reached this determination:

- The 2016-0375 Bachand irrigation well is screened in the Deep Confined aquifer. The Deep Confined aquifer has been mapped by Lindgren (1996) as horizontally extensive in this area, which means the aquifer exists at most locations, and likely exists at the site of the Complainant well.
- Hydrogeologic cross sections and results of nearby aquifer tests (Table D-1) show no evidence of barrier boundaries in the Deep Confined aquifer between the Complainant well site and 2016-0375 Bachand irrigation well.
- Nearby aquifer test results (Table D-1) show that deeper aquifers, such as the Deep Confined aquifer, are connected to the Shallow Confined aquifers via vertical leakage.
- The 2016-0375 Bachand irrigation well is topographically and hydrologically down gradient of the Complainant well. In general, wells to the southeast have a higher groundwater elevation than to the northwest (Figure C-4).

This is why the 2016-0375 Bachand irrigation well located 2.8 miles north of the Complainant well has a lower water elevation (approximately 17 feet lower) compared to the Complainant well (Figure 6).

• Pumping from the 2014-1853 Hess well during the aquifer test did not cause water levels to decline in the 2016-0375 Bachand Irrigation well, which is 3.5 miles from the Hess wells. However, based on the pumping rate and length of the test, drawdown was not expected. This is consistent with other aquifer test results in the area, where drawdown is typically not observed more than two miles from the aquifer test well (Table D-1).

After it was determined that the 2016-0375 Bachand irrigation well and the Complainant well are connected via vertical leakage, hydrogeologic modeling was used to determine if pumping the 2016-0375 Bachand irrigation well could cause drawdown in the Complainant well. An AQTESOLV (Duffield, 2007) forward model (two-aquifer solution) was applied using aquifer parameters derived from the 2014-1853 Hess aquifer test (Appendix D), and simulated pumping cycles based on submitted records for the 2016-0375 Bachand irrigation well. The model simulated pumping the 2016-0375 Bachand irrigation well for one irrigation season. Model results showed that after one irrigation season, pumping the 2016-0375 Bachand irrigation well could have caused approximately 0.5 feet of drawdown at the Complainant well.

Bachand 2016-0375 reported using water in 2019 and 2020. The 2016-0375 Bachand irrigation well therefore contributed to water supply issues in the Complainant well in 2019 and 2020.

# 2012-1282 Yaggie

As discussed in the Setting section of this report, the 2019-3035 Strand well test did not cause drawdown in the 2012-1282 Yaggie irrigation well (788660), which indicates that there is likely a barrier boundary between both Strand irrigation wells and the Yaggie irrigation well. Groundwater levels in the 2012-1282 Yaggie irrigation well are approximately 20 feet lower than water levels collected in nearby wells (Figure 3). Together, these facts indicate that the 2012-1282 Yaggie irrigation well is screened within a different aquifer that is not connected to wells to the south or east. The 2012-1282 Yaggie irrigation well is therefore not connected to the Complainant well and did not contribute to water supply problems in the Complainant well in 2019 or 2020.

# **Conclusions**

The well interference complaint has been determined to be valid. The interference is due to combined use from the following permitted appropriators (listed in numeric order according to permit number):

- 2014-1853 Bill Hess
- 2015-0699 David Bachand and Mary Lynn Bachand Inc.
- 2015-2249 Brent Strand
- 2016-0375 Jeffrey Bachand
- 2019-3035 Brent Strand

Evidence that leads to this conclusion is as follows:

- 1. The depth of the Complainant domestic well indicates it is screened in the Shallow Confined aguifer.
- 2. The Shallow Confined aquifer has limited availability of water.

- a. Water levels in this aquifer are slow to recover after water levels drop due to nearby high capacity pumping. This is consistent with other aquifer tests and water level monitoring in the area.
- b. Water levels in the Complainant well can drop by approximately 30 feet due to domestic use alone.
- 3. The aquifer water levels in the Complainant well dropped at least 4 feet from historic levels based on site observations (using the rust staining on the pump drop pipe).
- 4. The well driller on site during the field investigation on August 28, 2020 did not find any problems with the construction of the Complainant well or the mechanics of the pump.
- Groundwater appropriation for irrigation has been increasing in the area over the past five years, and water levels decrease during the irrigation season compared to off-season (winter) levels.
- 6. The reduction in water levels during the irrigation season near the Complaint well correlates to permitted irrigation groundwater use from multiple appropriators in the area.
- 7. Predictive modeling, hydrogeologic cross sections, and groundwater monitoring data confirm that the irrigation wells of the five permitted users listed above are connected to the Shallow Confined aquifer via vertical leakage. This is consistent with previous aquifer test results and monitoring in the area.
- 8. As it is currently constructed, the Complainant well cannot fully meet the domestic use requirements during the irrigation season. The pump cannot be lowered any further in this well.

# **Technical Recommendations**

It is recommended that a new, deeper well be constructed to provide an adequate water supply to the Complainant residence. This may require installing the new well in the Intermediate or Deep Confined aquifer in order to provide adequate water to the domestic well. Based on a nearby well log at the 2014-1853 Hess irrigation well 829001, the Intermediate/Deep Confined aquifer exists approximately 187 to 236 feet below land surface.

Depending on the existing pump specifications, a new pump may also be required. The pump should be set deep enough to account for the large self-pumping drawdown (which is around 30 feet and typical of the Shallow Confined aquifer in this area) and water level declines from nearby high capacity pumping.

Red Lake County groundwater often has naturally occurring arsenic. It is recommended that the Complainant have the existing well water tested and the new well water tested at a laboratory certified to test drinking water for arsenic. Because arsenic levels can take some weeks or months to stabilize in some newly constructed wells, the Minnesota Department of Health (MDH) recommends resampling the new well in a few months to see if the arsenic level has changed. The MDH website has a list of accredited laboratories, health risks, and water treatment suggestions at: <a href="https://www.health.state.mn.us/communities/environment/water/wells/waterquality/arsenic.html">https://www.health.state.mn.us/communities/environment/water/wells/waterquality/arsenic.html</a>. If the new well has arsenic levels above 10 micrograms per liter, MDH recommends installation of a water treatment unit that reduce arsenic.

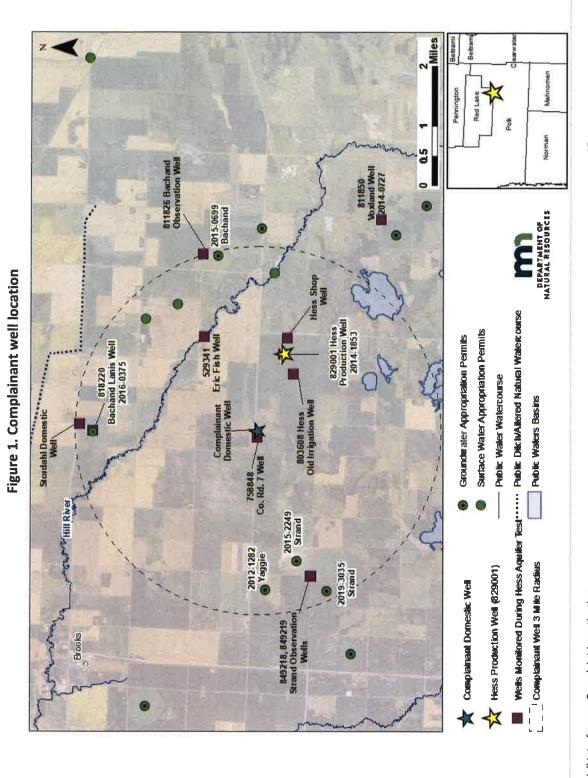
DNR Groundwater Specialist Michele Walker is available to answer questions about the new well specifications:

Email: Michele.Walker@state.mn.us

Phone: 218-308-4212

# References

- Duffield, G.M., 2007. AQTESOLV for Windows Version 4.5 User's Guide, HydroSOLVE, Inc., Reston, VA.
- Krog, R., and Rose, J.L., Red Lake and Polk County monitoring summary through 2019: Minnesota Department of Natural Resources Ecological and Water Resource, MPARS permit 2015-0699.
- Lahti, L., 2017, 2016-0375, Anthony Bachand, Red Lake County: Minnesota Department of Natural Resources Ecological and Water Resource, MPARS permit 2016-0375.
- Lindgren, R. J., 1996, Availability and quality of water from drift aquifers in Marshall, Pennington, Polk, and Red Lake Counties, northwestern Minnesota: U.S. Geological Survey Water Resources Investigations Report 95-4201.
- Rose, J.L., 2015a, PA 2015-0699 Bachand, aquifer test analysis and evaluation of resource impacts: Minnesota Department of Natural Resources Ecological and Water Resource, MPARS permit 2015-0699.
- Rose, J.L., 2015b, Permit application 2014-1853 Hess, Red Lake County: Minnesota Department of Natural Resources Ecological and Water Resource, <u>MPARS permit 2014-1853</u>.
- Rose, J.L., 2019a, Groundwater technical review of permit application 2014-1853 Hess, Red Lake County: Minnesota Department of Natural Resources Ecologic and Water Resources, <u>MPARS permit 2014-1853</u>.
- Rose, J.L., 2019b, Lessard Well Interference Investigation, Red Lake County: Minnesota Department of Natural Resources Ecologic and Water Resources.
- Rose, J.L., 2020, Groundwater technical review of permit application 2019-3035 Strand, Polk County: Minnesota Department of Natural Resources Ecological and Water Resource, <u>MPARS permit 2019-3035</u>.
- Rose, J.L., and Krog, R., 2020, Aquifer test report for 2018-3621 Yaggie, Red Lake County, MPARS permit 2018-3621.
- Rose, J.L., and Nelson, R., 2018, Aquifer test report for permit 2016-1609 Pederson, Polk County: Minnesota Department of Natural Resources Ecological and Water Resource, <u>MPARS permit 2016-1609</u>.
- Rose, J.L., and Nelson, R., 2019, Aquifer test report and 2018 monitoring summary for 2017-2109 Tersteeg, Polk County: Minnesota Department of Natural Resources Ecological and Water Resource, <u>MPARS permit 2017-2109</u>.
- Walker, M., 2016, Technical review of groundwater appropriation permit amendment 2015-2249 Strand: Minnesota Department of Natural Resources Ecological and Water Resource, MPARS permit 2015-2249.
- Walker, M., 2018, Aquifer test report review, permit application 2014-1861: Minnesota Department of Natural Resources Ecological and Water Resource, MPARS permit 2014-1861.
- Yourd, A.R., 2021 in production, Aquifer test report for 2014-1853 Hess, Red Lake County, MPARS permit 2014-1853.



Well Interference Complaint Investigation

Well Interference Complaint Investigation

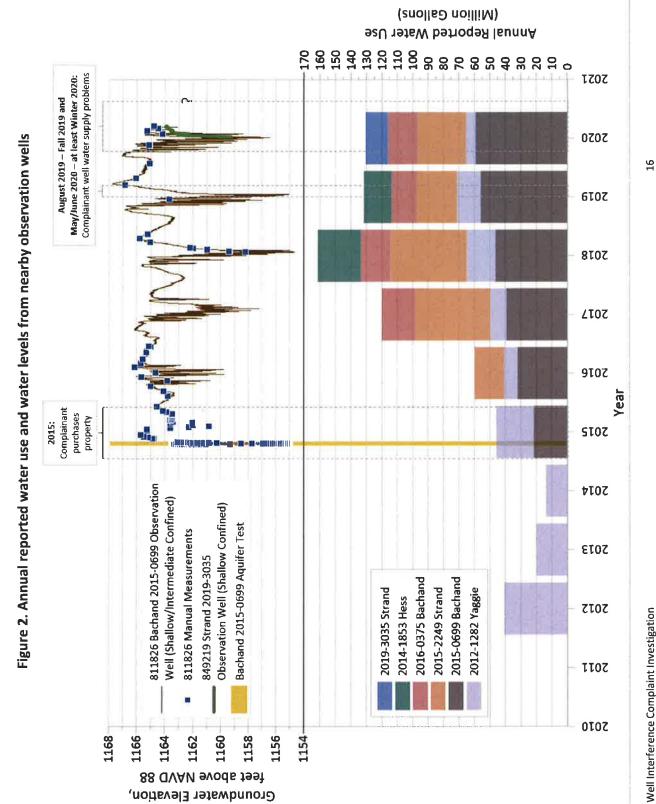
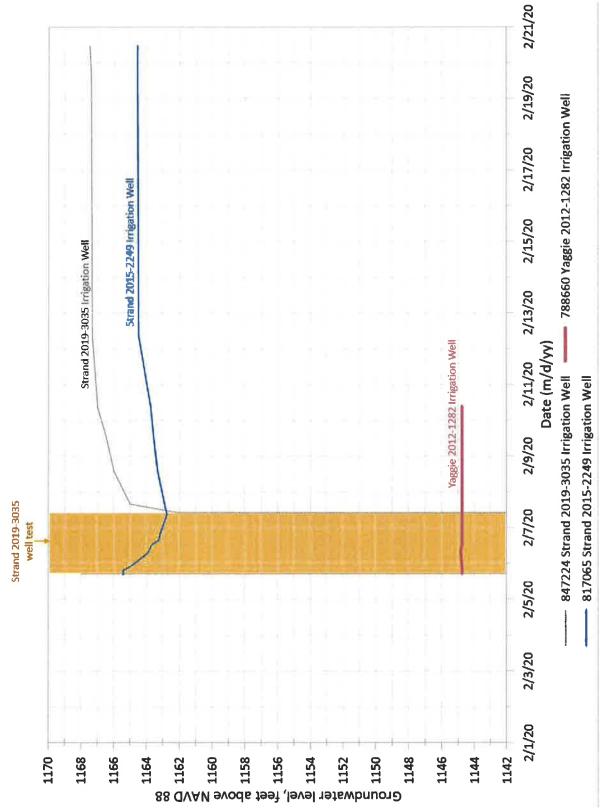
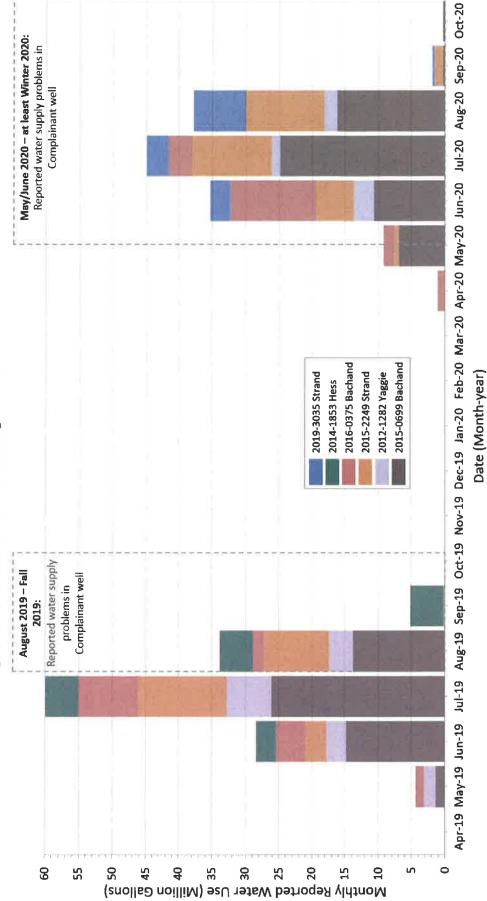


Figure 3. Strand 2019-3035 well test results









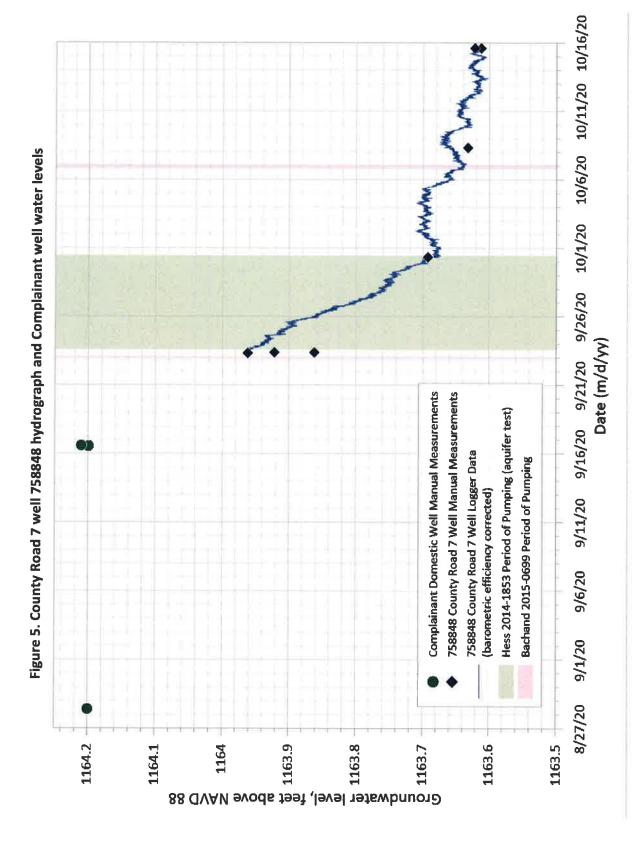
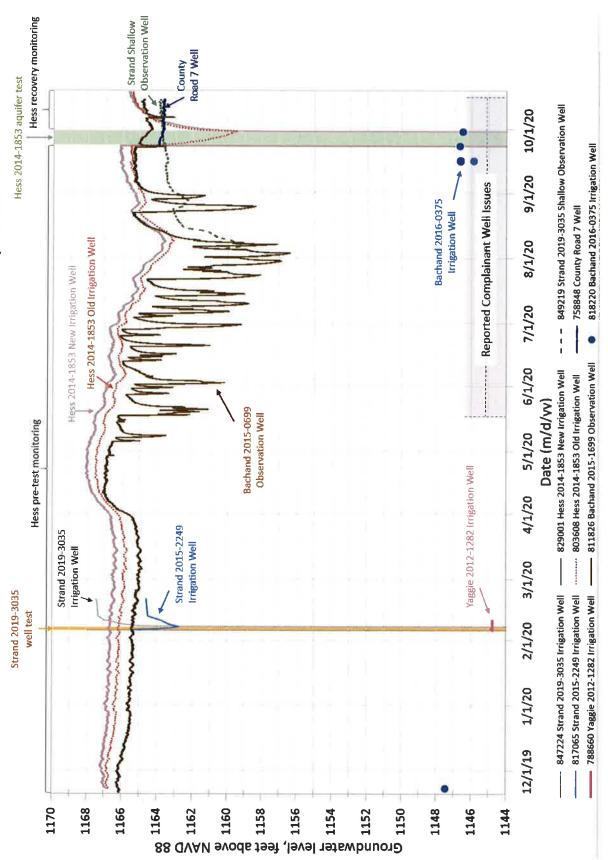


Figure 6. Groundwater level data near Complainant well and Hess 2014-1853 aquifer test results





# **WATER WELL INFORMATION**

Authorized Agents	1.00			Telephor Home (	15/9540L 16)189-2920	NW HE L
Emeil Addressa	81770m s	1. SE B. OOKS IN	1/4, 1/4, 1/4 o	le one sectiona). (19	howing the exact location of you (640 scree divided into 60, 40, 10 scree). Arison a mating the location of well(s).	•
Red Lake	Township Name	Yownship No.	Range	Section	1/41/4	
PART B Descri fame of Company which (11/4 K 17)		ater problems WEL	Date Complete	d		Present De ph 48 15
	eight Above (Below) La ( - ameter:	nd Syrface: Interval: from 13V	KAND-SELL (	☐ Alt Rote	Bored:	top and Coper
SCREEN: UN CA	omen (8		S Joen n.	Domestic Di Unestico Irrigation	A Amount in gallons per day (go god god god urrent Non-Pumping Weter Lev	Public Supply
Type Siol/Gage Soil between	Reand	Dis.: Lengts: FY	ITINGS;	Origi	nei Current	feet dele measured
TYPE:  (3) Submersible (3) Jet, Shellow (4) Jet, Deep (5) Reciprocesing (6) Centrifical	Age: 70'S ?  Pump Setting-submern (Below Ground Level)  Drop Pipe Length-nor	Pumping Rate: years		Original & C	wront Pumping Water Level Br nel Current Uni Kap Swart	method of measurement (sheet tape, of flow Land Surface:
PART C	(Below Ground Level)	45.	FLL CON	Flowing Wal		¢ No
ISING:	Filled with Sediments Incressed Other 92	Command (Describe method	anth additional of inspection):	aheets ee	needed.	
REEN (if one exists): Discressed (II) Discressed (II)	Resided/Corroded	Comment (Ocusion method	definapaction):	of hi	odejž tětějš	orke handing
JMP:  Therused  RustedCorrected	Blockical Other (%)	Comment (Describe method				
Rusted/Corroded Holse/Gradie	Water Maria.					
STRIBUTION:  Plugged Lines  Vectors in Unes	Other	Comment (Describe method	or impaction):	MA C	votex II grad	Castern of Cont
		nt Water Well Construction Cod		, 8 not, why e	rott	-2
PARTD	3e (%		SIGNATI	JRES kr:	Fisher	soro

#### COMPLAINT QUESTIONNAIRE

Please answer the following questions by providing as much information as possible. Attach any documents involved, auch as receipts, worldiets, bide, water level measurements, observation or related investigative information, etc.

when the water is run for the novses, there is no water in house when try to use sprinkless, water pressure is not enough to kun their 1) Describe the problem:

2) indicate the number of people, illvestock and other type(s) of water use supplied by the well(s):

Apeople, 6 horses, 4dogs, 4 cats

3) Suspected cause of the problem:

nearby irrigators to the east

4) Have you contacted well owner(s) whose well(s) you suspect might be affecting yours? Explain (provide their name, address and phone number)

ND

5) Past well problems? (when and what was the problem?):

NO post well problems, when first connected well to

6) Describe any maintenance that has been done on this well:

2018-bleogned well +Inspected = OK

7) Have you corrected the problem? Explain:

8) How do you feel this problem can be fairly resolved? (If possible, attach a list of work, materials, and costs needed to resolve the problem) drill new well

9) Have you complained before? When? To whom?

10) General Comments:



Figure B-1. Photograph of Complainant well (no unique number)

Figure B-2. Photograph of well pump and iron stained drop pipe

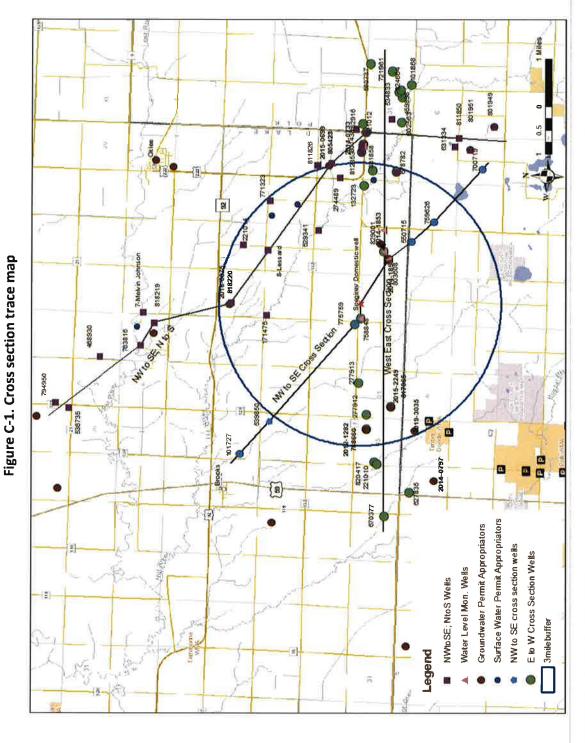


Figure B-3. Photograph of iron staining at the top of drop pipe below pitless adapter



Table B-1. Well Yield Test

Volume (gallons)	Time (seconds)	Flow Rate (gpm)	Time (Central Daylight Time)	Comment
5	64	4.7	10:55 AM	Initial measurement and could start to smell bleach. Time approximated
0.5	12	2.5	Not noted	Low flow rate
3	10	18.0	Not noted	High flow rate
1	4.5	13.3	Not noted	High flow rate
0.5	17	1.8	Not noted	Low flow rate
0.5	11	2.7	Not noted	Low flow rate
5	21.58	13.9	11:14 AM	Shut off flow right after measurements
5	11.62	25.8	11:18 AM	High flow rate after 4 minutes of shut off
Not measured	Not measured	Not measured	11:18:23 AM	After 23 seconds from start at 11:18 the flow started to blow air but didn't reduce rate
Not measured	Not measured	Not measured	11:19 AM	High flow rate
Not measured	NM	25.8	11:19:09	After 1 min 9 sec from 11:18 flow reduced from high to low again. No measurement of final rate, concerned about burning out pump so shut off hydrant.



26

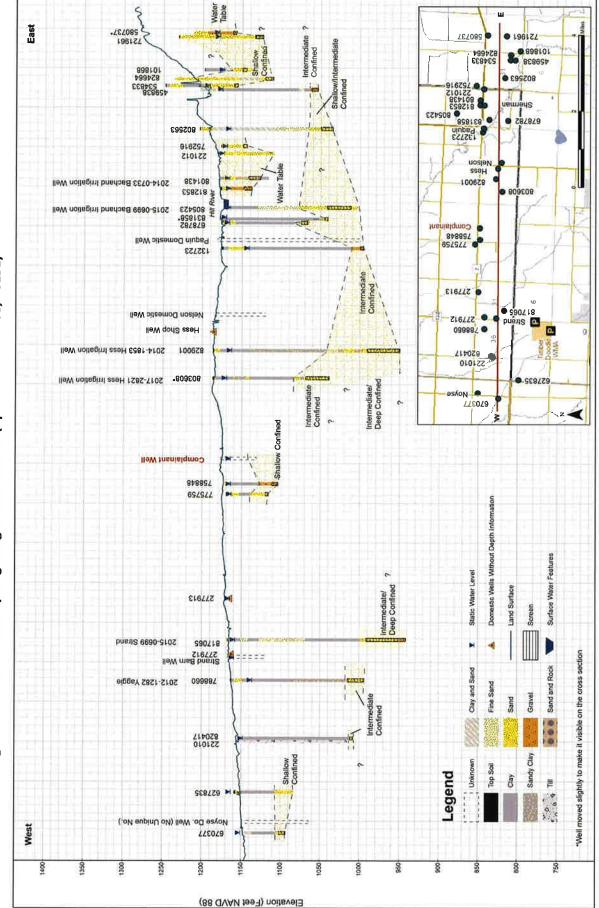


Figure C-2. West to east hydrogeologic cross-section (updated from Rose, 2019a)

Well Interference Complaint Investigation

28

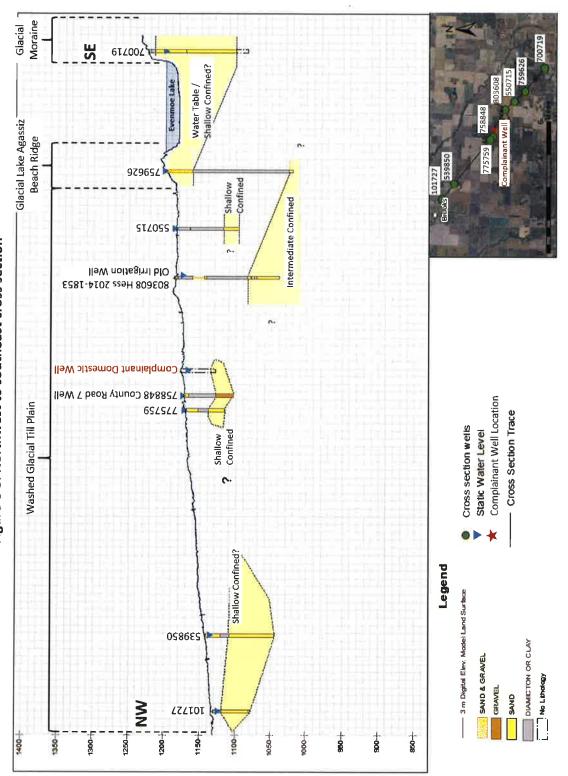


Figure C-3. Northwest to southeast cross section

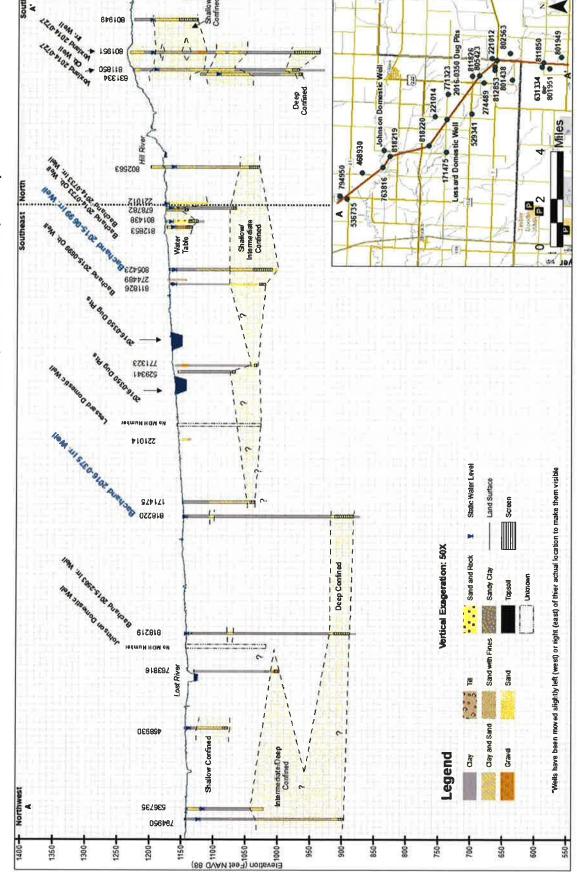


Figure C-4. Northwest to southeast; north to south cross section (modified after Rose, 2019b)

# Appendix D. Aquifer Characteristics

given the highly variable nature of the deposits. To better understand the local aquifer characteristics and connectivity both horizontally and vertically, nearby test information was compiled. DNR has record of aquifer tests (pump one well and observe water level changes in other In glacial deposits, aquifer characteristics (how much water can be stored and how readily water can move through the material) can vary wells) and specific capacity tests (observations in the pumped well only) that have been conducted and are shown in Table D-1.

Table D-1. Available aquifer characteristics within 3 miles of the Complainant well

Source of Information and Date of Test	Specific capacity test. July 28, 2014. Pumping rate of 350 gpm. DNR analyzed (Rose, 2015b)	Aquifer test run from September 23 to September 30, 2020 (7 days pumping). Variable pumping rate of 700-800 gpm. DNR currently analyzing (estimates provided are considered draft). Drawdown measured in source aquifer up to 2.2 miles away and Shallow Confined aquifers up to 1.4 miles away. Leakage occurred through overlying aquitard (K'= 0.02).	Specific capacity test. December 15 to 16, 2015. Pumping rate of 1600 gpm. DNR analyzed (Walker, 2016).	Specific capacity test. March 23, 2016. Pumped at 1109 gpm. DNR analyzed (Lahti, 2017).	No testing available.	Enhanced specific capacity test. February 5 to 7, 2020. Pumping rate of 1100 gpm for 1.7 days. DNR analyzed (Rose, 2020b). Leakage occurred through overlying aquitard (K'= 0.009). Drawdown measured 0.7 miles to the east in 2015-2249 irrigation well (817065) but not one mile north or southwest in 2012-1282 (788660- Intermediate Confined) or 2014-0797 (801957- Shallow Confined) irrigation wells. Barrier boundaries interpreted to the north and west.	Aquifer test. April 20 to 24, 2015. Pumping rate of 1553 gpm. DNR analyzed (Rose, 2015a). Leakage at late time. Channel aquifer. No drawdown in water table well. Risk to Chester 29 calcareous fen is low.
Hydraulic Conductivity (ft/day)	8	28 (draft)	350	125	Unknown	61	165
Aquifer Storativity (unitless)	Not applicable	0.0002 (draft)	Not applicable	Not applicable	Unknown	0.00002	0.00072
Aquifer Transmissivity (ft²/day)	125	2600 (draft)	20,000	4500	Unknown	2140	12,400
Aquifer Thickness (feet)	45	92	57	36	21		75.
Unique well number and depth	803608; 148 feet	829001; 236 feet	817065; 226 feet	818220; 265 feet	788660; 169 feet	847224; 180 feet	805423; 161 feet
Distance from Complaint Well	1.1 miles Southeast	1.3 miles Southeast	2.3 miles Southwest	2.8 miles North	2.7 miles West	2.9 miles Southwest	3 miles East
Aquifer Name (Interpreted from Lindgren, 1996)	Intermediate/ Deep Confined	Intermediate/ Deep Confined	Intermediate/ Deep Confined	Deep Confined	Intermediate Confined	Intermediate Confined	Shallow/ Intermediate Confined
Appropriations Permit No. and Land owner	2014-1853 William Hess	2014-1853 William Hess	2015-2249 Brent Strand	2016-0375 Jeffrey Bachand	2012- 1282 Michael Yaggie	2019-3035 Brent Strand	2015-0699 David Bachand and Mary Lynn Bachand Inc.



Ecological and Water Resources 500 Lafayette Road St. Paul, MN 55155 **CERTIFIED MAIL** 

February 9, 2021

Mr. Jeffrey Bachand 20827 Pine Ridge Circle SE Erskine, MN 56535

RE: Well Interference Investigation, Water Appropriation Permit 2016-0375 in Red Lake County - Found Valid

Dear Mr. Bachand,

On August 20, 2020, DNR received a Well Interference Complaint from Fedor Snegirev for his property at 26381 270<sup>th</sup> St. SE, Brooks, MN, which is near your family's irrigation wells that are associated with groundwater appropriation permit 2016-0375. DNR has investigated this complaint and found it **to be valid**. Pumping of five irrigation systems was found to collectively cause the well interference. These irrigation wells are owned by:

- Bill Hess, well #829001, permit #2014-1853
- David Bachand and Mary Lynn Bachand Inc., well #805423, permit #2015-0699
- Brent Strand, well #817065, permit #2015-2249
- Jeffrey Bachand, well #818220, permit #2016-0375
- Brent Strand, well #847224, permit #2019-3035

A sixth permitted well was part of the investigation but it was determined that this well did not contribute to the interference.

Enclosed you will find the report titled *Snegirev Well Interference Investigation Report*. This report details the investigation and findings. Briefly, it concludes that your production well was partially responsible for the drop in water level in the Fedor Snegirev domestic well that caused the out-of-water situation in his well.

Also enclosed is the Well Interference Settlement Guidelines factsheet. This will help guide you through the rest of the Well Interference law and closure process. I am available to answer questions and/or the DNR can schedule a conference call or online meeting with the irrigators listed above.

Beginning February 11, 2021, the responsible parties listed above will have 30 days (until March 12, 2021) to choose from one of the following options and let me know which option you choose:

- 1. Negotiate reasonable agreements with Fedor Snegirev, OR
- 2. Request a public hearing
- 3. Modify or request permits

If the parties listed above decide to negotiate a reasonable agreement Mr. Snegirev, you then have 10 more days to send him a written settlement offer (until March 22, 2021).

Since there are four irrigators involved in this interference, it may be useful for the group to select one spokesperson. The group may either negotiate directly with Mr. Snegirev, or I can contact him on your behalf.

The Investigation Report concludes that, due to a reduction in water levels from increased irrigation, the current well in the shallow aquifer no longer has an adequate water supply and a new, deeper well is necessary. A new well has not been drilled yet, so Mr. Snegirev provided multiple bids from local licensed well drillers. These are also enclosed in the packet. The DNR does not endorse any particular contractor. The items eligible for reimbursement are:

- Up to the total cost of drilling a new well in a deeper aquifer and connecting to the existing water lines.
- Cost of water quality testing for the new well to determine if the water is of similar quality as the existing well. (Mr. Snegirev will pay for testing the water quality in his existing well.)
- If the arsenic level in the new well is significantly higher than the existing well and is above state
  recommended levels, the cost of an arsenic treatment system would be eligible for reimbursement.
  Many wells in Red Lake County have naturally occurring high arsenic levels. See enclosed MDH fact
  sheet and webpage for additional information.
- Cost of sealing the old well after drilling a new one.

Most well interference complaints are resolved through the settlement process. Minnesota Rules state that "when a domestic water supply is endangered the DNR shall restrict or cancel the appropriation from your production well until a settlement, negotiation or hearing is complete, and that the responsible parties pay for costs necessary to provide an adequate water supply with the same quality and quantity as prior to the interference". The settlement timeline is set in rule.

#### **Action Needed:**

- 1. Let us know if you would like DNR to schedule a conference call or online meeting to answer questions.
- 2. Please contact me by March 12, 2021 at the above address, by phone or email, when the party decides whether to offer a settlement or request a hearing.
- 3. If you decide to begin negotiation with Fedor Snegirev, his phone number is 218-289-2920. His email address is <a href="mailto:fedor.snegirev58@gmail.com">fedor.snegirev58@gmail.com</a>, and his mailing address is 240 2<sup>nd</sup> Street NE McIntosh, MN 56556.

If DNR receives well interference complaints in the future, each will be addressed through the same process in the order that they are received.

Please feel free to call or email me if you have any questions regarding the well interference situation.

Sincerely,

Carmelita Nelson Well Interference Coordinator 651-259-5034

#### Carmelita.nelson@state.mn.us

cc: Anthony Bachand, 24063 275th Ave. SE, Brooks, MN 56715

ec: Tanya Waldo, Red Lake County SWCD; Rachel Klein, East Polk SWCD; and Myron Jesme, Red Lake WD

Nathan Kestner, Regional Manager, DNR EWR

Theresa Ebbenga, Assistant Regional Manager, DNR EWR

Tom Groshens, District Manager, DNR EWR

Michele Walker/Jennifer Rose, Groundwater Specialist, DNR EWR

Robert Guthrie, Groundwater Appropriation Hydrologist, DNR EWR

Ellen Considine, Hydrologist Supervisor, DNR EWR



Ecological and Water Resources 500 Lafayette Road St. Paul, MN 55155 **CERTIFIED MAIL** 

February 9, 2021

Mr. David Bachand and Ms. Mary Lynn Bachand 706 Minnesota 222 Oklee, MN 56742

RE: Well Interference Investigation, Water Appropriation Permit 2015-0699 in Red Lake County - Found Valid

Dear Mr. Bachand,

On August 20, 2020, DNR received a Well Interference Complaint from Fedor Snegirev for his property at 26381 270<sup>th</sup> St. SE, Brooks, MN, which is near your family's irrigation wells that are associated with groundwater appropriation permit 2016-0375. DNR has investigated this complaint and found it **to be valid**. Pumping of five irrigation systems was found to collectively cause the well interference. These irrigation wells are owned by:

- Bill Hess, well #829001, permit #2014-1853
- David Bachand and Mary Lynn Bachand Inc., well #805423, permit #2015-0699
- Brent Strand, well #817065, permit #2015-2249
- Jeffrey Bachand, well #818220, permit #2016-0375
- Brent Strand, well #847224, permit #2019-3035

A sixth permitted well was part of the investigation but it was determined that this well did not contribute to the interference.

Enclosed you will find the report titled *Snegirev Well Interference Investigation Report*. This report details the investigation and findings. Briefly, it concludes that your production well was partially responsible for the drop in water level in the Fedor Snegirev domestic well that caused the out-of-water situation in his well.

Also enclosed is the Well Interference Settlement Guidelines factsheet. This will help guide you through the rest of the Well Interference law and closure process. I am available to answer questions and/or the DNR can schedule a conference call or online meeting with the irrigators listed above.

Beginning February 11, 2021, the responsible parties listed above will have 30 days (until March 12, 2021) to choose from one of the following options and let me know which option you choose:

- 4. Negotiate reasonable agreements with Fedor Snegirev, OR
- 5. Request a public hearing
- 6. Modify or request permits

If the parties listed above decide to negotiate a reasonable agreement Mr. Snegirev, you then have 10 more days to send him a written settlement offer (until March 22, 2021).

Since there are four irrigators involved in this interference, it may be useful for the group to select one spokesperson. The group may either negotiate directly with Mr. Snegirev, or I can contact him on your behalf.

The Investigation Report concludes that, due to a reduction in water levels from increased irrigation, the current well in the shallow aquifer no longer has an adequate water supply and a new, deeper well is necessary. A new well has not been drilled yet, so Mr. Snegirev provided multiple bids from local licensed well drillers. These are also enclosed in the packet. The DNR does not endorse any particular contractor. The items eligible for reimbursement are:

- Up to the total cost of drilling a new well in a deeper aquifer and connecting to the existing water lines.
- Cost of water quality testing for the new well to determine if the water is of similar quality as the existing well. (Mr. Snegirev will pay for testing the water quality in his existing well.)
- If the arsenic level in the new well is significantly higher than the existing well and is above state recommended levels, the cost of an arsenic treatment system would be eligible for reimbursement. Many wells in Red Lake County have naturally occurring high arsenic levels. See enclosed MDH fact sheet and webpage for additional information.
- Cost of sealing the old well after drilling a new one.

Most well interference complaints are resolved through the settlement process. Minnesota Rules state that "when a domestic water supply is endangered the DNR shall restrict or cancel the appropriation from your production well until a settlement, negotiation or hearing is complete, and that the responsible parties pay for costs necessary to provide an adequate water supply with the same quality and quantity as prior to the interference". The settlement timeline is set in rule.

#### **Action Needed:**

- 4. Let us know if you would like DNR to schedule a conference call or online meeting to answer questions.
- 5. Please contact me by March 12, 2021 at the above address, by phone or email, when the party decides whether to offer a settlement or request a hearing.
- If you decide to begin negotiation with Fedor Snegirev, his phone number is 218-289-2920. His email address is <u>fedor.snegirev58@gmail.com</u>, and his mailing address is 240 2<sup>nd</sup> Street NE McIntosh, MN 56556.

If DNR receives well interference complaints in the future, each will be addressed through the same process in the order that they are received.

Please feel free to call or email me if you have any questions regarding the well interference situation.

Sincerely,

Carmelita Nelson Well Interference Coordinator 651-259-5034

## Carmelita.nelson@state.mn.us

cc: Anthony Bachand, 24063 275th Ave. SE, Brooks, MN 56715

ec: Tanya Waldo, Red Lake County SWCD; Rachel Klein, East Polk SWCD; and Myron Jesme, Red Lake WD

Nathan Kestner, Regional Manager, DNR EWR

Theresa Ebbenga, Assistant Regional Manager, DNR EWR

Tom Groshens, District Manager, DNR EWR

Michele Walker/Jennifer Rose, Groundwater Specialist, DNR EWR

Robert Guthrie, Groundwater Appropriation Hydrologist, DNR EWR

Ellen Considine, Hydrologist Supervisor, DNR EWR



Ecological and Water Resources 500 Lafayette Road St. Paul, MN 55155 **CERTIFIED MAIL** 

February 9, 2021

Mr. Brent Strand 3542 6<sup>th</sup> Street East West Fargo, ND 58078

Regarding: Well Interference Investigation, Water Appropriation Permits 2015-2249 and 2019-3035 Red Lake and Polk Counties - Found Valid

Dear Mr. Strand,

On August 20, 2020, DNR received a Well Interference Complaint from Fedor Snegirev for his property at 26381 270<sup>th</sup> St. SE, Brooks, MN, which is near your family's irrigation wells that are associated with groundwater appropriation permit 2016-0375. DNR has investigated this complaint and found it **to be valid**. Pumping of five irrigation systems was found to collectively cause the well interference. These irrigation wells are owned by:

- Bill Hess, well #829001, permit #2014-1853
- David Bachand and Mary Lynn Bachand Inc., well #805423, permit #2015-0699
- Brent Strand, well #817065, permit #2015-2249
- Jeffrey Bachand, well #818220, permit #2016-0375
- Brent Strand, well #847224, permit #2019-3035

A sixth permitted well was part of the investigation but it was determined that this well did not contribute to the interference.

Enclosed you will find the report titled *Snegirev Well Interference Investigation Report*. This report details the investigation and findings. Briefly, it concludes that your production well was partially responsible for the drop in water level in the Fedor Snegirev domestic well that caused the out-of-water situation in his well.

Also enclosed is the Well Interference Settlement Guidelines factsheet. This will help guide you through the rest of the Well Interference law and closure process. I am available to answer questions and/or the DNR can schedule a conference call or online meeting with the irrigators listed above.

Beginning February 11, 2021, the responsible parties listed above will have 30 days (until March 12, 2021) to choose from one of the following options and let me know which option you choose:

- 7. Negotiate reasonable agreements with Fedor Snegirev, OR
- 8. Request a public hearing
- 9. Modify or request permits

If the parties listed above decide to negotiate a reasonable agreement Mr. Snegirev, you then have 10 more days to send him a written settlement offer (until March 22, 2021).

Since there are four irrigators involved in this interference, it may be useful for the group to select one spokesperson. The group may either negotiate directly with Mr. Snegirev, or I can contact him on your behalf.

The Investigation Report concludes that, due to a reduction in water levels from increased irrigation, the current well in the shallow aquifer no longer has an adequate water supply and a new, deeper well is necessary. A new well has not been drilled yet, so Mr. Snegirev provided multiple bids from local licensed well drillers. These are also enclosed in the packet. The DNR does not endorse any particular contractor. The items eligible for reimbursement are:

- Up to the total cost of drilling a new well in a deeper aquifer and connecting to the existing water lines.
- Cost of water quality testing for the new well to determine if the water is of similar quality as the existing well. (Mr. Snegirev will pay for testing the water quality in his existing well.)
- If the arsenic level in the new well is significantly higher than the existing well and is above state recommended levels, the cost of an arsenic treatment system would be eligible for reimbursement. Many wells in Red Lake County have naturally occurring high arsenic levels. See enclosed MDH fact sheet and webpage for additional information.
- Cost of sealing the old well after drilling a new one.

Most well interference complaints are resolved through the settlement process. Minnesota Rules state that "when a domestic water supply is endangered the DNR shall restrict or cancel the appropriation from your production well until a settlement, negotiation or hearing is complete, and that the responsible parties pay for costs necessary to provide an adequate water supply with the same quality and quantity as prior to the interference". The settlement timeline is set in rule.

#### **Action Needed:**

- 7. Let us know if you would like DNR to schedule a conference call or online meeting to answer questions.
- 8. Please contact me by March 12, 2021 at the above address, by phone or email, when the party decides whether to offer a settlement or request a hearing.
- If you decide to begin negotiation with Fedor Snegirev, his phone number is 218-289-2920. His email address is <u>fedor.snegirev58@gmail.com</u>, and his mailing address is 240 2<sup>nd</sup> Street NE McIntosh, MN 56556.

If DNR receives well interference complaints in the future, each will be addressed through the same process in the order that they are received.

Please feel free to call or email me if you have any questions regarding the well interference situation.

Sincerely,

Carmelita Nelson Well Interference Coordinator 651-259-5034

## Carmelita.nelson@state.mn.us

cc: Anthony Bachand

ec: Tanya Waldo, Red Lake County SWCD; Rachel Klein, East Polk SWCD; and Myron Jesme, Red Lake WD

Nathan Kestner, Regional Manager, DNR EWR

Theresa Ebbenga, Assistant Regional Manager, DNR EWR

Tom Groshens, District Manager, DNR EWR

Michele Walker/Jennifer Rose, Groundwater Specialist, DNR EWR

Robert Guthrie, Groundwater Appropriation Hydrologist, DNR EWR

Ellen Considine, Hydrologist Supervisor, DNR EWR



Ecological and Water Resources 500 Lafayette Road St. Paul, MN 55155 **CERTIFIED MAIL** 

February 9, 2021

Mr. William Hess 33348 310th Avenue SE McIntosh, MN 56556

Regarding: Well Interference Investigation, Water Appropriation Permit #2014-1853 Red Lake County - Found Valid

Dear Mr. Hess,

On August 20, 2020, DNR received a Well Interference Complaint from Fedor Snegirev for his property at 26381 270<sup>th</sup> St. SE, Brooks, MN, which is near your family's irrigation wells that are associated with groundwater appropriation permit 2016-0375. DNR has investigated this complaint and found it **to be valid**. Pumping of five irrigation systems was found to collectively cause the well interference. These irrigation wells are owned by:

- Bill Hess, well #829001, permit #2014-1853
- David Bachand and Mary Lynn Bachand Inc., well #805423, permit #2015-0699
- Brent Strand, well #817065, permit #2015-2249
- Jeffrey Bachand, well #818220, permit #2016-0375
- Brent Strand, well #847224, permit #2019-3035

A sixth permitted well was part of the investigation but it was determined that this well did not contribute to the interference.

Enclosed you will find the report titled *Snegirev Well Interference Investigation Report*. This report details the investigation and findings. Briefly, it concludes that your production well was partially responsible for the drop in water level in the Fedor Snegirev domestic well that caused the out-of-water situation in his well.

Also enclosed is the Well Interference Settlement Guidelines factsheet. This will help guide you through the rest of the Well Interference law and closure process. I am available to answer questions and/or the DNR can schedule a conference call or online meeting with the irrigators listed above.

Beginning February 11, 2021, the responsible parties listed above will have 30 days (until March 12, 2021) to choose from one of the following options and let me know which option you choose:

- 10. Negotiate reasonable agreements with Fedor Snegirev, OR
- 11. Request a public hearing
- 12. Modify or request permits

If the parties listed above decide to negotiate a reasonable agreement Mr. Snegirev, you then have 10 more days to send him a written settlement offer (until March 22, 2021).

Since there are four irrigators involved in this interference, it may be useful for the group to select one spokesperson. The group may either negotiate directly with Mr. Snegirev, or I can contact him on your behalf.

The Investigation Report concludes that, due to a reduction in water levels from increased irrigation, the current well in the shallow aquifer no longer has an adequate water supply and a new, deeper well is necessary. A new well has not been drilled yet, so Mr. Snegirev provided multiple bids from local licensed well drillers. These are also enclosed in the packet. The DNR does not endorse any particular contractor. The items eligible for reimbursement are:

- Up to the total cost of drilling a new well in a deeper aquifer and connecting to the existing water lines.
- Cost of water quality testing for the new well to determine if the water is of similar quality as the existing well. (Mr. Snegirev will pay for testing the water quality in his existing well.)
- If the arsenic level in the new well is significantly higher than the existing well and is above state recommended levels, the cost of an arsenic treatment system would be eligible for reimbursement. Many wells in Red Lake County have naturally occurring high arsenic levels. See enclosed MDH facts sheet and webpage for additional information.
- Cost of sealing the old well after drilling a new one.

Most well interference complaints are resolved through the settlement process. Minnesota Rules state that "when a domestic water supply is endangered the DNR shall restrict or cancel the appropriation from your production well until a settlement, negotiation or hearing is complete, and that the responsible parties pay for costs necessary to provide an adequate water supply with the same quality and quantity as prior to the interference". The settlement timeline is set in rule.

#### **Action Needed:**

- 10. Let us know if you would like DNR to schedule a conference call or online meeting to answer questions.
- 11. Please contact me by March 12, 2021 at the above address, by phone or email, when the party decides whether to offer a settlement or request a hearing.
- 12. If you decide to begin negotiation with Fedor Snegirev, his phone number is 218-289-2920. His email address is <a href="mailto:fedor.snegirev58@gmail.com">fedor.snegirev58@gmail.com</a>, and his mailing address is 240 2<sup>nd</sup> Street NE McIntosh, MN 56556.

If DNR receives well interference complaints in the future, each will be addressed through the same process in the order that they are received.

Please feel free to call or email me if you have any questions regarding the well interference situation.

Sincerely,

Carmelita Nelson Well Interference Coordinator 651-259-5034

## Carmelita.nelson@state.mn.us

cc: Anthony Bachand

ec: Tanya Waldo, Red Lake County SWCD; Rachel Klein, East Polk SWCD; and Myron Jesme, Red Lake WD

Nathan Kestner, Regional Manager, DNR EWR

Theresa Ebbenga, Assistant Regional Manager, DNR EWR

Tom Groshens, District Manager, DNR EWR

Michele Walker/Jennifer Rose, Groundwater Specialist, DNR EWR

Robert Guthrie, Groundwater Appropriation Hydrologist, DNR EWR

Ellen Considine, Hydrologist Supervisor, DNR EWR



Ecological and Water Resources 500 Lafayette Road St. Paul, MN 55155

February 9, 2021

Tony Bachand 24063 275<sup>th</sup> Ave. SE Brooks, MN 56715

RE: Well Interference Investigation, Water Appropriation Permits 2016-0375 in Red Lake County - Found Valid

Dear Mr. Bachand,

On August 20, 2020, DNR received a Well Interference Complaint from Fedor Snegirev for his property at 26381 270<sup>th</sup> St. SE, Brooks, MN, which is near your family's irrigation wells that are associated with groundwater appropriation permit 2016-0375. DNR has investigated this complaint and found it **to be valid**. Pumping of five irrigation systems was found to collectively cause the well interference. These irrigation wells are owned by:

- Bill Hess, well #829001, permit #2014-1853
- David Bachand and Mary Lynn Bachand Inc., well #805423, permit #2015-0699
- Brent Strand, well #817065, permit #2015-2249
- Jeffrey Bachand, well #818220, permit #2016-0375
- Brent Strand, well #847224, permit #2019-3035

A sixth permitted well was part of the investigation but it was determined that this well did not contribute to the interference.

Enclosed you will find the report titled *Snegirev Well Interference Investigation Report*. This report details the investigation and findings. Briefly, it concludes that your production well was partially responsible for the drop in water level in the Fedor Snegirev domestic well that caused the out-of-water situation in his well.

Also enclosed is the Well Interference Settlement Guidelines factsheet. This will help guide you through the rest of the Well Interference law and closure process. I am available to answer questions and/or the DNR can schedule a conference call or online meeting with the irrigators listed above.

Beginning February 11, 2021, the responsible parties listed above will have 30 days (until March 12, 2021) to choose from one of the following options and let me know which option you choose:

- 13. Negotiate reasonable agreements with Fedor Snegirev, OR
- 14. Request a public hearing
- 15. Modify or request permits

If the parties listed above decide to negotiate a reasonable agreement Mr. Snegirev, you then have 10 more days to send him a written settlement offer (until March 22, 2021).

Since there are four irrigators involved in this interference, it may be useful for the group to select one spokesperson. The group may either negotiate directly with Mr. Snegirev, or I can contact him on your behalf.

The Investigation Report concludes that, due to a reduction in water levels from increased irrigation, the current well in the shallow aquifer no longer has an adequate water supply and a new, deeper well is necessary. A new well has not been drilled yet, so Mr. Snegirev provided multiple bids from local licensed well drillers. These are also enclosed in the packet. The DNR does not endorse any particular contractor. The items eligible for reimbursement are:

- Up to the total cost of drilling a new well in a deeper aquifer and connecting to the existing water lines.
- Cost of water quality testing for the new well to determine if the water is of similar quality as the existing well. (Mr. Snegirev will pay for testing the water quality in his existing well.)
- If the arsenic level in the new well is significantly higher than the existing well and is above state
  recommended levels, the cost of an arsenic treatment system would be eligible for reimbursement.
  Many wells in Red Lake County have naturally occurring high arsenic levels. See enclosed MDH fact
  sheet and webpage for additional information.
- Cost of sealing the old well after drilling a new one.

Most well interference complaints are resolved through the settlement process. Minnesota Rules state that "when a domestic water supply is endangered the DNR shall restrict or cancel the appropriation from your production well until a settlement, negotiation or hearing is complete, and that the responsible parties pay for costs necessary to provide an adequate water supply with the same quality and quantity as prior to the interference". The settlement timeline is set in rule.

#### **Action Needed:**

- 13. Let us know if you would like DNR to schedule a conference call or online meeting to answer questions.
- 14. Please contact me by March 12, 2021 at the above address, by phone or email, when the party decides whether to offer a settlement or request a hearing.
- 15. If you decide to begin negotiation with Fedor Snegirev, his phone number is 218-289-2920. His email address is <a href="mailto:fedor.snegirev58@gmail.com">fedor.snegirev58@gmail.com</a>, and his mailing address is 240 2<sup>nd</sup> Street NE McIntosh, MN 56556.

If DNR receives well interference complaints in the future, each will be addressed through the same process in the order that they are received.

Please feel free to call or email me if you have any questions regarding the well interference situation.

Sincerely,

Carmelita Nelson Well Interference Coordinator 651-259-5034

#### Carmelita.nelson@state.mn.us

ec: Tanya Waldo, Red Lake County SWCD; Rachel Klein, East Polk SWCD; and Myron Jesme, Red Lake WD Nathan Kestner, Regional Manager, DNR EWR
Theresa Ebbenga, Assistant Regional Manager, DNR EWR
Tom Groshens, District Manager, DNR EWR
Michele Walker/Jennifer Rose, Groundwater Specialist, DNR EWR
Robert Guthrie, Groundwater Appropriation Hydrologist, DNR EWR
Ellen Considine, Hydrologist Supervisor, DNR EWR

## **ENTRY SALARY LEVELS**

Position	*Salary Structure	
Administrator	\$56,851 – \$92,327	
Accounting Officer	\$42,533 - \$62,690	
Administrative Assistant/Office Manager	\$40,632 - \$58,777	
Office & Administrative Spec. Int	\$21,099 – 31,200	
Ditch Inspector/Technician II	\$38,467 – \$54,661	
Engineering Specialist	\$43,091 – \$60,327	
Engineering Senior/Hydro II	\$51,219 – \$75,358	
Water Quality Program Coordinator	\$47,287 – \$70,199	
Natural Resource Technician	\$38,467 - \$54,661	
Summer College Intern	\$12.50 per hour – up	

Revised August 9, 2012 Revised January 8, 2015 Revised July 23, 2020

# 7. STAFF -- JOB DESCRIPTIONS

Job Title: Administrator

Location: 1000 Pennington Avenue South, Thief River Falls

General Function: Administration of the day to day operations of the Red Lake Watershed

District under the general direction of the District's Board of Managers.

Salary: \$56,851 - \$92,327

Accountability: Board of Managers

Authorities: Supervise employees of the District. Prepares budgets, broad authority to

hire, discipline and dismiss personnel. Implements policy as directed by the Board of Managers, evaluates the performance of staff members and provides overall control and direction for the personnel function of the District, including active participation in or approval of personnel action. Sign payroll and payroll tax checks, staff travel checks, and checks under \$1,000 for monthly operating expenses unless prior approval of the Board of

Managers.

Responsibilities: A. Manage, supervise and be in charge of the Administration of District activities, including but not limited to:

1. Provide assistance to the District secretary and treasurer including payroll, disbursements and records.

- 2. Provide information and assistance to residents of the District with related problems.
- 3. Provide information, assistance, and work with, when necessary, governmental agencies.
- 4. Assure each project/petition progressing in planned schedule.
- B. Use technical and professional training to full capacity as Administrator of the District.
- C. Direct representative of the Board of Managers of the District with authority to handle day to day administrative problems.
- D. Share all resources available as Administrator to help the District function as a successful District.
- E. Shall have the authority to hire and discharge staff, subject only to the provisions of paragraph I.
- F. Shall have the authority to hire and discharge consultants for services, subject only to the provisions of paragraph I.
- G. Shall carry out the directives and objectives of the Board of Managers of the District. This includes, but not limited to:

- 1. Arrange for supportive information to the Board for items on the agenda.
- 2. Carry out Board actions, as directed by Board with assistance from the President.
- 3. Provide progress reports on all Board directives and project activities as necessary to the mission of water management.
- 4. Assigns the workload to the District's project and consulting engineers and coordinates the timetable for completion of work.
- 5. Supervise Consulting Engineers with progress steps for active projects with persons or agencies involved.
- 6. Make recommendations to the Board for orderly and efficient improvements of the administrative and operational procedures.
- 7. Provide the necessary recommendations on budgets and projected fund levies.
- 8. Assist and cooperate with appointed committees.
- 9. Provides opportunities and recommendations for ongoing training for Board and staff.
- H. Attend meetings to keep informed on matters regarding the District
- I. The above authority and responsibilities of the Administrator shall be subject only to such policies as may be adopted and such orders as may be issued by the Board of Managers.

#### **Essential Qualifications:**

4-year Administrative Business Degree or considerable work-related experience and knowledge of watershed district duties

Working knowledge of computers and software programs (such as Excel and Word)

Knowledge or experience with Minnesota Drainage Law

Experience in personnel management and Experience in Project Management

Extensive experience in engineering, construction inspection and knowledge of field equipment

Valid Minnesota Driver's License

January 23, 1997 Revised August 9, 2012 Revised January 1, 2019

Job Title: Accounting Officer

Classification: Full time

Location: 1000 Pennington Avenue South, Thief River Falls

Work Hours: 8:00 a.m. to 4:30 p.m.

General Function: Perform variety of accounting and administrative support for the Red Lake

Watershed District.

Salary: \$42,533 - \$62,690

Accountability: Reports to Administrator

Instructs Office & Admin Spec. Int.

## Examples of Work:

- A. Coordinates and maintains the finances of the Red Lake Watershed District which includes accounts receivable, accounts payable, making journal entries, generating and preparing financial statements, budgets, submit billings for grants, personnel files, coordinating annual audits, investment reports and general administrative services. Advises on budget issues and assists in the development of the yearly budgets.
- B. Process and generate payroll, compile all required payroll reports for State and/or Federal agencies. Maintain records for personnel leaves of absence.
- C. Receipts and reports incoming revenue and prepares bank deposits.
- D. Process checks and prepare associated financial reports for Board.
- E. Implements all accounting policies.
- F. Provide secretarial support as directed by the Administrator.
- G. Administers benefit plans to employees, completes proper documents to enroll individuals in the plans, submits appropriate information to proper State and or Federal agencies, and maintains employee records regarding use of benefits.

- H. Maintains the Special Revenue assessments and assists in preparing annual tax levies. Prepare documents for levy requests and final levies to counties. Document and record tax levy receipts.
- I. Maintains and updates fixed asset inventories and records.
- J. Assist with of Board of Manager meetings, minutes, agendas, and associated duties when requested.
- K. Assist with the transition and maintenance of Districts M-Files system.
- L. Manages and arranges for external, independent and annual audits. Completes and issues 1099 forms, W-2 forms, and other State/Federal forms necessary for complying with State and Federal laws.
- M. Maintains all insurance files and coverage, corresponds with insurance agents and takes lead in audits of insurances.
- N. Notary for the RLWD if requested by District Administrator.
- O. Keep abreast of changing rules, statutes or state guidelines pertaining to accounting functions.

#### **Essential Qualifications:**

4-year degree in business, secretarial or management, accounting fields or experience of equal value with extensive experience in using a variety of software packages (Microsoft Office) to produce correspondence and documents, and maintain presentations, spreadsheets and databases.

Job Title: Administrative Assistant /Office Manager

Classification: Full Time

Accountability: Reports to Administrator

Salary: \$40,632 - \$58,777

Location: 1000 Pennington Avenue South, Thief River Falls

Work Hours: 8:00 a.m. to 4:30 p.m.

General Function: Works under the direct supervision of Administrator.

This position will serve as Assistant to the Administrator of the Red Lake Watershed District as well as Office Manager to the District. Task includes assisting the Administrator with management operational, analytical, outreach policy and staffing issues. This position will also be responsible for directing the Boards operations in the absence of the Administrator

- Leads a project or program, including development or improvement of procedures and processes.
- Assists in the organization of budgeting process, including planning the budgetary needs of the District, purchasing of supplies and equipment.
- Make decisions and solve problems in the absence of the Administrator.
- Leads in management of software systems, including word processing, M-File management, spreadsheets, and ability to utilize presentation software.
- Leads in data entry and databases sufficient to accurately enter data element into database; and database management sufficient to understand and recommend changes to a regulatory database.
- Lead staff person in customer service (phone, in person) and conveys complex information in an understandable manner, answer questions and act as a resource to outside agencies and individuals.
- Assists Administrator in organization public hearings and compliance of drainage law associated with establishing projects, takes the lead in healthcare data privacy and data practices laws. Evaluates, develops, and implements changes in office procedures and equipment to improve productivity and workflow, simply procedures, or reduce costs.
- Plans and conducts administrative studies and maintains administrative systems and policies such as recordkeeping, retention schedules, and departmental forms and document control.
- Assists Administrator in gathering information for public hearings and takes lead in public hearing notices.

- Assists with administration of support staff to include, assigning, and reviewing duties, scheduling, training, and managing employee performance.
- Submits and reviews staff documentation in preparing annual reports.
- Recommend and implement policies and procedures; ensuring staff are trained.
- Performs variety of administrative and assists in accounting support functions.
- Perform a variety of research related to assigned area of responsibility; compiles findings and make recommendations based on findings for management of the Wild Rice Allocation Program administrative system and policies.
- Perform a variety of administrative administrator activities, which may include monitoring project timelines and identifying and resolving issues and coordinating cross department services.
- Planning and coordinating events.
- Management of RLWD records, filing and information retrieval system, both manual and automated (computer). Document, maintain and oversee office management systems, policies, and procedures, to maintain an efficient level op operation.
- Oversee and manage RLWD phone system, e-mail, and internet system.
- Oversee or assist Administrator in utilities and building maintenance.
- Coordination and maintenance of RLWD Permit database and files.

## TRAINING AND EXPERIENCE

High School diploma or GED equivalent. Five (5) years of experience as secretary to department head or higher-level executive experience. Extensive knowledge in Minnesota Statutes 103D and 103E. Preferred experience with small local units of government, secondary education, and office management experience.

#### LICENSING REQUIREMENTS

Valid Minnesota Driver's License.

July 23, 2020

Job Title: Office & Admin Spec. Int.

Location: 1000 Pennington Avenue South, Thief River Falls

Classification: Permanent Part time

Salary: \$31,200 - \$41,600

Work Hours: 8:00 a.m. to 4:30 p.m.

General Function: To provide clerical and secretarial services related to the Red Lake

Watershed District; to do all necessary correspondence, typing, copying, and

other general office duties.

Accountability: Reports to Administrator or full-(time office staff

Responsibilities: A. Provide secretarial and clerical service for the Red Lake Watershed District.

B. Answer incoming telephone calls and transfer to appropriate party.

C. Take dictation, type all correspondence, and follow through on a timely mailing.

D. Knowledge of computer operator functions and responsibilities.

E. Handle incoming and outgoing mailing and associated postage meter duties. Bids or personal mail should remain unopened. Maintain update all mailing lists, such as "Draft" agenda mailing list, etc.

F. Maintain bulletin board information and scrapbook.

G. Reception and hosting of office visitors.

H. Take staff meeting minutes. Upon approval of Administrator, distribute to each staff person.

I. Review each set of approved minutes, make a copy of minutes, and highlight where it pertains to a project so it can be filed in the project file.

J. File correspondence.

K. Register board and staff for seminars, meetings, etc.

May 9, 1991 Revised September 30, 1991 Revised July 15, 1996 Revised August 9, 2012 Revised January 1, 2019 Revised July 23, 2020

Job Title: Engineering Senior/Hydro II

Location: 1000 Pennington Avenue South, Thief River Falls

Classification: Full time

Salary: \$51,219 - \$75,358

Work Hours: 8:00 a.m. to 4:30 p.m.

Accountability: Responsible to Administrator

Provide direction and assist all engineering staff.

General Function: Aid Consulting Engineer in all engineering activities, as assigned by

Administrator

Examples of Work: Coordinate all project data collection, surveys & reports

Lead and assist in all permitting functions

Complete payment requests and submit to Accounting Department three

days prior to any scheduled Board meeting

Highly proficient in use of ArcGIS and AutoCad with ability to complete

high level plans and drawings utilizing CAD software Knowledge in reviewing detailed plans and specification

Construction inspection of variety of project Ability to read and interpret construction plans

Flood surveys and project surveying

Wetland Delineation experience and ability to assist or lead in wetland

delineation reporting and permitting Drafting data base development

Assist in water allotments for wild rice on Clearwater River & assist

Engineer in calibrating pumps.

Stream gauging

Operate watershed impoundment projects – coordinate with State and

Federal Agencies, local cities, counties, & landowners for the timing of gate

closure's and releases & schedule and prepare annual meeting.

Assist in data gathering & preparing engineer reports.

Coordinate all RLWD ditch inspection annually with Ditch Inspector Assist with water quality projects – gather data and survey information

Permit Program: Review, inspect, survey (as needed) RLWD permits

Meet with landowners, schedule and present information at Board meetings, recommend solutions for problems, and assist with on-site

installations.

## **Essential Qualifications:**

Graduation from high school Supervisory experience

Considerable related work experience

Working knowledge of computers and programming

Considerable experience of engineering practices & GPS surveying skills

Knowledge of construction materials, methods, & Inspection

High level skilled in use of field, office & computer aided drafting software

Ability to tolerate and work safely in a construction area

Ability to direct moderately difficult tasks in construction area

Ability to stand and walk for long periods of time be able to lift upwards of

70 lbs. Valid Minnesota Driver's License

## Desirable Qualifications:

Four-year degree in Engineering with two-year construction experience, or graduation from a two-year technical college with three years of GPS surveying and construction experience, or GPS surveying and construction experience of at least 10 years.

Job Title: Engineering Specialist

Location: 1000 Pennington Avenue South, Thief River Falls

Classification: Full time

Salary: \$43,091 - \$60,327

Work Hours: 8:00 a.m. to 4:30 p.m.

Accountability: Responsible to Administrator

Provide direction and assist Ditch Inspector and other technical aides, part-

time staff, and dam tenders

General Function: Provides assistance to Consulting Engineer & Engineering Senior in all

engineering activities, as assigned by Administrator

Examples of Work: Coordinate project inspection, surveys & reports

Lead in all permitting functions

Complete payment requests and submit to Accounting Department three

days prior to any scheduled Board meeting

Computer aided drafting

Construction inspection of variety of project Ability to read and interpret construction plans

Flood surveys and project surveying Drafting data base development

Assist in water allotments for wild rice on Clearwater River & assist

Engineer in calibrating pumps.

Stream gauging

Operate watershed impoundment projects – coordinate with State and

Federal Agencies, local cities, counties, & landowners for the timing of gate

closeures and releases & schedule and prepare annual meeting.

Assist in data gathering & preparing engineer reports.

Coordinate all RLWD ditch inspection annually with Ditch Inspector Assist with water quality projects – gather data and survey information

<u>Permit Program:</u> Review, inspect, survey (as needed) RLWD permits

Meet with landowners, schedule and present information at Board meetings, recommend solutions for problems, and assist with on-site

installations.

#### **Essential Qualifications:**

Graduation from high school

Supervisory experience

Considerable related work experience

Working knowledge of computers and programming

Considerable experience of engineering practices & GPS surveying skills

Knowledge of construction materials, methods, & Inspection

Skill in use of field, office & computer aided drafting

Ability to tolerate and work safely in a construction area

Ability to direct moderately difficult tasks in construction area

Ability to stand and walk for long periods of time be able to lift upwards of 70 lbs.

Valid Minnesota Driver's License

#### Desirable Qualifications:

Four-year degree in Engineering with two-year construction experience, or graduation from a two-year technical college with three years of GPS surveying and construction experience, or GPS surveying and construction experience of at least 5 years.

May 9, 1991 Revised May 1993 Revised January 1, 1996 Revised March 9, 1998 Revised August 9, 2012 Revised July 23, 2020 Revised February 12, 2021

Job Title: Ditch Inspector/Engineering Technician II

Classification: Full time

Location: 1000 Pennington Avenue South, Thief River Falls

Work Hours: 8:00 a.m. to 4:30 p.m.

Salary: \$38,467 – \$54,660

Accountability: Responsible to: Administrator

Reports to: Administrator

General Function: Survey Crew, Yearly inspection of all legal drainage systems and coordinate

maintenance as directed by Administrator.

Examples of Work: Construction inspection and staking

Field surveys

Extensive knowledge in maps and construction plans

Stream gauging

Operating watershed projects

Data base management and analysis Assist in preparing engineer reports

Water Quality sampling, analysis, and reporting

Presentations of information to the public

Assist Engineering Specialist with permit inspection

Sentence to Serve Program: Coordinate with STS supervisors and crew chiefs and provide

drawings, maps, etc.

<u>Ditch Inspection:</u> Review yearly ditch inspection reports and inspect problem areas.

Recommend corrective action to Administrator. Compile drawings, maps, quote forms for contractors. Meet with contractor to view and explain work,

survey and inspection as necessary.

Essential Qualifications: Graduation from high school

Considerable related work experience

Some knowledge of construction materials and methods

Skill in use of field, office, drafting, and laboratory equipment

Ability to tolerate and work safely in a construction area

Ability to direct moderately difficult construction area Working knowledge of computers and programming

Working knowledge of simple engineering practices & GPS survey

equipment

Ability to lift upwards of 50 pounds Valid Minnesota Drivers License

Desirable Qualifications: Graduation from a two-year technical college or 2 years' experience

GPS surveying and construction experience.

May 9, 1991 Revised May 1993 Revised July 1996 Revised December 23, 1996 Revised August 9, 2012

#### Revised July 23, 2020

## JOB DESCRIPTION

Job Title: Water Quality Program Coordinator

Classification: Full Time

Location: 1000 Pennington Avenue South, Thief River Falls

Work Hours: 8:00 a.m. - 4:30 p.m.

Salary: \$47,287 - \$70,930

Accountability: Responsible to Administrator

General Function: Establish criteria and projects to assist the Red Lake Watershed in

achieving water quality goals as outlined in the Ten-Year Overall Plan.

## Examples of Work:

• River and lake water quality sampling and field water quality measurements

- Calibration of water quality monitoring equipment
- Water quality data entry and management & submittal to EPA STORET database
- Analyze water quality/quantity data
- Operation and maintenance of continuous water quality monitoring equipment
- Stream gauging/flow measurement
  - Create flow rating curves for monitoring sites
  - Install and operate continuous stage monitoring equipment.
- Conduct field surveys
- Mathematical computer modeling of lakes and rivers
- Initiate and coordinate water quality improvement projects
- Prepare grant applications for water quality initiatives in the RLWD area
- Project management and reports
- Submit semi-annual reports to funding sources (MPCA, BWSR, NMF) for grantfunded projects
- Total Maximum Daily Load (TMDL) studies and Watershed Restoration and Protection Strategy (WRAPS) projects and reports
- ArcGIS mapping
- Writing comprehensive water quality reports
- Contributing articles to RLWD Annual Reports
- Website maintenance
- Provide technical advice to planning bodies/organizations
  - Red River Basin Water Quality Team

- Red River Basin Monitoring Advisory Committee
- Red Lake River Corridor Enhancement Joint Powers Group
- Presentations to the Board of Managers and other groups
- Use of Microsoft Excel, Word, Access, and Power Point software
- Public education through participation in county outdoor education days, Northwest Minnesota Water Festivals, Envirothon, civic engagement, etc.
- Coordinate all project activities and report to Administrator
- Report progress accomplishments to Administrator where funding has been obtained.
- Coordinate multi-agency monitoring efforts within the District
- Stressor Identification
- Geomorphological assessment
- Coordinate public water quality meetings

#### **Essential Qualifications:**

- Skills and knowledge of water quality sampling and analysis
- Skills and knowledge of chemistry, limnology, and aquatic biology
- Skills in grant applications
- Program coordination
- Supervisory Experience
- Oral communication skills
- Ability to lift upwards of 70 pounds

#### Desirable Qualifications:

Bachelor of Science Degree with emphasis in Environmental/Water Quality studies or related field or equivalent training and experience. Working knowledge of computer software and programs such as Excel, Word, Working knowledge of ArcView, GIS, and GPS, knowledge of water sample collection, data analysis, ability to assist in surveying department, and Valid Minnesota Drivers License. Basic understanding and skills in GIS, ArcView and HTML as well as skills and knowledge in use of GPS equipment.

May 9, 1991 Revised December 23, 1996 Revised August 9, 2012 Revised January 1, 2019 Revised July 23, 2020

Job Title: Natural Resource Technician

Classification: Full Time

Location: 1000 Pennington Avenue South, Thief River Falls, MN 56701

Work Hours: 8:00 – 4:30

Salary: \$38,467 - \$54,660

Accountability: Responsible to Administrator and/or Water Quality Program Coordinator

Supervises: Other District employees as may be assigned

General Function: Water Quality and Other Data Collection

GIS Technician
Data Management

Web Site Development/Management

Examples of Work: Water quality sampling

Stream gauging

Conduct field surveys

GIS database development and management

Map development Spatial analysis

Website maintenance as directed by Administrator or Administrative

Assistant

Coordinates entire River Watch Program

GPS data collection

Assist in preparing engineering and scientific reports

## **Essential Qualifications:**

Graduation from high school

Considerable related work experience

Working knowledge of computers and software programs (such as Excel,

ArcGIS, Spatial Analyst and Word)

Skills and knowledge of water quality data collection

Skills in the use of field equipment

No physical handicaps in relation to the tasks to be performed

Valid Minnesota Driver's License

## Desirable Qualifications:

2 yr degree in Natural Resources, Water Resources related field, or comparable experience. Working knowledge of computer software and programs such as Excel, Word, working knowledge of ArcView, GIS, and GPS, knowledge of water sample collection, data analysis, ability to assist in surveying department, and Valid Minnesota Drivers License. Graduation from a two-year college or four-year technical college Some basic understanding and skills in GIS, ArcView and HTML Skills and knowledge in use of GPS equipment

Job Title: Summer College Intern

Classification: Part time

Location: Thief River Falls District office

Work Hours: 8:00 – 4:30

Salary: \$12.50 per hour - up

Accountability: Responsible to: Administrator or Full-Time staff as directed by the

Administrator.

General Function: Assist full time staff with various District activities and projects.

Examples of work: (Illustrative only)

Field surveys

Assist in low level water quality tasks

Drafting maps and plans Assist with office tasks

Stream gauging

2021 Job Description

Revised July 23, 2020

Below is the advertising we have done for the two positions open with the District.

## **Newspapers:**

Thirteen Towns-Fosston (3 weeks)	\$	520.80
Erskine Echo (3 weeks)	\$	231.00
Leader Record/Tri County Canary (2 weeks)	\$	198.00
Gonvick/Grygla/McIntosh/Oklee		
Grand Rapids Herald (Sunday-2 weeks)	\$	290.00
Warren Scheaf (2 weeks)	\$	400.00
Roseau Times (3 weeks)	\$	440.70
Mahnomen Times (2 weeks)	\$	192.00
TRF Times/Northern Watch (2 weeks)	\$	820.00
(also get a NW Jobs on-line display)		
Crookston Times/Shopper (3 weeks)	\$	893.00
	\$3	3,985.50

Free Advertising on the League of Minnesota Cities Website

Posted on the Districts Website and Facebook page (with numerous shares from agencies/staff)

## **Colleges Contacted:**

Detroit Lakes (state college system also)

Wapheton (state college system also)

Moorhead Technical Institute (state colleges system also)

University of MN-Cities (Handshake program which many colleges share postings)

University of MN-Crookston (sent directly to Admin. Staff)

NDSU (Careers Page and sent directly to Admin. Staff – with response received from staff already)

UND (Handshake and sent directly to Admin. Staff)

Bemidji State (Handshake and sent directly to Admin. Staff)

St. Cloud State (Careers Page and sent directly to Admin. Staff – with response received from staff already)

## **Ditch Inspector/Engineering Technician II**

Red Lake Watershed District is seeking applicants for a full time position as an Ditch Inspector/Engineering Technician II.

**Duties:** Survey crew to include yearly inspection of all public legal drainage systems and coordinate maintenance, construction inspection and staking, field surveys, extensive knowledge in maps and construction plans, stream gauging, operating watershed projects, data base management and analysis, assist in preparing engineer reports, assist with District permit applications.

Requirements: Graduation from high school. Two year technical college preferred in Civil Engineering Technology or 2 years' experience in Trimble GPS survey equipment and software, surveying and construction experience. Knowledge of agricultural practices, construction materials and methods, and simple engineering practices. Skill in use of field, office, laboratory equipment. Ability to tolerate and work safely in construction areas and inspect moderately difficult construction projects. Applicant must have no physical limitations in relation to tasks performed, must be able to lift 50 pounds. Knowledge of Microsoft Office (Excel and Word) and Introductory to AutoCad (CAD)/Civil 3D. Valid Minnesota Driver's License and knowledge of using all-terrain vehicles (ATV).

Application and a complete job description are available at the Red Lake Watershed District office, 1000 Pennington Avenue South, Thief River Falls, MN 56701 or at redlakewatershed.org

**Application deadline:** March 12, 2021

**Salary Range:** \$38,467 – \$54,660

Red Lake Watershed District is an Equal Opportunity Employer

## **Engineering Senior/Hydro II**

Red Lake Watershed District (RLWD) is seeking applicants for a full-time position as an Engineering Senior/Hydro II.

General Function: Aid Consulting Engineer in all engineering activities. This position will coordinate all project data collection, surveys, and reports. Lead and assist in all project permitting functions. Complete and submit project pay request. Knowledge in reviewing detailed plans and specifications. Construction inspection. Flood surveys and project surveying. Assist in water allotments for wild rice on Clearwater River. Stream gauging. Operation of watershed impoundments. Assist with water quality projects. Review, inspect, survey RLWD permits. Work with landowners.

**Requirements:** Highly proficient in use of ArcGIS and AutoCAD, with ability to complete high level plans and drawings. Wetland Delineation experience and ability to assist or lead in wetland delineation reporting and permitting. Drafting data base development. Knowledge of construction materials, methods, and inspection. Ability to lift upwards of 70 pounds. Supervisory Experience. Considerable related work experience. Four-year degree in Engineering with two-year construction experience or graduation from a two-year technical college with three years of GPS surveying and construction experience, or GPS surveying and construction experience of at least 10 years.

Application is available at the RLWD office at 1000 Pennington Avenue South, Thief River Falls, MN 56701 or visit our website at redlakewatershed.org

Please submit application, cover letter, resume and references to the RLWD office.

**Application deadline:** March 12, 2021

**Salary Range:** \$51,219 - \$75,358

Red Lake Watershed District is an Equal Opportunity Employer.

## Red Lake Watershed District - Administrators Report February 25, 2021

**Red River Watershed Management Board** – LeRoy and I attended the RRWMB February 16, 2021 via Microsoft Teams.

Clearwater River 1W1P – Corey and I attended the first Policy Committee meeting which was held at 1:00 pm yesterday February 24<sup>th</sup>. Election of officers was completed along with approval of agenda items such as bylaws, work schedule and timeline as well as planning budget. First Advisory/Policy committee meeting will be held March 24<sup>th</sup> at 1:00 pm.

**Red River 1W1P** – There was a Microsoft Teams meeting held at 1:00 Monday February 22<sup>nd</sup> to discuss the upcoming RCPP/BWSR funding agreement and if this is an option for 1w1p. No decision was made as to moving forward in completing the application.

**Thief River 1W1P** – There will be a planning meeting held at 10:00 am March 4<sup>th</sup>. I also attended a conference call with Lon Aune and Blake Carlson to discuss the JD 23 Outlet Repair Project that is being funded by FEMA and the 1w1p funds.

**Red River Flood Damage Reduction Work Group** – LeRoy and I attended the RRFDRWG meeting held at 9:30 - 12:00. Pine Lake Project was brought to the group for review as well as two projects being developed by the Middle Snake Tamarac Rivers Watershed District which include the Newfolden and Nelson Slough FDR Projects.

**Moose River Interagency Meeting** – Nick, LeRoy and I will be attending the Moose River Interagency meeting at 9:30 am March 3<sup>rd</sup>. The meeting will be virtual as all of the agency folks that attend are working from their home.

**Correspondence Anya Kaplan-Seem** – I have included in your packet a letter from Anya Kaplan-Seem who is working on her PhD and plans on coming to the Red River Valley to do some research. The reason for sharing this is make you aware of her plans should she ever reach out to you for information.

#### To the Red Lake Watershed District:

I hope this message finds you well. I have recently begun sitting in on your public meetings and write to introduce myself.

I am a PhD student in the Department of Geography, Environment, and Society at the University of Minnesota, currently conducting research into artificial drainage practices and politics in the Red River Valley. The purpose of the research is to better understand how the physical and social geographies of the Red River Valley shape one another, and how specific efforts to manage excess water for commodity crop production take place in the context of institutional supports and pressures, economic and ecological concerns, and diverse relationships to the history and possible futures of agriculture in the region.

For seven years before moving to Minnesota and beginning graduate studies I worked on mid-sized market farms including one in northern New York state close to the farmland where John Johnston pioneered tile drainage practices for American farmers in the 1840s and '50s. In my work as a geographer, I aim to try to understand why things happen the way they do where they do—and what difference that makes to people's lives and to the places in which they live. My goal is to write a dissertation that informs how geographers think about landscape and agriculture in the American Midwest and that encourages social scientists to question our own assumptions about what is at play and what is at stake when we make claims about agrarian practices or futures.

Over the next 12-15 months I will be reading historical records, attending public meetings and events, and interviewing landowners, growers, technicians, industry professionals, researchers, and members of local and state government. I'm currently limited by Covid-19 research protocols to doing remote work, however, it's my hope that I'll be able to make trips to the Red River Valley soon and have many of these conversations in person. I hope also to be fortunate enough to find individuals willing to show me around their land or have me join them and observe while they work so that I can more competently appreciate and more justly convey the complexity of the issues involved and the perspectives people share with me.

Thank you for taking the time to read this letter. I look forward to connecting in the future and welcome emails or calls should you wish to be in touch. My contact information is below.

Best regards, Anya Kaplan-Seem

Anya Kaplan-Seem PhD candidate, Dept of Geog, Env & Soc, UMN office: 414 Social Sciences Bldg, Mpls, MN 55455

email: kapla298@umn.edu phone: 917-981-9043