BOARD OF WATER AND SOIL RESOURCES 520 LAFAYETTE ROAD NORTH ST. PAUL, MN 55155 WEDNESDAY, JANUARY 25, 2023

AGENDA

9:00 AM CALL MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ADOPTION OF AGENDA

MINUTES OF DECEMBER 15, 2022 BOARD MEETING

PUBLIC ACCESS FORUM (10-minute agenda time, two-minute limit/person)

REPORTS

- Chair & Administrative Advisory Committee Gerald Van Amburg
- Executive Director John Jaschke
- Audit & Oversight Committee Joe Collins
- Dispute Resolution and Compliance Report Travis Germundson/Rich Sve
- Grants Program & Policy Committee Todd Holman
- RIM Reserve Committee Jayne Hager Dee
- Water Management & Strategic Planning Committee Joe Collins
- Wetland Conservation Committee Jill Crafton
- Buffers, Soils & Drainage Committee Mark Zabel
- Drainage Work Group Neil Peterson/Tom Gile

AGENCY REPORTS

- Minnesota Department of Agriculture Thom Petersen
- Minnesota Department of Health Steve Robertson
- Minnesota Department of Natural Resources Sarah Strommen
- Minnesota Extension Joel Larson
- Minnesota Pollution Control Agency Katrina Kessler

ADVISORY COMMENTS

- Association of Minnesota Counties Brian Martinson
- Minnesota Association of Conservation District Employees Nicole Bernd
- Minnesota Association of Soil & Water Conservation Districts LeAnn Buck
- Minnesota Association of Townships Eunice Biel
- Minnesota Association of Watershed Districts Jan Voit
- Natural Resources Conservation Service Troy Daniell

COMMITTEE RECOMMENDATIONS

Administrative Advisory Committee

1. BWSR Diversity, Equity and Inclusion Plan – Jenny Gieseke and Janina Artisty – DECISION ITEM

Audit and Oversight Committee

1. 2022 Performance Review and Assistance Program Legislative Report – Jenny Gieseke and Jenny Mocol-Johnson – *DECISION ITEM*

Grants Program and Policy Committee

- 1. FY23 Water Quality and Storage Pilot Grant Program Rita Weaver **DECISION ITEM**
- Amendment to Board Order #22-55: Clean Water Fund Competitive Grants Marcey Westrick DECISION ITEM

Central Region Committee

- 1. Snake River Comprehensive Watershed Management Plan Darren Mayers **DECISION ITEM**
- 2. Lower Mississippi River Watershed Management Organization Watershed Management Plan Steve Christopher **DECISION ITEM**

Northern Region Committee

 Otter Tail River Comprehensive Watershed Management Plan – Kurt Beckstrom, Ryan Hughes, and Pete Waller – **DECISION ITEM**

NEW BUSINESS

1. Historical Context: Tribes – Melissa King and Craig Engwall – Melissa King and Craig Engwall – *INFORMATION ITEM*

UPCOMING MEETINGS

- Southern Region Committee is scheduled for 10:00 a.m., February 23, 2023, location TBD.
- BWSR meeting is scheduled for 9:00 a.m., March 22, 2023, in St. Paul and by MS Teams.

ADJOURN



December 30, 2022

Executive Assistant Board of Water and Soil Resources 520 Lafayette Rd St Paul, MN 55155-4101 RECEIVED

JAN 03 2023

Bd. of Water & Soil Resources St. Paul

From: Campaign Finance and Public Disclosure Board

Subject: Requirement for public officials to annually recertify statement of economic interest

You are receiving this notice because you are the contact person for an agency that has members or employees who are public officials. All public officials must update their statements of economic interest annually. The Board is asking for your help in reminding the public officials in your agency of this requirement. In doing so, please keep these things in mind:

- A public official must review and recertify his or her statement even if he or she left the
 public official position during 2022, or if nothing on it has changed. Please be sure
 that the public officials who left your agency during the year are aware of the filing
 requirement.
- The annual recertification must be filed after January 1, 2023, but no later than January 30, 2023. A public official who does not file a recertification by the deadline will be subject to the imposition of late filing fees and a potential civil penalty.
- The Board will send letters directly to all public officials in late December notifying them
 of the requirement and giving them the information necessary to file online. Paper copies
 of the statement may be printed from the Board's website by any official unable to file
 online.

If you are not sure who in your agency is considered a public official, you can view the list of the public officials in your agency by entering your agency's name into the search box at https://cfb.mn.gov/reports-and-data/officials-financial-disclosure/agency/.

If you need to correct any inaccuracies on the list for your agency, or if you have questions about the reporting requirements in general, please contact Erika Ross at 651-539-1187 or erika.t.ross@state.mn.us or William Hager at 651-539-1183 or william.hager@state.mn.us.

Thank you in advance for your assistance.

Date: 1-24-23 (*DRAFT*)

Topic: Ways MN can leverage USDA-NRCS IRA Climate Conservation Funds (EQIP, CSP, RCPP)

Time Period: ramp up over 5+ years

Acceleration: See IRA Funding Table (below).

Partner staff via contribution agreement can assist with targeted outreach and marketing to increase new and diverse participation by historically underserved groups. Partner staff assist with processing applications also.

- 1. Extend funding by using State funds to pick up applicants that could not be funded under NRCS programs when funds run out or the reverse.
- 2. Use State/local funds to cover a practice(s) that that NRCS does not offer. Example: if State levels are significant enough, NRCS could stop offering cover crop, stream bank, or another practice and the State could fund them instead.
- 3. Partner staff who are certified planners and/or have JAA could assist with planning and implementation via contribution agreement. All work would need to be completed the same as an NRCS employee using our tools, desktop and possibly CART.
- 4. Partner staff could assist via agreement with practice checkout and status reviews based on JAA and/or experience.
- 5. Piggyback State funding to extend or enhance the duration of the practice established with Federal funding. State funds could pick up annual payments beyond the NRCS 3-year limit. Also, the State could stack funds so certain practices are paid at or near 100%.
- 6. State, local, and private funds could be leveraged using the RCPP Alternative Funding which allows an entity such as BWSR to run the entire project including funding.

Notes:

- A. EQIP and CSP are flat rate payment programs (not cost-share) at approx. 50%. NRCS does not track if the client gets more of their cost paid via non-NRCS programs.
- B. Existing Farm Bill Conservation Title provisions/mechanisms will be used under IRA. No new programs are expected at this time.
- C. "Stacking" of NRCS funds is not allowed but stacking with other (state, local, private, Fed non-NRCS) is allowable.
- D. CSP requires at least one additional practice. Therefore, unsuccessful applicants could use State programs to fund certain key enhancements and practices to meet concerns.
- E. RCPP availability / funding will increase but the same program regulations and processes will be used.
- F. Use of a (broad) 'climate sub-set' of existing standard practices is expected to be approved by the NRCS Chief soon.

Ways Minnesota can leverage USDA-NRCS IRA Climate Easement Funds (RCPP, HFRP, ALE, WRE)

- 1. Add SWCD capacity to provide outreach and marketing to educate landowners about options and explain how to seek Fed dollars and how the conservation easement would fit their land management objectives. The effort needs to be targeted.
- 2. Use SWCD staff who are certified planners and have JAA to prepare a conservation and management plan that meets landowner, state, and federal interests and record the easement on the property title.

- 3. Provide technical assistance (with JAA) to restore the install Climate-beneficial practices (e.g., engineering designs, seed sourcing and specifications).
- 4. Oversee the restoration and practice installation by contractors.
- 5. Assist with annual monitoring.
- 6. Use State funds to pay for gaps in cost-rates where NRCS may not be able to pay as much as the landowner expects. An example is, if NRCS could only pay up to \$7,500 per acre but the landowner needs \$10K based on the current market, State funds could assist to reach \$10K.
- 7. ALE requires an entity to hold the easement. A State agency could take responsibility. (In HFRP, NRCS holds the easement unless it is part of an RCPP.)
- 8. RCPP Alternative funding could be used if the State would take on and fully run an easement program for working lands and/or wetlands and/or water retention easements.

Notes:

- A. NRCS Easement Programs require the easement to be held by a State, Local or NGO with a validated program.
- B. USDA-NRCS funding pays for an "up-to" amount which is a fraction of the appraised value.

IRA Funding Table.

		IRA funding in millions									
	Current- '22	2023	2024	2025	2026	IRA total					
EQIP	\$ 1,800	\$ 250	\$ 1,750	\$ 3,000	\$ 3,450	\$ 8,450					
CSP	\$ 800	\$ 250	\$ 500	\$ 1,000	\$ 1,500	\$ 3,250					
RCPP	\$ 300	\$ 250	\$ 800	\$ 1,500	\$ 2,400	\$ 4,950					
ACEP	\$ 450	\$ 100	\$ 200	\$ 500	\$ 600	\$ 1,400					

FY 2024-25 Biennial Budget Planning

All Funds by Agency

(Dollars in Thousands)

					Biennium			Biennium			
		FY 2023	FY 2024	FY 2025	FY 23-25	FY 2026	FY 2027	FY 26-27			
Water and Soil Re	sources, Board	of									
Base Adjustment ar	id Operations Su										
General	EXP	\$0	\$189	\$370	\$559	\$370	\$370	\$740			
	CI Cost (Savings)	\$0	\$189	\$370	\$559	\$370	\$370	\$740			
Clean Water Legacy	- Accelerated Im	plementat	ion								
Clean Water	EXP	\$0	\$5,500	\$5,500	\$11,000	\$0	\$0	\$0			
	CI Cost (Savings)	\$0	\$5,500	\$5,500	\$11,000	\$0	\$0	\$0			
Clean Water Legacy	- Buffer Law Imp	olementatio	on								
Clean Water	EXP	\$0	\$2,000	\$2,000	\$4,000	\$0	\$0	\$0			
_	CI Cost (Savings)	\$0	\$2,000	\$2,000	\$4,000	\$0	\$0	\$0			
Clean Water Legacy - Conservation Drainage Management and Assistance											
Clean Water	EXP	\$0	\$1,000	\$1,000	\$2,000	\$0	\$0	\$0			
	CI Cost (Savings)	\$0	\$1,000	\$1,000	\$2,000	\$0	\$0	\$0			
Clean Water Legacy	- Critical Shorela	and Protect	ion								
Clean Water	EXP	\$0	\$1,500	\$1,500	\$3,000	\$0	\$0	\$0			
	CI Cost (Savings)	\$0	\$1,500	\$1,500	\$3,000	\$0	\$0	\$0			
Clean Water Legacy	- Floodplain Eas	ements									
Clean Water	EXP	\$0	\$2,500	\$2,500	\$5,000	\$0	\$0	\$0			
	CI Cost (Savings)	\$0	\$2,500	\$2,500	\$5,000	\$0	\$0	\$0			
Clean Water Legacy	- Massuras Rasi	ilts and Acc	countability								
Clean Water	EXP	\$0	\$1,250	\$1,250	\$2,500	\$0	\$0	\$0			
- Cicari Water	CI Cost (Savings)	\$0 \$0	\$1,250 \$1,250	\$1,250 \$1,250	\$2,500	\$0 \$0	\$0 \$0	\$0 \$0			
Clean Water Legacy	- One Watershe	d, One Plar	1								
Clean Water	EXP	\$0	\$1,750	\$1,750	\$3,500	\$0	\$0	\$0			
	CI Cost (Savings)	\$0	\$1,750	\$1,750	\$3,500	\$0	\$0	\$0			

Tuesday, January 10, 2023 Page 1 of 4

					Dieminum			Dieminum
		FY 2023	FY 2024	FY 2025	FY 23-25	FY 2026	FY 2027	FY 26-27
Water and Soil R	Resources, Board o	of						
Clean Water Lega	cy - Soil Health and	Adoption	of Cover Cro	ops				
Clean Water	EXP	\$0	\$6,039	\$6,038	\$12,077	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$6,039	\$6,038	\$12,077	\$0	\$0	\$0
Cloan Water Lega	cy - Surface and Dri	nkina Wat	or Protoctic	n Postorat	ion			
		_						
Clean Water	EXP	\$0	\$8,500	\$8,500	\$17,000	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$8,500	\$8,500	\$17,000	\$0	\$0	\$0
Clean Water Lega	cy - Targeted Wellh	ead Drink	ing Water So	ource Prote	ection			
Clean Water	EXP	\$0	\$2,500	\$2,500	\$5,000	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$2,500	\$2,500	\$5,000	\$0	\$0	\$0
Class Water Land	an Tankalan Frak							
Clean water Lega	cy - Technical Evalu							
Clean Water	EXP	\$0	\$100	\$100	\$200	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$100	\$100	\$200	\$0	\$0	\$0
Clean Water Lega	cy - Tillage and Eros	ion Evalua	ation					
Clean Water	EXP	\$0	\$425	\$425	\$850	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$425	\$425	\$850	\$0	\$0	\$0
	, ,,,	·	•	•		·	·	
Clean Water Lega	cy - Watershed Base	ed Implem	nentation					
Clean Water	EXP	\$0	\$39,500	\$39,500	\$79,000	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$39,500	\$39,500	\$79,000	\$0	\$0	\$0
Clean Water Lega	cy - Watershed Part	ners Lega	су					
Clean Water	EXP	\$0	\$500	\$500	\$1,000	\$0	\$0	\$0
	CI Cost (Savings)	\$0 \$0	\$500	\$500	\$1,000	\$0	\$0	\$0
	G. GGG. (GG80)	**	4555	4500	, , , , , ,	7-	7-	, ,
Clean Water Lega	cy - Wetland Restor	ation Ease	ements					
Clean Water	EXP	\$0	\$5,000	\$5,000	\$10,000	\$0	\$0	\$0
	CI Cost (Savings)	\$0	\$5,000	\$5,000	\$10,000	\$0	\$0	\$0
Conservation Ease	ement Stewardship	Account						
Not Assigned	NA	\$0	\$0	\$0	\$0	\$0	\$0	\$0
not rooigileu	CI Cost (Savings)	ŞU	ŞU	ŞU	٦٥٠	ŞU	ŞU	٥٦
	Ci Cost (Savings)							

Biennium

Biennium

Tuesday, January 10, 2023 Page 2 of 4

Water and Soil Resources, Board of														
Conservation Ea	Conservation Easement Stewardship Account													
Enhancement to RIM Easements														
Enhancement to	o RIM Easements													
General	EXP	\$0	\$3,550	\$3,550	\$7,100	\$480	\$480	\$960						
	CI Cost (Savings)	\$0	\$3,550	\$3,550	\$7,100	\$480	\$480	\$960						
Grants to Tribal	and NGO Entities													
Not Assigned	NA	\$0	\$0	\$0	\$0	\$0	\$0	\$0						
	CI Cost (Savings)													
Grasslands ease	ement													
General	EXP	\$0	\$11,000	\$11,000	\$22,000	\$400	\$400	\$800						
	CI Cost (Savings)	\$0	\$11,000	\$11,000	\$22,000	\$400	\$400	\$800						
Habitat Enhance	ement Landscape Progr	am												
General	EXP	\$0	\$4,500	\$4,500	\$9,000	\$1,000	\$1,000	\$2,000						
	CI Cost (Savings)	\$0	\$4,500	\$4,500	\$9,000	\$1,000	\$1,000	\$2,000						
Natural Resource	ces Block Grant Increas	e												
General	EXP	\$0	\$1,250	\$1,250	\$2,500	\$1,250	\$1,250	\$2,500						
	CI Cost (Savings)	\$0	\$1,250	\$1,250	\$2,500	\$1,250	\$1,250	\$2,500						
Peatland Easem	ents													
General	EXP	\$0	\$7,500	\$7,500	\$15,000	\$710	\$710	\$1,420						
	CI Cost (Savings)	\$0	\$7,500	\$7,500	\$15,000	\$710	\$710	\$1,420						
Soil Health Prog	gram													
General	EXP	\$0	\$13,580	\$13,580	\$27,160	\$13,580	\$13,580	\$27,160						
	CI Cost (Savings)	\$0	\$13,580	\$13,580	\$27,160	\$13,580	\$13,580	\$27,160						
Support for Trib	oal Liaison													
General	EXP	\$0	\$129	\$136	\$265	\$144	\$144	\$288						
	CI Cost (Savings)	\$0 \$0	\$129	\$136	\$265	\$144	\$144	\$288						
		-												
Water Storage														

FY 2023

FY 2024

FY 2025

Biennium

FY 23-25

FY 2026

FY 2027

Biennium

FY 26-27

Tuesday, January 10, 2023 Page 3 of 4

Water and Soil	Vater and Soil Resources, Board of														
Water Storage	Vater Storage														
General	EXP	\$0	\$8,500	\$8,500	\$17,000	\$480	\$480	\$960							
	CI Cost (Savings)	\$0	\$8,500	\$8,500	\$17,000	\$480	\$480	\$960							
General		\$0	\$50,198	\$50,386	\$100,584	\$18,414	\$18,414	\$36,828							
Clean Water		\$0	\$78,064	\$78,063	\$156,127	\$0	\$0	\$0							
Not Assigned															

FY 2025

\$128,449

FY 2024

\$128,262

FY 2023

\$0

Water and Soil Resources, Board of Cost (Savings)

Biennium

FY 23-25

\$256,711

FY 2026

\$18,414

FY 2027

\$18,414

Biennium

FY 26-27

\$36,828

Tuesday, January 10, 2023 Page 4 of 4



Southwest Prairie TSA mentorship expedites SWCD techs' proficiency





The Southwest Prairie TSA, also known as TSA 5, training coordinator position is funded primarily by BWSR's Clean Water Fundsupported, noncompetitive **Enhanced Shared Technical** Services grant, and supplemented by an NACD technical assistance grant.

rowing up on a grain farm north of Dawson gave Quintin Peterson an advantage when he became a Lac qui Parle Soil & Water Conservation District (SWCD) technician. He was familiar with farming practices in the area. He knew the terrain. And he already knew many of the landowners in his home county.

Not every new SWCD hire is as well-versed in agriculture.

In the 11 SWCDs served by the Southwest Prairie Technical Service Area (TSA), TSA Training Coordinator Dawn Madison can help to fill those gaps with one-on-one training and mentorship. Hers is a unique position among the state's eight TSAs.

"It's kind of a jump-start," said Southwest Prairie TSA Administrative Coordinator Kay Gross.







Peterson

How to gain that trust and keep that trust, that's the most crucial thing.

— Quintin Peterson,
Lac qui Parle SWCD

Top: SWCD technicians from the 11-county Southwest Prairie TSA learned how to identify and review placement of water and sediment control basins, and the resources being addressed, during a training with TSA Senior Engineering Technician Mike Skoglund Oct. 19, 2022, in Redwood County. **Above:** Southwest Prairie TSA Training Coordinator Dawn Madison has hosted SWCD technicians on her Nobles County beef-and-crop farm. She organized trainings on other livestock producers' farms so SWCD staffers could learn what drives management decisions and get some experience talking to farmers. **Photos Courtesy of Dawn Madison, TSA 5**







Left: Technicians from SWCDs within the 11-county TSA 5 examined soil profiles and the deep roots of Kernza during the Organic Ag 101 Field Day on Aug. 11, 2022, in Lac qui Parle County. **Photo Credit:** Quintin Peterson, Lac qui Parle SWCD **Middle:** Breanna Wagner of the Cottonwood SWCD and Lee Tapper of the Rock County SWCD/Land Management office estimated corn yields in September 2022 on Madison's Nobles County farm. **Right:** Sam Schardin of the Lincoln SWCD, at left, and Courtney Snyder of the Lyon SWCD worked with Madison and TSA Engineer Russ Hoogendoorn, not pictured, on water and sediment control basin design Dec. 19, 2022, in the Lincoln SWCD office in Ivanhoe. **Photos Courtesy of Dawn Madison, TSA 5**

Peterson is one of 41 SWCD staffers who has worked one-on-one with Madison over the past five years.

His background, environmental science degree and experience as a habitat technician with Pheasants Forever's Habitat Forever LLC could not prepare Peterson for every aspect of the job. Shortly after he was hired, Peterson started working with Madison to become proficient in software programs used to design structures, and to learn about ecological practices such as cover crops and no-till.

"Working through (conservation planning sessions) really sped up my development as a technician to complete successful projects in the field on my own," said Peterson, who joined the SWCD nearly four years ago, and was promoted in September to technical manager in the four-person office.

When the TSA hired Madison as a contractor in fall 2017, Gross said TSA engineers could not keep up with demand for services. When SWCD staffers attain Job Approval Authority (JAA) — even to sign off on less complex projects — it

These jobs are uniquely different. There's no manual. Every county is different. Everything is new, and (for) a lot of these young people, it's their first or second job.

—Dawn Madison, TSA 5 training coordinator

frees TSA engineers for work that requires more technical expertise. Enlisting Madison to train employees frees experienced SWCD staff members to focus on their duties.

Landowners benefit when knowledgeable staff can suggest options that fit their operation and improve both conservation and their bottom line.

"If a landowner's got a problem and asks, and we can help them solve that, I'll guarantee you, the next time they're thinking (about a project), they're going to come into your office because you were helpful, you were knowledgeable. We're not hiding any of the facts. This is what it's going to cost you. This is what it's going to do. This is what it's going to look like. So very down-to-earth, honest, talking on their platform and that's kind of what this training is doing, is getting them the knowledge so that they can confidently talk

with a landowner," Gross said.

Working with Madison, Gross said SWCD employees learn how to talk to a landowner at the counter and in the field, how to investigate and assess resource concerns, and how to determine what options might best suit the landowner. Acting as a mentor, Madison may accompany them when they meet with landowners.

Once they finish training, Madison remains available to answer questions.

"These jobs are uniquely different. There's no manual. Every county is different. Everything is new, and (for) a lot of these young people, it's their first or second job — so they're absolutely fresh to (this type of) work and how to go about learning to do their job," Madison said. "They've got farmers coming through the door asking for some deliverable, and they don't

know what (the farmers) are talking about."

At field trainings that introduced agricultural crops, farm implements and soil health practices and allowed technicians to hear farmers explain their management decisions — Madison has worked with even more new hires. She started a training series focused on different types of livestock operations dairy, beef, hogs — and how they drive crop production, land use and management decisions.

"It's not as intimidating," Gross said of working oneon-one or in small groups. "What she's trying to do is build up their confidence."

Training usually starts with a call from an SWCD manager, who describes what skills the position requires. Madison then meets the employee to learn about their abilities and aspirations. Together, they set two large goals and one small goal that mesh with the SWCD's needs.

"What I want and what they're craving in a job we meld those two together and then she starts working up a training plan with them," said Gross, who is also the Cottonwood SWCD administrator. "I need them to run the gamut."

In Cottonwood County, Gross said the SWCD must be ready to pursue prioritized conservation projects funded through the Minnesota Board of Water and Soil Resources' (BWSR) One Watershed, One Plan, which is supported by Clean Water Funds. Implementation is underway in the Watonwan River watershed. The BWSR Board is slated to consider plans for the Des Moines River watershed this spring. Next up will be the Cottonwood-Middle Minnesota River watershed

Successful implementation will hinge upon working with private landowners. Gross described her office's bigpicture goal:

"What we're trying to get out there is as much conservation on the land as we can to keep (farmers') resources as healthy as possible in whatever ecosystem they're working in — if they're working in dairy, beef, swine. Maybe they're just crop farming. But what can we do out there to help them so that their bottom line improves but also our conservation on the ground improves?"

The one-on-one training augments — and prepares staffers for — state, local and national trainings, which might only be offered every two years, and which tend to draw larger groups of varying skill levels. Madison's handson field days introduce the jargon, tools, implements and practices new employees will build upon.

"It doesn't hurt to have a background in what you're looking at before you go to a (more advanced) training,"



Joe and Rita Vander Kooi explain their dairy operation and answer SWCD technicians' questions during a Dec. 1, 2022, tour of their Nobles County farm. **Photo Credit:** Dawn Madison, TSA 5

Details & Definitions

TSA 5: The Southwest Prairie Technical Service Area, also known as TSA 5, serves SWCDs in Cottonwood, Jackson, Lac qui Parle, Lincoln, Lyon, Murray, Nobles, Pipestone, Redwood, Rock and Yellow Medicine counties. TSA 5 had 160 projects on the books as of December 2022 — including those being investigated, surveyed, designed, or construction-ready. Additionally, TSA 5 completed 95 projects in 2022.

JAA: Gaining Job Approval Authority, a credentialing system for planning, design and installation of standard conservation practices, requires training, experience and demonstrated competence.

Gross said. "A lot of people we're hiring right now do not have a close farm background."

Madison and her husband ran a dairy farm until 2019, when they switched to a black Angus cow-calf operation. They have hosted hands-on trainings centered on the cover crops and notill practices they employ on their farm near Adrian.

"The technicians being able to come out here and dig in our soil and do the infiltration test and survey on my land without feeling that they're going to get in trouble — it's nice," Madison said. "They can practice in a non-judgment zone without having to have a deliverable."

Madison said her mentors at the Natural Resources

Conservation Service (NRCS) inspired her to do the same for others. She earned an associate degree in ag business, and then interned with the USDA's Farm Service Agency (FSA) in Worthington. The FSA job led to a recommendation for an NRCS position, which offered more hours than the banking iob she was considering. She worked as an NRCS soil conservation technician for nearly 20 years before buying a greenhouse a few vears ago.

When she took the TSA job — which is funded primarily by BWSR's Clean Water Fund-supported, noncompetitive Enhanced Shared Technical Services grant, and supplemented by a National Association of Conservation Districts (NACD) technical assistance

grant — Madison said she thought she could fulfill SWCDs' training needs in one year.

"But nobody can understand the amount of turnover, and until you're in those shoes you really don't understand the dynamic. It's been a learning process. Sometimes you go through a couple people before you find the one that really wants to be there," Madison said. She tries to help employees feel more comfortable in their new roles. "From there, some components have to sort themselves out. I think I came into it thinking that I could help them become fit for the job. You can't create that."

What she can do is help SWCD staffers tap their motivation. For example, one employee with an interest in invasive species spearheaded successful work to increase awareness.

"What we get is people very motivated to change the world in some way. It is important that we help them understand that changing the world takes time. Slow down. Get your foundation going. As you develop your skills, you can venture into more things of interest, provided the supervisor's good with it," Madison said.

Peterson, meanwhile, seems to have found his niche.

"This has always been a lifetime goal of mine. At least since middle school I knew what path I wanted to take — not the SWCD in particular, but in conservation," said Peterson, who grew up hunting and fishing along the Lac qui Parle River. "I believe we should leave our landscape in better shape than when we found it."



Cook County SWCD staff gain experience via collaboration with BWSR engineer







Left: A 45-foot-tall bluff along Lake Superior's shoreline was partially eroded in spring 2022. Cook County SWCD staff are working to prevent further erosion, which can be seen here from a balcony. **Middle:** Cook County SWCD Administrator Stephen Janasie (far right), two members of the homeowners' association, and the individual who oversaw the construction of the development viewed the erosion during a site visit. **Right:** A balcony view shows the proximity of the building to the bluff crest. The area where the grass is worn down is roughly where the outlet pipe for the gutter project will be installed. **Photo Credits:** Cook County SWCD

A new emphasis on providing one-on-one, project-specific training led a Minnesota Board of Water and Soil Resources (BWSR) engineer to work on a project involving a 45-foot-tall bluff on the shore of Lake Superior. The collaboration assisted Cook County Soil & Water Conservation District (SWCD) staff with technical aspects of an erosion control project affecting a condominium complex.

Cook County SWCD staff members are among the latest to use BWSR's expanded one-on-one assistance. The focus aims to help fill the demand from BWSR partners for more direct support.

In spring 2022, a combination of melt from a record-setting seasonal snowfall plus rain events led to massive runoff. When Cook County SWCD staff visited the site that July, SWCD Administrator Stephen Janasie said a 50-foot-long stretch of the crest had fallen to the beach below — which brought the bluff edge closer to several housing units.

BWSR Northern Regional Training Engineer Patrick Schultz, who worked with Cook

County SWCD staff, said runoff from large roofs at the condominium complex exacerbated the erosion problem.

Cook County SWCD staff addressed the problem using the USDA Natural Resources Conservation Service's (NRCS) roof runoff structure and underground outlet practices, which typically are used to divert clean rainwater from roofs away from feedlots to prevent it from becoming contaminated. The idea was simple: Use gutters to capture and redirect the roof runoff.

"This project was a priority for the district due to the amount of sediment that entered Lake Superior, and the potential of this continuing during future events. The landowners are taking additional steps to eliminate runoff from this sensitive area, like increasing the vegetative buffer, reducing off-site runoff ... entering the property, and installing vegetated swales," Janasie said.

Because the Cook County SWCD staff did not have the <u>Job Approval Authority</u> (<u>JAA</u>) needed to approve the project, they turned to Schultz, who worked through the design process with them, and ultimately reviewed and approved the project.

Schultz began working oneon-one with district staff in late summer 2022. He provided technical expertise and support throughout the design phase, and answered SWCD staffers questions as they worked their way through challenges. The site itself is challenging from a stormwater perspective, partly because it is adjacent to Highway 61, Janasie said. The challenge lies in figuring out how to manage large amounts of water that flow through the area. There is a narrow strip of land between the highway and the bluff, and much of that area is impervious surface — including a large parking lot. Across the road, a big hill sends water to the highway and, eventually, to the property.

Janasie said he found the one-on-one assistance invaluable on this project, a first of its kind for Cook County SWCD staff.

"Patrick's willingness to work through each step of the design phase provided us with the knowledge and resources needed to properly address the problem. The BWSR technical training videos got us started, but it was very helpful developing the designs with someone like Patrick who has done this before. He helped us balance all the factors at this challenging site and showed us where to find and how to use the resources from BWSR and NRCS for the conservation practices employed," Janasie said.

The property owners have hired contractors for the project. The goal is to begin installing gutters and outlet pipes this spring. SWCD technicians anticipate that the project should be completed quickly.

Funding comes from Cook County SWCD's State Cost-Share Program allocation, which is officially called the Erosion Control and Water Management Program. The program provides funds to SWCDs to share the cost

of systems or practices for erosion control, sedimentation control, or water quality improvements that are designed to protect and improve soil and water. Through the program, landowners can request financial and technical assistance from their local district for the implementation of conservation practices. The state cost-share funding is a general fund appropriation that BWSR distributes to SWCDs via a formula. This program has its own statutory requirements and BWSR policy details for implementation.

The Technical Training and Certification Program (TTCP) provides training and assistance to conservation field staff on engineering practices that address erosion and other conservation needs. Most of this training takes place in the classroom, in group sessions or in the field. Especially during the COVID-19 pandemic, training was offered via webinars and other virtual

means. A shift in job duties starting in fall 2022 allowed the training engineers to do more one-on-one or project-specific training and assistance. Roughly 25% of training engineers' time is dedicated to this one-on-one type of training.

"We've always known that people need more one-on-one help than what's being offered out there. It's something we've always wanted to do, and we've always done it to a small extent, we just never really advertised what we were doing or tried to push it," Schultz said.

One-on-one training might include helping staff to design a practice, reviewing and approving plans, helping staff with construction oversight and other on-site activities.

Further, one-on-one training supports the TTCP's mission of having highly trained and skilled field staff, providing mentors for field staff, and helping field staff move toward achieving JAA by gaining experience.



Isanti SWCD alum treatment caps yearslong Blue Lake protection work









66

Clean
Water
Funds make
this kind of
a project
possible. ...
(It) would
be costprohibitive
for a lake
association
to fund on
its own.

Bill Fredell,Blue LID VP

ZIMMERMAN — With an aluminum sulfate treatment targeting in-lake phosphorus, the Isanti Soil & Water Conservation District (SWCD) last fall embarked upon the final phase of Clean Water Fund-supported



"Blue Lake was teetering on becoming an imperiled, endangered lake because of too much phosphorus," said Bill Fredell, vice president of the 147-member Blue Lake Improvement District (LID), which prompted protection efforts and provided matching funds. "This is the most cost-effective way to preserve the lake for the future."

Phosphorus feeds the algae that can turn lakes green. While not yet impaired, Blue Lake was starting to produce more algae blooms. Monitoring in 2016 revealed slightly elevated phosphorus and chlorophyll-a levels.

"This is Phase 2 of a larger goal to protect Blue Lake. Phase 1 was dealing with the external sources of phosphorus," said Lydia Godfrey, Isanti SWCD outreach assistant. A <u>2018 Clean Water Fund grant</u> from the Minnesota Board of Water and Soil Resources (BWSR) supported



Fredell



Godfrey

the initial work within the watershed, which reduced upland phosphorus-loading by more than 40%.

"We did the most cost-effective projects there," Godfrey said.

A diagnostic study determined that an aluminate sulfate treatment — also known as an alum treatment — was the best next step to protect the lake. A \$384,630 Clean Water Fund grant BWSR awarded to the SWCD in 2022 supports that work.

A crew from SOLitude Lake Management completed the first of two planned alum applications on Sept. 15, 2022. A second alum treatment planned for 2024 will cap the SWCD's Clean Water Fundsupported work centered on the popular recreational lake.

"You look in the lake and you can see fish and (plants) on the bottom, which you couldn't see yesterday," Godfrey said while September's 73-acre treatment was underway.

Together, the two treatments will reduce phosphorus by an estimated 590 pounds a year — exceeding the SWCD's 360-pound annual reduction goal by more than 150%.

SOLitude Lake Management operator Justin Broch, on shore, left, and project manager Joel Barrow, on barge and at right, monitored the tanks of aluminum sulfate and sodium aluminate as they refilled on Sept. 14. 2022, at the Blue Lake access in Stanford Township before making another GPS-guided application, center. A second alum treatment is set for 2024.

Photo Credits: Ann Wessel, BWSR

VIDEO:

"Isanti SWCD:
Blue Lake Alum
Treatment"

Tadd Barrow, a Fairmont, Nebraska-based water quality specialist with SOLitude, described the treatment as he and the rest of the crew waited for a truck to arrive with more aluminum sulfate.

"We essentially 'mow the lawn' going back and forth

across
the lake,
applying
aluminum
sulfate. The
aluminum
sulfate
will form a
flock that
settles —



Barrow

it almost looks like snow falling through the water," Barrow said. "It resides on the bottom of the lake. It's a very, very thin layer that is porous. Water can move through that layer. As that water comes through, that aluminum sulfate is grabbing onto the phosphorus, which is trying to leach into the water column that stimulates that algae growth."

The crew uses GPS to guide application. Automated valves and flow meters ensure accurate distribution and coverage.

A treatment can be effective from five to 20-plus years, depending upon conditions including the dose rate, amount of phosphorus-loading from the watershed and number of sites to which the alum can bind.



The Isanti SWCD's first BWSR Clean Water Fund grant-supported Blue Lake alum treatment was completed in September 2022; the second is planned for 2024.

BWSR Clean Water Fund grant details

\$251,000 AWARDED IN 2018: The Isanti SWCD worked with private landowners and two townships to reduce runoff and phosphorus-loading within the watershed. Projects included six shoreline restorations; one rain garden; shoreline erosion control, hill and gully stabilization and a second rain garden at the Stanford Township boat access; a stormwater management site incorporating an iron-enhanced sand filter, a rain garden and lakeshore buffers; and two settling ponds on a ditch identified as the highest contributor of phosphorus to the lake.

Annual phosphorus reduction estimate: 40.68 pounds

\$384,630 AWARDED IN 2022: In September, SOLitude Lake Management completed the first of two planned Blue Lake alum treatments, which targeted in-lake phosphorus. The second treatment is planned for 2024. Annual phosphorus reduction estimate: 590 pounds

"We're hoping that the result of this alum treatment will be quite dramatic, and it will prove to people that we can do even more, so that we get to a point where there's absolutely no phosphorus runoff into the lake — or as little as possible. That way we'll be able to preserve the lake for a long time into the

future," Fredell said.

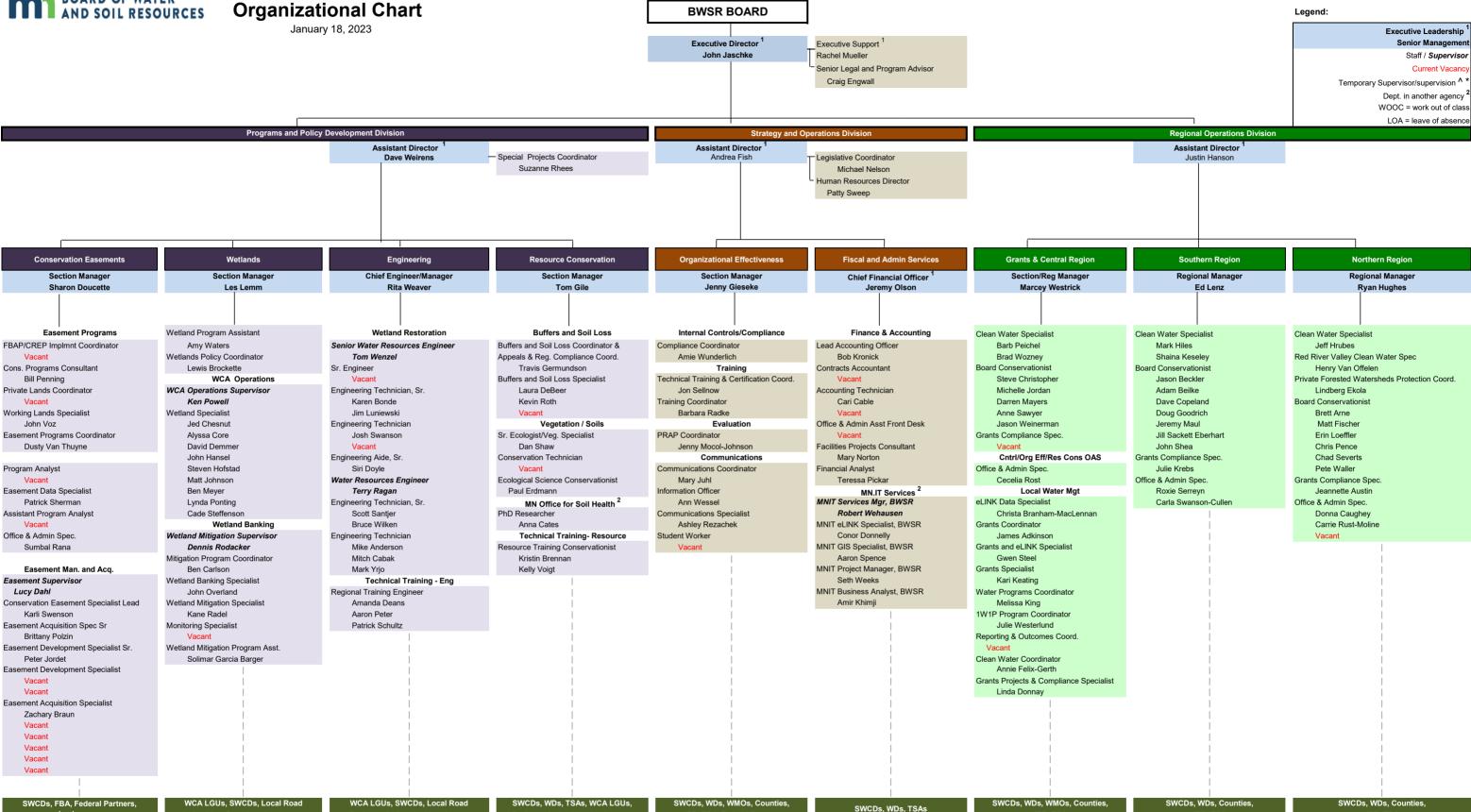
Fredell, who lives in Edina, has been visiting the lake since he was a child. Over the years, he's seen the shift from summer homes like his to year-round lake residences.

"This is a lake that people love. This is their home. This is their summer home. And they have friends here. It's a community asset that is very worthy of our protecting," Fredell said. "Blue Lake is an enormous resource for Isanti County. It's one of the few deep lakes in the county, and it has traditionally been a very healthy lake."

Thirty-one feet at its deepest point, 263-acre Blue Lake supports game fish and panfish including walleye, largemouth bass, Northern pike, bluegills, sunfish, perch and crappies. It draws anglers, recreational boaters and swimmers.

"This is a very popular recreational lake. It's very cherished by those in the county. It's also very cherished by the people that live on the lake. This project would not be possible if it wasn't for the efforts of the residents on Blue Lake, especially the Blue Lake Improvement District as well as both of the townships," Godfrey said.





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FI-00529-09 (11/13) Page **1** of **2**

EMPLOYEE EXPENSE REPORT (Instructions)

DO NOT PAY RELOCATION EXPENSES ON THIS FORM.

See form FI-00568 Relocation Expense Report. Relocation expenses must be sent to Minnesota Management & Budget, Statewide Payroll Services, for payment.

USE OF FORM: Use the form for the following purposes:

- 1. To reimburse employees for authorized travel expenses.
- 2. To request and pay all travel advances.
- 3. To request reimbursement for small cash purchases paid for by employees.

COMPLETION OF THE FORM: Employee: Complete, in ink, all parts of this form. If claiming reimbursement, enter actual amounts you paid, not to exceed the limits set in your bargaining agreement or compensation plan. If you do not know these limits, contact your agency's business expense contact. Employees must submit an expense report within 60 days of incurring any expense(s) or the reimbursement comes taxable.

All of the data you provide on this form is public information, except for your home address. You are not legally required to provide your home address, but the state of Minnesota cannot process certain mileage payments without it.

	Ea	rn Code		Earn Code				
Description	In State	Out of State	Description	In State	Out of State			
Advance	ADI	ADO	Membership		MEM			
Airfare	ARI	ARO	Mileage > IRS Rate	MIT*	MOT*			
Baggage Handling	BGI	BGO	Mileage < or = IRS Rate	MLI	MLO			
Car Rental	CRI	CRO	Network Services		NWK			
Clothing Allowance		CLA	Other Expenses	OEI	OEO			
Clothing-Non Contract		CLN	Parking	PKI	PKO			
Communications - Other		COM	Photocopies	CPI	CPO			
Conference/Registration Fee	CFI	CFO	Postal, Mail & Shipping Svcs.(outbound)	PMS				
Department Head Expense		DHE	Storage of State Property	STO				
Fax	FXI	FXO	Supplies/Materials/Parts	SMP				
Freight & Delivery (inbound)		FDS	Telephone, Business Use	BPI	BPO			
Hosting		HST	Telephone, Personal Use	PHI	PHO			
Laundry	LDI	LDO	Training/Tuition Fee	TRG				
Lodging	LGI	LGO	Taxi/Airport Shuttle	TXI	TXO			
Meals With Lodging	MWI	MWO	Vest Reimbursement VST					
Meals Without Lodging	MEI*	MEO*	Note: * = taxable, taxed at supplemental rates					

Supervisor: Approve the correctness and necessity of this request in compliance with existing bargaining agreements or compensation plans and all other applicable rules and policies. Forward to the agency business expense contact person, who will then process the payments. Note: The expense report form must include original signatures.

Final Expense For This Trip?: Check this box if there will be no further expenses submitted for this trip. By doing this, any outstanding advance balance associated with this trip will be deducted from the next paycheck that is issued.

1-Way Commute Miles: Enter the number of miles from your home to your permanent workstation.

Expense Group ID: Entered by accounting or payroll office at the time of entering expenses. The Expense Group ID is a unique number that is system-assigned. It will be used to reference any advance payment or expense reimbursement associated with this trip.

Earn Code: Select an Earn Code from the list that describes the expenses for which you are requesting reimbursement. Be sure to select the code that correctly reflects whether the trip is in state or out-of-state. **Note**: Some expense reimbursements may be taxable.

Travel Advances, Short-Term and Recurring: An employee can only have one outstanding advance at a time. An advance must be settled before another advance can be issued.

Travel Advance Settlement: When the total expenses submitted are less than the advance amount or if the trip is cancelled, the employee will owe money to the state. Except for rare situations, personal checks will not be accepted for settlement of advances; a deduction will be taken from the employee's paycheck.

FMS ChartStrings: Funding source(s) for advance or expense(s)

Mileage: Use the Mileage Reimbursement Calculation table to figure your mileage reimbursement. Mileage may be authorized for reimbursement to the employee at one of three rates (referred to as the equal to, less than, or greater than rate). The rates are specified in the applicable bargaining agreement/compensation plan. Note: If the mileage rate you are using is above the IRS rate at the time of travel (this is not common), part of the mileage reimbursement will be taxed.

Vehicle Control #: If your agency assigns vehicle control numbers follow your agency's internal policy and procedure. Contact your agency's business expense contact for more information on the vehicle control number procedure.

Personal Travel Benefits: State employees and other officials cannot accept personal benefits resulting from travel on state business as their own. These benefits include frequent flyer miles/points and other benefits (i.e. discounts issued by lodging facilities.) Employees must certify that they have not accepted personal travel benefits when they apply for travel reimbursement.

Receipts: Attach itemized receipts for all expenses except meals, taxi services, baggage handling, and parking meters, to this reimbursement claim. The Agency Designee may, at its option, require attachment of meal receipts as well. Credit card receipts, bank drafts, or cancelled checks are not allowable receipts.

Copies and Distribution: Submit the original document for payment and retain a copy for your employee records.

FI-00529-09 (11/13) Page **2** of **2**