

SUBCOMMITTEE ON MINNESOTA WATER POLICY

April 8, 2024

10:00 am

Jim Stark, Director

MEETING AGENDA

SUBCOMMITTEE ON MINNESOTA WATER POLICY: APRIL 8

- **CALL TO ORDER: CHAIR: SENATOR WEBER**
- **APPROVAL OF MARCH 11 MINUTES**
- **PRESENTATION SUPPORTING LIMITED LIABILITY FOR CERTIFIED SALT APPLICATORS: JANE HOVLAND, BARB AKRE, GRETCHEN SABLE (LEAGUE OF WOMEN VOTERS) RELATES TO SF3954; PUTNAM AND OTHERS: HF3656- HOLLINS AND OTHERS)**
- **UPDATE AND SUPPORT FOR: “ KEEP IT CLEAN INITIATIVE—WASTE ON ICE: ROBYN DWIGHT (SF3957: PUTNAM AND OTHERS; HF3662- MYERS AND OTHERS)**
- **UPDATE ON AGRICULTURAL FERTILIZER RESEARCH AND EDUCATION COUNCIL: FABIAN FERNANDEZ; BRUCE MONTGOMERY – RELATES TO SF3719- PUTNAM, WEBER, AND OTHERS; HF3411- FISCHER AND OTHERS)**
- **UPDATE AND DISCUSSION ON SUBCOMMITTEE PLANS FOR THE INTERIM- JIM STARK**
- **PROGRESS REPORT ON THE SESSION’S WATER LEGISLATION- JIM STARK (AS TIME ALLOWS)**
- **ADJOURN (10:45)**

SUBCOMMITTEE MEMBERS

SENATE MEMBERS

SENATOR WEBER*

SENATOR HAWJ

SENATOR KUPEC

SENATOR LANG

SENATOR PUTMAN

SENATOR WESENBERG

HOUSE MEMBERS

➤ REPRESENTATIVE HEMMINGSEN-JAEGER*

➤ REPRESENTATIVE JACOB

➤ REPRESENTATIVE FISCHER

➤ REPRESENTATIVE REHM

➤ REPRESENTATIVE SHULTZ

➤ REPRESENTATIVE SKRABA

➤ * CO-CHAIRS

LIMITING SALT APPLICATION

- **LEAGUE OF WOMEN VOTERS**
- **JANE HOVLAND**
- **BARB AKRE**
- **GRETCHEN SABLE**

SUPPORT LIMITED LIABILITY FOR CERTIFIED SALT APPLICATORS

JANE HOVLAND & BARB AKRE



GRETCHEN SABLE

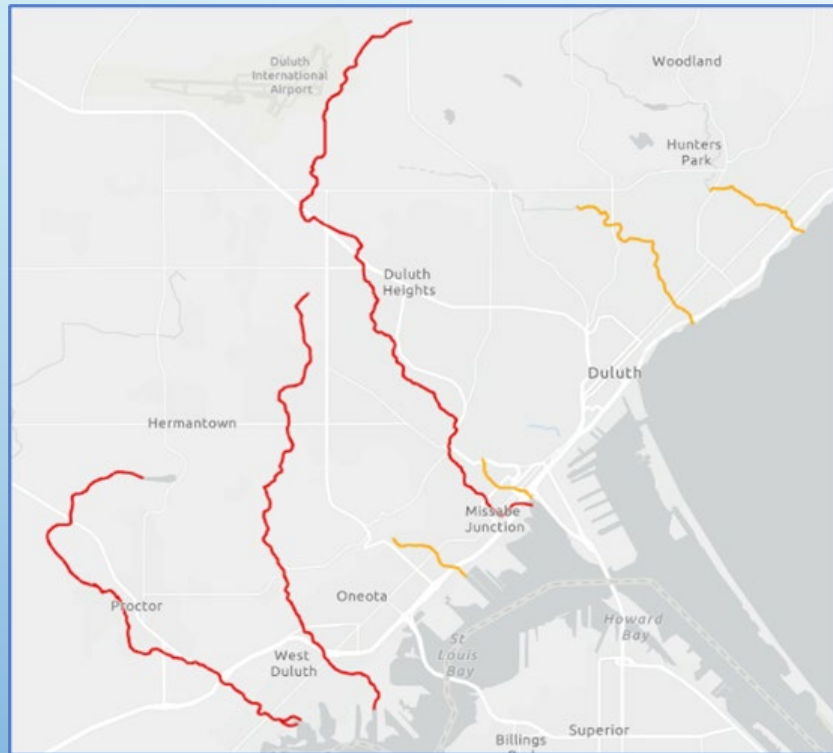


OVER APPLICATION OF DEICING SALT POLLUTES



- IT ACCUMULATES IN SOIL, SURFACE WATER & GROUNDWATER
- THERE AREN'T ECONOMICALLY FEASIBLE TREATMENT OPTIONS
- ECOSYSTEMS CHANGE: AQUATIC LIFE IS HARMED AND FOOD CHAINS ARE DISRUPTED
- INFRASTRUCTURE IS DAMAGED

DULUTH'S FRESHWATER IS BECOMING SALTY



- OF 44 STREAMS IN DULUTH, ONLY 10 ARE MONITORED FOR CHLORIDE
 - 3 MEET CHLORIDE STANDARDS
 - 3 EXCEED STANDARDS AND ARE IMPAIRED
 - 4 STREAMS “AT RISK” FOR IMPAIRMENT
 - 1 OF THOSE ALREADY NOMINATED FOR IMPAIRMENT
- CLEAN WATER DRAWS TOURISTS TO DULUTH AND THE STATE (\$\$\$)

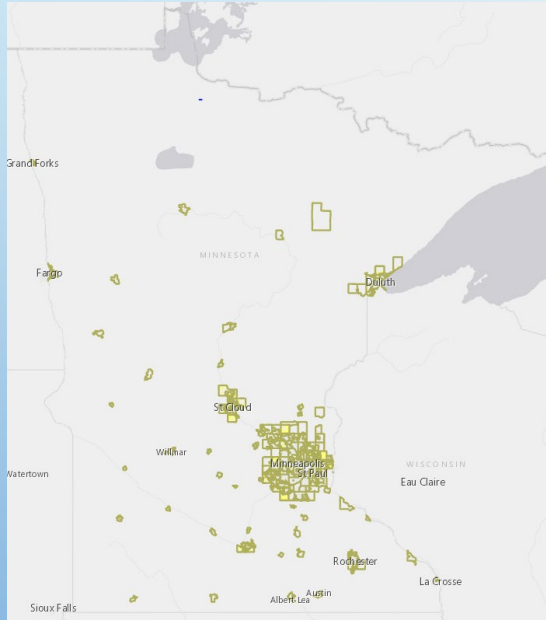
MN HAS MADE A GOOD START TO REDUCE SALT USE



- ROAD AUTHORITIES USE CALIBRATION & BRINING PRACTICES
- MN LOCAL ROAD RESEARCH BOARD EXPERIMENTS WITH SALT ALTERNATIVES
- MN STATEWIDE CHLORIDE MANAGEMENT PLAN GUIDANCE
- MN STORMWATER MANUAL GUIDANCE WITH BMPS
- SMART SALTING TRAINING:
 - FOR ROAD MAINTENANCE PROFESSIONALS
 - FOR PARKING LOTS AND SIDEWALKS PROFESSIONALS
 - FOR PROPERTY MANAGERS, BUSINESS OWNERS, & ENVIRONMENTAL PROFESSIONALS

MS4 PERMITTEES ARE IMPROVING PRACTICES

- BETTER PRODUCTS AND METHODS
- TRAINED STAFF
- CALIBRATION EQUIPMENT



HOWEVER

- LARGE PARTS OF THE STATE LACK THESE REQUIREMENTS BECAUSE THEIR URBANIZED AREA POPULATION IS <50,000



WISE SALT USE ADVICE EXISTS FOR HOMEOWNERS



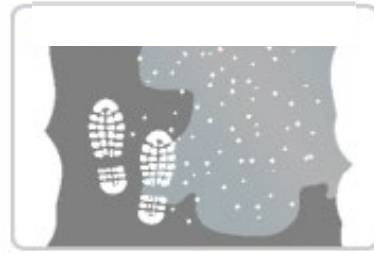
1. Shovel

Clear walkways before snow turns to ice, and before you apply salt. The more snow you clear manually, the less salt you'll need.



2. Select

Salt doesn't melt ice if the pavement is below 15 degrees, so use sand for traction when it's too cold, or choose a different de-icer.



3. Scatter

Use salt only where it's critical. When you apply salt to pavement, leave plenty of space between granules. A 12-ounce coffee cup of salt is enough to cover 10 sidewalk squares or a 20-foot driveway.



4. Sweep

Clean up leftover salt, sand, and de-icer to save and reuse as needed.

Protect our water!

Source: www.cleanwatermn.org





WHAT'S MISSING?

COMMERCIAL SALT APPLICATORS AND THE PEOPLE THAT HIRE THEM NEED:

- **SMART SALTING TRAINING (AVAILABLE, NOT FULLY UTILIZED)**
- **CONTRACTS THAT DON'T PAY BY POUND OF SALT USED (MODEL CONTRACTS AVAILABLE, NOT FULLY UTILIZED)**
- **LIMITED LIABILITY PROTECTION FROM LAWSUITS FOR TRAINED & CERTIFIED APPLICATORS (NOT AVAILABLE)**



ANSWER: MIRROR NEW HAMPSHIRE'S PROGRAM



- GREEN SNOWPRO PROGRAM: TRAINS & CERTIFIES PROFESSIONALS IN SALT REDUCTION PRACTICES THAT PRIORITIZE PUBLIC SAFETY & MITIGATE SALT USE.
- LIMITED LIABILITY PROTECTION AGAINST DAMAGES ARISING FROM SNOW AND ICE CONDITIONS IS GRANTED UNDER [RSA 508:22](#) TO NHDES-CERTIFIED COMMERCIAL SALT APPLICATORS AND PROPERTY OWNERS OR MANAGERS THAT HIRE THEM.
- TEN YEARS OF NH DATA AND LITIGATION EXPERIENCE DEMONSTRATE THE PROGRAM'S EFFECTIVENESS.

***MN NEEDS YOUR SUPPORT
FOR A SIMILAR LIMITED LIABILITY BILL NEXT SESSION***



WHY SUPPORT A LIMITED LIABILITY BILL?

BALANCES PUBLIC SAFETY
AND ENVIRONMENTAL
PROTECTION



and



Efficiency of salting
Environmental quality
Documentation



Liability
Costs

THE BIGGER PICTURE

- CHLORIDE IS NOT JUST A PROBLEM IN DULUTH
 - 50 IMPAIRMENTS FOR CHLORIDE STATEWIDE
- SALTY WATER IS A GROWING PROBLEM ALONG THE MISSISSIPPI
 - CHLORIDE INCREASING BASIN-WIDE (SOURCE: A 2023 UPPER MISSISSIPPI RIVER BASIN ASSOCIATION REPORT)
 - CHLORIDE CONCENTRATIONS IN THE UPPER MISSISSIPPI INCREASED BY AN AVERAGE OF 35% BETWEEN 1989 AND 2018
 - ROAD SALTING WAS IDENTIFIED AS A CHIEF CAUSE





KEEP OUR LAKES CLEAN INITIATIVE
UPDATE:
ROBYN DWIGHT; MIKE HIRST

AFREC UPDATE

- **AGRICULTURAL FERTILIZER RESEARCH AND EDUCATION COUNCIL**
- **DR. FABIAN FERNANDEZ (UM)**
- **BRUCE MONTGOMERY (MDA-RETIRED)**

REVISITING THE AFREC LEGISLATIVE REQUEST: WATER POLICY SUBCOMMITTEE APRIL 8, 2024

Bruce Montgomery AFREC Research and Educational Coordinator
 Dr. Fabián Fernández
 Professor & Extension Nutrient Management Specialist
 Department of Soil, Water, and Climate

AFREC Factsheet For Legislators

What is AFREC?

AFREC stands for the Agricultural Fertilizer Research and Education Council. The program, which began in 2008, is tasked with improving fertilizer efficiency, farm profitability, and Minnesota's environment through soil fertility research, technology development, and education.

The council is made up of Minnesota farmers and crop advisors from each of the major agricultural groups in the state. The council's funding comes from a 40 cent per ton fee on fertilizer sales in Minnesota. Farmers in the state invest around five cents per cropland acre per year. This raises over \$1 million each year.

This program was conceived, designed, funded, and managed with the support of the agricultural community. The Minnesota Department of Agriculture serves as an important partner to AFREC by collecting and managing the tonnage fee, providing legal and technical guidance, and overseeing all associated contracts. While the economic payback on the \$13 million investment is impressive, the environmental benefits to Minnesota's water resources are undeniable. The agricultural community is unified in the continuation of the AFREC program.



AFREC at a Glance

~\$1,000,000

raised per year for soil fertility and water quality research, technology and education.

40¢

per ton fee on fertilizer sales in Minnesota funds AFREC.

5¢

per acre per year net cost to farmers for AFREC program.

\$13 MILLION

invested in soil fertility research and education in Minnesota since 2008.



Minnesota is one of 14 states with a fee on fertilizer sales to help fund soil fertility research.

246 PROJECTS FUNDED SINCE 2008



AFREC FACTSHEET FOR LEGISLATORS

Purpose of This Document

The fertilizer tonnage fee that supports AFREC is scheduled to sunset June 30, 2024. In order to continue this important program, Minnesota legislators need to take urgent action.

The Minnesota agriculture community is unified in support of AFREC and highly recommends that the fee and overall structure stay the same and the program be extended for another 10 years.

This factsheet and the companion detailed report are provided so legislators and other key decision makers have a clear understanding of the value of the AFREC program and can make an informed decision.

Agricultural Community Support for AFREC

Legislators and other key decisionmakers:

AFREC (Agricultural Fertilizer Research and Education Council) has had a rich and productive history since its establishment fifteen years ago in 2008. Over \$13 million has been carefully invested into soil fertility research and education programs. Unbiased scientific findings have reassured farmers and agricultural professionals that current fertilizer recommendations and associated management practices are highly relevant, and also provide cutting edge technology. These investments can yield huge gains in both farm economics and environmental protection.

AFREC is funded by a 40 cent/ton fee on fertilizer sales, which is collected by the Minnesota Department of Agriculture (MN Statutes 18C.425). This authority is scheduled to sunset June 30, 2024. Associated Council functions (established in MN Statutes 18C.70,71&80) are scheduled to sunset June 30, 2025.

It is imperative that soil fertility research continues to advance to keep pace with an ever-changing world. AFREC was conceived, developed, led, and funded by Minnesota's agricultural community. The organizations listed below enthusiastically support continuing this important program.

We are asking for a ten-year extension and keeping the supporting fee at 40 cents/ton.

We are asking for a ten-year extension and keeping the supporting fee at 40 cents/ton.

Learn more at:
MNsoilFertility.com/Legislative

"AFREC funding supports science-based research in Minnesota and is very valuable to the ag community. Program outcomes help farmers adopt the best soil fertility practices and keeps Minnesota agriculture strong and competitive."



AFREC is made up of Minnesota farmers and crop advisors from each of the major agricultural groups in the state.

AFREC: Agricultural Fertilizer Research and Education Council

This program was created by the MN Legislature to ensure that Minnesota farmers and ag professionals have access to high quality fertilizer recommendations and “state of the art” technology.

Since conception in 2009, AFREC has invested over \$13 Million into soil fertility research and education projects.

Requesting a ten-year extension with no other legislative modifications.



What's AFREC Role in Protecting Water Resources and Soil Quality?

★ StarTribune

MINNESOTA

THURSDAY, JANUARY 18, 2024 • SECTION B

Clean drinking water promised in SE. Minn.

However the state's EPA-imposed plan to clean up farm pollution won't be solidified soon.

By GREG STANLEY
greg.stanley@startribune.com

The state said it will spend the coming months providing clean drinking water to residents in southeastern Minnesota whose wells are contaminated with farm pollution.

In a work plan released this month, state regulators

gave the EPA a timeline for providing the water treatment systems but said existing programs will eventually reduce the nitrate pollution that's fouling the wells.

Margaret Wagner, a division manager with the Minnesota Department of Agriculture, said it will take time to see results of programs designed

to change farming practices to reduce fertilizer runoff.

"A lot of the work we are able to do really started when the Clean Water Legacy Amendment passed in 2010," Wagner said. "While plans were developed many years ago, we had very little funding and staff. We're fully implementing the plans now."

On Nov. 3, the EPA ordered the state to take several steps to address nitrate contamination in southeastern Minnesota, including providing safe water immediately to those with contaminated private wells and coming up with a plan to reduce the pollution. The action was short of what community groups

had requested, which was to declare a public health emergency, but they still welcomed the federal pressure.

The state's plan to reduce nitrate pollution relies on programs that have been around for 10, 20 and even 30 years without working, said state Rep. Rick Hansen, DFL-South St. Paul, leader of the House Environmental Committee.

"It's embarrassing," Hansen

said. "I'd encourage the EPA to reject it. If we have a public health crisis the answer is not, 'Hey, let's grab some doughnuts and coffee and lobbyists and spend two years talking about it again.'"

Nitrate is a chemical that is dangerous in high quantities, and the porous geography of southeastern Minnesota makes wells particularly

See **NITRATES** on B5 ▶

1

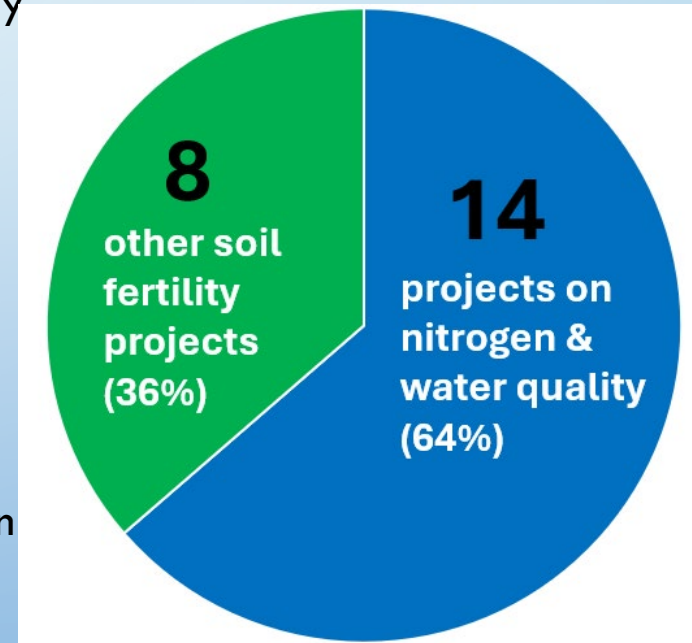
AFREC funds a wide variety of research related to nitrogen and water quality issues

5 Things to Know about AFREC's Role in Protecting Water Quality

14 of the 22 (64%) research projects AFREC funded in 2023 dealt with nitrogen and water quality. These projects looked at issues such as:

- Cover crops
- Soil health
- Manure management
- N-fixing biological products
- Nitrogen inhibitors
- Irrigation and nitrogen
- Variable rate technologies

2023 AFREC-funded research projects



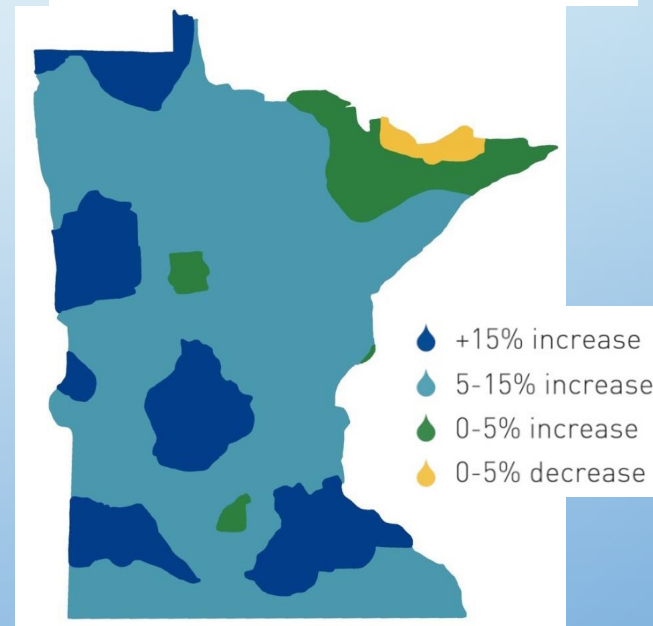
5 Things to Know about AFREC's Role in Protecting Water Quality

2

The climate – and agriculture – are changing. AFREC funding helps keep the U of M's fertilizer guidelines up to date

Minnesota is getting warmer and wetter, which has big implications for nitrogen management on Minnesota farms. Adapting to climate change requires continuous research. In addition, new agricultural products, practices, and technologies need to be tested to see if they work as advertised.

MORE RAIN IN MINNESOTA
Change in average rainfall from 1901-1960 to 1991-2012

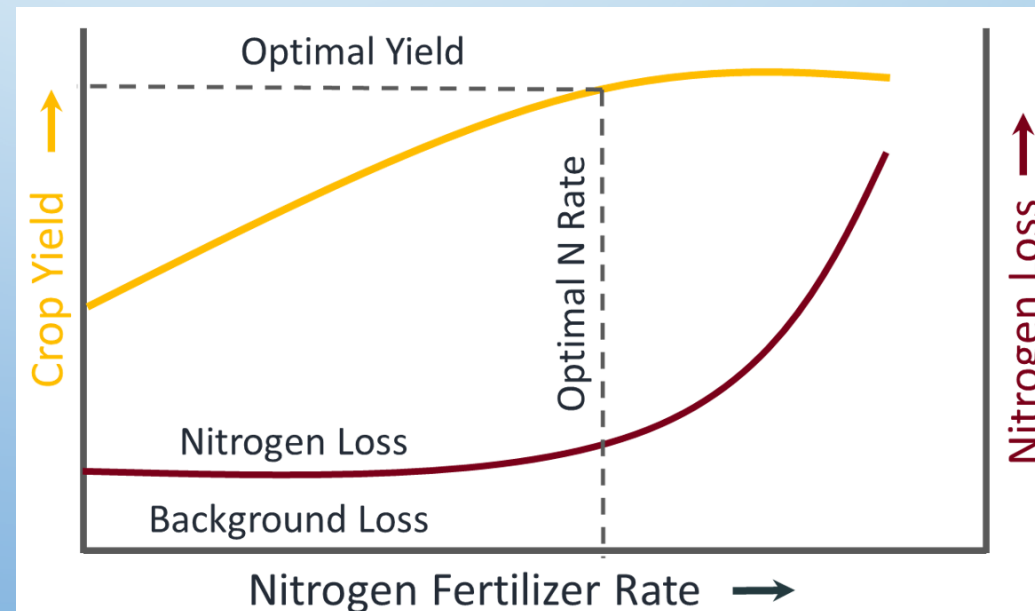


5 Things to Know about AFREC's Role in Protecting Water Quality

3

AFREC research informs the Corn Nitrogen Rate Calculator (cornNrateCalc.org)

One of the best tools that Minnesota corn growers can use to positively impact water quality is the Corn Nitrogen Rate Calculator. It uses data from research trials around the state to determine the most profitable nitrogen rate based on current corn and nitrogen fertilizer prices. Our research shows that the most profitable rate for farmers is also good for water quality.



4

AFREC also funds educational events and outreach activities to Minnesota farmers and agricultural professionals

5 Things to Know about AFREC's Role in Protecting Water Quality

Research results are only valuable if they find their way to the farmers and ag professionals who can use them. That's why AFREC funds the annual Nitrogen Conference, the Nutrient Management Conference, and a suite of communications efforts by the U of M to provide education about the latest research and recommendations.



5

AFREC invests in the infrastructure and people needed to conduct rigorous research

5 Things to Know about AFREC's Role in Protecting Water Quality

The U of M's nutrient management research team is widely regarded as one of the best in the nation. AFREC funding plays a big part in attracting talented researchers, graduate students, and federal grant funding. In addition, AFREC helps researchers establish state-of-the-art laboratories and field plots, and purchase the equipment we need.



Learn more about AFREC at:

MNsoilFertility.com

Contact us at:

• Bruce Montgomery
afrecmonty@comcast.net

• Dr. Fabián Fernández
fabiangf@umn.edu

SUBCOMMITTEE PLANS FOR THE INTERIM

PRIORITIZE WATER POLICY AND MANAGEMENT ISSUES

- **SURVEY STAKEHOLDERS/AGENCIES ABOUT WATER POLICY AND MANAGEMENT NEEDS**
- **HOLD VIRTUAL MEETINGS TO DISCUSS/REFINE PRIORITIES**
- **DEVELOP A SHORT LIST**
- **DRAFT BILLS THAT ADDRESS PRIORITIES**

SUBCOMMITTEE PLANS FOR THE INTERIM-2

- **MEETINGS TO REVIEW AND PROPOSE MINOR CHANGES TO THE WATER APPROPRIATION ALLOCATION PRIORITIES**
- **SUBCOMMITTEE MEMBER REQUEST**
- **ISSUES WERE IDENTIFIED, RESULTING FROM THE WHITE BEAR LAKE LITIGATION**
- **SOME ESSENTIAL NEEDS MAY NOT BE INCLUDED IN THE HIGHEST PRIORITIES— SCHOOLS AND HOSPITALS, FOR EXAMPLE**
- **MINOR CHANGES TO THE BILL LANGUAGE MAY BE APPROPRIATE**
- **A STAKEHOLDER DISCUSSION IS NEEDED**

SUBCOMMITTEE PLANS FOR THE INTERIM-3

- STATE AGENCIES HAVE BEEN CHALLENGED TO INCREASE DRINKING WATER PROTECTION IN SE MINNESOTA, MOSTLY AROUND NITRATE: ENVIRONMENTAL ORGANIZATION AND THE EPA
- THEY ARE, AND HAVE BEEN, ADDRESSING THIS PROBLEM THROUGH VARIOUS PROGRAMS: EQB, BWSR, CWC, MDA, LCCMR, MDH AND THE MPCA
- PROGRAMS ARE COMPLEX, FOCUSED ON SPECIFIC GOALS, AND ARE SOMEWHAT SILOED
- AGENCIES REQUESTING INCREASED FUNDING, TO EXPAND PROGRAMS
- RESPONSES FROM THE CWC, GOVERNOR AND LEGISLATURE ARE FORTH-COMING BUT THE RESPONSES ARE SHORT TERM AND ONE-TIME
- A LONG TERM STRATEGY IS NEEDED THAT CONSIDERS ALL OF THE STATE
- I'M PROPOSING A **SHORT** SUMMARY REPORT THAT:
 - DESCRIBES AGENCY PROGRAMS
 - PROVIDES A SIMPLE AND SORT SUMMARY OF ISSUES
 - OUTLINES CHALLENGES TO DRINKING WATER- BY REGION
 - PROVIDES A PLATFORM FOR A LONG-TERM STATEWIDE STRATEGY DISCUSSION IN THE FALL POSSIBLY LEADING TO POLICY AND LEGISLATION NEXT SESSION

SUBCOMMITTEE PLANS FOR THE INTERIM-4

- FINALLY, I'D LIKE TO PROPOSE A FIELD TRIP TO THE UPPER MISSISSIPPI RIVER BASIN
- FOCUSED ON OUR MOST IMPORTANT LAKES, PROTECTING THOSE LAKES AND THE SOURCE OF WATER FOR THE METRO
- BRAINERD AREA– LIKELY ON NIGHT AN TWO DAYS
- I'D APPRECIATE A GO- HEAD FROM THE SUBCOMMITTEE.

THANKS

- **NEXT MEETING, MONDAY MAY 13, AT 10 AM**
- **THANKS**
- **ADJOURN**