

Policy Committee Meeting Agenda

Clean Water Council

February 24, 2023

9:30 a.m. – 12:00 p.m.

[WebEx Only](#)

2023 Policy Committee: John Barten, Rich Biske (Chair), Kelly Gribauval-Hite, Raj Rajan, Victoria Reinhardt (Vice Chair), Peter Schwagerl, Phil Sterner, Jordan Vandal, and Marcie Weinandt

9:30 Regular Business

- Introductions
- Approve today's agenda
- Approve minutes of previous meeting(s)

9:35 Groundwater Follow-Up Discussion: Sustainability Standard for Groundwater Appropriations

- Katie Smith, Director, Ecological and Water Resources Division, Minnesota DNR
- [Report to the Minnesota State Legislature: Definitions and Thresholds for Negative Impacts to Surface Waters](#) (executive summary in packet)

10:00 Regular Business (continued)

- Chair update
- Staff update
 - Legislative Update

10:15 Legislative Platform from Subcommittee on Minnesota Water Policy (SWMP)

- Jim Stark, Executive Director, SWMP

10:30 Break

10:45 Minnesota's Climate Action Framework (Emphasis on Resiliency & Working Lands)

- Dana Vanderbosch, Assistant Commissioner for Water and Agriculture Policy, MPCA

12:00 Adjourn

March Meeting: Drainage & Water Storage

This Document can be made available
in alternative formats upon request

State of Minnesota

HOUSE OF REPRESENTATIVES

NINETY-THIRD SESSION

H. F. No. 1680

02/13/2023

Authored by Hansen, R.; Hussein; Bierman and Pinto
The bill was read for the first time and referred to the Committee on Environment and Natural Resources Finance and Policy

- 1.1

A bill for an act
- 1.2

relating to natural resources; providing for sustainable diversion limits on
- 1.3

groundwater appropriations; amending Minnesota Statutes 2022, sections 103G.005,
- 1.4

by adding subdivisions; 103G.287, subdivision 2.
- 1.5

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:
- 1.6

Section 1. Minnesota Statutes 2022, section 103G.005, is amended by adding a subdivision
- 1.7

to read:
- 1.8

Subd. 9c. **Ecosystem harm.** "Ecosystem harm" means to change the biological
- 1.9

community and ecology in a manner that results in loss of ecological structure or function.
- 1.10

Sec. 2. Minnesota Statutes 2022, section 103G.005, is amended by adding a subdivision
- 1.11

to read:
- 1.12

Subd. 13b. **Negative impact to surface waters.** "Negative impact to surface waters"
- 1.13

means a change in hydrology sufficient to cause aquatic ecosystem harm or alter riparian
- 1.14

uses long term.
- 1.15

Sec. 3. Minnesota Statutes 2022, section 103G.005, is amended by adding a subdivision
- 1.16

to read:
- 1.17

Subd. 15i. **Sustainable diversion limit.** "Sustainable diversion limit" means a maximum
- 1.18

amount of water that can be removed directly or indirectly from a surface water body in a
- 1.19

defined geographic area on a monthly or annual basis without causing a negative impact to
- 1.20

the surface water body.

2.1 Sec. 4. Minnesota Statutes 2022, section 103G.287, subdivision 2, is amended to read:

2.2 Subd. 2. **Relationship to surface water resources.** Groundwater appropriations ~~that~~
2.3 ~~will have negative impacts to surface waters are subject to applicable provisions in section~~
2.4 ~~103G.285~~ may be authorized only if they avoid known negative impacts to surface waters.
2.5 If the commissioner determines that groundwater appropriations are having a negative
2.6 impact to surface waters, the commissioner may use a sustainable diversion limit or other
2.7 relevant method, tools, or information to implement measures so that groundwater
2.8 appropriations do not negatively impact the surface waters.

2.9 Sec. 5. **REVISOR INSTRUCTION.**

2.10 The revisor of statutes must renumber the subdivisions of Minnesota Statutes, section
2.11 103G.005, listed in column A to the references listed in column B. The revisor must make
2.12 necessary cross-reference changes in Minnesota Statutes and Minnesota Rules consistent
2.13 with the renumbering:

| | | |
|------|------------------------|------------------------|
| 2.14 | <u>Column A</u> | <u>Column B</u> |
| 2.15 | <u>subdivision 9b</u> | <u>subdivision 9d</u> |
| 2.16 | <u>subdivision 13a</u> | <u>subdivision 13C</u> |
| 2.17 | <u>subdivision 15h</u> | <u>subdivision 15j</u> |

103G.287 GROUNDWATER APPROPRIATIONS.

Subdivision 1. Applications for groundwater appropriations; preliminary well-construction approval. (a) Groundwater use permit applications are not complete until the applicant has supplied:

(1) a water well record as required by section 103I.205, subdivision 9, information on the subsurface geologic formations penetrated by the well and the formation or aquifer that will serve as the water source, and geologic information from test holes drilled to locate the site of the production well;

(2) the maximum daily, seasonal, and annual pumpage rates and volumes being requested;

(3) information on groundwater quality in terms of the measures of quality commonly specified for the proposed water use and details on water treatment necessary for the proposed use;

(4) the results of an aquifer test completed according to specifications approved by the commissioner. The test must be conducted at the maximum pumping rate requested in the application and for a length of time adequate to assess or predict impacts to other wells and surface water and groundwater resources. The permit applicant is responsible for all costs related to the aquifer test, including the construction of groundwater and surface water monitoring installations, and water level readings before, during, and after the aquifer test; and

(5) the results of any assessments conducted by the commissioner under paragraph (c).

(b) The commissioner may waive an application requirement in this subdivision if the information provided with the application is adequate to determine whether the proposed appropriation and use of water is sustainable and will protect ecosystems, water quality, and the ability of future generations to meet their own needs.

(c) The commissioner shall provide an assessment of a proposed well needing a groundwater appropriation permit. The commissioner shall evaluate the information submitted as required under section 103I.205, subdivision 1, paragraph (e), and determine whether the anticipated appropriation request is likely to meet the applicable requirements of this chapter. If the appropriation request is likely to meet applicable requirements, the commissioner shall provide the person submitting the information with a letter or electronically transmitted notice providing preliminary approval to construct the well and the requirements, including test-well information, that will be needed to obtain the permit.

(d) The commissioner must provide an applicant denied a groundwater use permit or issued a groundwater use permit that is reduced or restricted from the original request with all information the commissioner used in making the determination, including hydrographs, flow tests, aquifer tests, topographic maps, field reports, photographs, and proof of equipment calibration.

Subd. 2. Relationship to surface water resources. Groundwater appropriations that will have negative impacts to surface waters are subject to applicable provisions in section 103G.285.

Subd. 3. Protecting groundwater supplies. The commissioner may establish water appropriation limits to protect groundwater resources. When establishing water appropriation limits to protect groundwater resources, the commissioner must consider the sustainability of the groundwater resource, including the current and projected water levels, water quality, whether the use protects ecosystems, and the ability of future generations to meet their own needs.

Subd. 4. Groundwater management areas. (a) The commissioner may designate groundwater management areas and limit total annual water appropriations and uses within a designated area to ensure

sustainable use of groundwater that protects ecosystems, water quality, and the ability of future generations to meet their own needs. Water appropriations and uses within a designated management area must be consistent with a groundwater management area plan approved by the commissioner that addresses water conservation requirements and water allocation priorities established in section 103G.261. At least 30 days prior to implementing or modifying a groundwater management area plan under this subdivision, the commissioner shall consult with the advisory team established in paragraph (c).

(b) Notwithstanding section 103G.271, subdivision 1, paragraph (b), and Minnesota Rules, within designated groundwater management areas, the commissioner may require general permits as specified in section 103G.271, subdivision 1, paragraph (c), for water users using less than 10,000 gallons per day or 1,000,000 gallons per year and water suppliers serving less than 25 persons for domestic purposes. The commissioner may waive the requirements under section 103G.281 for general permits issued under this paragraph, and the fee specified in section 103G.301, subdivision 2, paragraph (c), does not apply to general permits issued under this paragraph.

(c) When designating a groundwater management area, the commissioner shall assemble an advisory team to assist in developing a groundwater management area plan for the area. The advisory team members shall be selected from public and private entities that have an interest in the water resources affected by the groundwater management area. A majority of the advisory team members shall be public and private entities that currently hold water-use permits for water appropriations from the affected water resources. The commissioner shall consult with the League of Minnesota Cities, the Association of Minnesota Counties, the Minnesota Association of Watershed Districts, and the Minnesota Association of Townships in appointing the local government representatives to the advisory team. The advisory team may also include representatives from the University of Minnesota, the Minnesota State Colleges and Universities, other institutions of higher learning in Minnesota, political subdivisions with jurisdiction over water issues, nonprofits with expertise in water, and federal agencies.

Subd. 5. Sustainability standard. The commissioner may issue water-use permits for appropriation from groundwater only if the commissioner determines that the groundwater use is sustainable to supply the needs of future generations and the proposed use will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply and private domestic wells constructed according to Minnesota Rules, chapter 4725.

History: 2010 c 361 art 4 s 55; 2013 c 114 art 4 s 71-73; 2014 c 289 s 55,56; 1Sp2015 c 4 art 4 s 95; 2017 c 93 art 2 s 120; 1Sp2019 c 4 art 3 s 88

Report to the Minnesota State Legislature: Definitions and Thresholds for Negative Impacts to Surface Waters

Minnesota Department of Natural Resources

January 2016



Executive Summary

Background and purpose

This report was prepared in response to Laws 2015, chapter 4, article 4, which directed the Department of Natural Resources (DNR) to consult with interested stakeholders and develop recommendations for statutory or rule definitions and thresholds for negative impacts to surface waters.

The DNR is charged with managing water resources to assure an adequate and sustainable supply for multiple uses. Minnesota has a modified riparian water law system, in which landowners have the right to make reasonable use of the abutting surface waters or the groundwater beneath their land, as defined and regulated by the water appropriation permitting program. The water itself is a public trust resource, and the state grants the right to water beyond personal use – above 10,000 gallons per day or one million gallons per year – through water appropriation permits. In recent years, it has become increasingly clear that Minnesota’s water resources, while abundant in many areas, are not unlimited. In some areas, increasing water withdrawals are using more groundwater than is naturally being recharged. In other areas, groundwater supplies are limited due to the underlying geology. Groundwater contamination is also a limiting factor in many areas.

The variability of Minnesota’s climate and geography mean that rainfall is not always available in the quantities we need at the times when it is most needed. Increasing demands on both surface water and groundwater supplies can cause negative impacts to the ecosystems and riparian uses of streams, lakes, and wetlands. While water levels fluctuate naturally throughout the year and across multiple years, water appropriations can push low levels lower, significantly reducing stream flows and more frequently putting fish, wildlife, plant communities and riparian uses at risk.

This report examines the effects of groundwater use on rivers and streams, lakes, and wetlands. DNR’s analysis and recommendations are based on the fact that surface water bodies go through seasonal and multi-year cycles of high and low water levels. The seasonal patterns, known as the seasonal hydrograph, are primary drivers in creating and maintaining the unique ecology and associated aquatic and riparian habitats of each water body. To preserve the seasonal hydrograph, protected flows must be established for streams, and protection elevations for lakes and some wetlands. These protection levels can then be translated into a quantity of water that can be sustainably withdrawn. Multi-year dry cycles and extreme droughts also serve important ecological functions, but may require a different approach to determining sustainable water use—e.g., water use that is ecologically sustainable under the normal seasonal hydrograph may need to be reduced during extreme drought.

This report was prepared with input from a broad range of stakeholders, as described in the Introduction and Appendix A. This report also incorporates and summarizes scientific studies, including an examination of approaches used in other states and countries. The recommendations in this report represent the DNR’s suggestions to further define and describe methods of determining protected flows and protection elevations. These recommendations are based on the DNR’s assessment of available information, analytical tools and the practicality of applying them in Minnesota.

Recommendations

The recommendations in this report fall into three categories: 1) definitions to be added in statute; 2) integration of statutory provisions dealing with surface water and groundwater; and 3) approaches to determining the thresholds for streams, lakes, and wetlands.

Definitions

The following definitions are recommended to be added in statute:

- Negative impact to surface waters – in relation to water appropriations, a change in hydrology sufficient to cause ecosystem harm or alter riparian uses long-term.
- Ecosystem harm – in relation to water appropriations, to change the biological community and ecology in a manner that results in a less desirable and degraded condition.
- Sustainable diversion limit – in relation to water appropriations, a maximum amount of water that can be removed directly or indirectly from a surface water body in a defined geographic area on an annual basis without causing a negative impact to the surface water body.

Statutory changes

The DNR also recommends combining many of the provisions in section 103G.285, which deals with surface water appropriations, and 103G.287, which deals with groundwater, into a single “Water Appropriations” section. This revision would recognize the interconnected and interdependent nature of surface and groundwater resources while removing the circular references between the two sections of statute that make it difficult to identify and assess ‘negative impacts.’

Approach to determining thresholds

A “threshold” is essentially the point at which negative impacts occur. Thresholds can be estimated based on data and scientific literature. Calculating thresholds at a statewide scale is not appropriate or practical, however, given the number of variables involved – e.g., which species or which riparian uses are negatively impacted. The diversity of Minnesota’s surface water and groundwater resources, land use, and climatic factors would make a single number misleading and inappropriate for many locations and conditions. The precautionary principle would require that any such statewide threshold be set to be protective of the most vulnerable resource, thereby unnecessarily restricting water use in many areas. Therefore, the DNR proposes establishing specific thresholds for specific watercourses, water basins, watersheds, or hydrologic areas in those parts of the state where water use is at risk of causing negative impacts.

Streams: The DNR’s research and a review of scientific literature indicate that a 20% change in hydrologic regime (relative to the August median base flow) will negatively affect the ecosystem, while a change less than 10% is not likely to be detectable. Setting a diversion limit of no more than 10% of the August median base flow will preserve the seasonal variability of the natural hydrology under all but the most extreme drought conditions. A 15% diversion limit would preserve much of the seasonal variability, but is not adequate to protect ecosystems during periods of drought. We recommend a 10% limit in most circumstances, but recognize a diversion limit of up to 15% may be appropriate in some areas where water uses are less dependent on a consistent supply.

Lakes: The DNR recommends an approach that establishes sustainable diversion limits for two categories of lakes.

Lakes connected to stream systems that outflow most of the time. For these lakes, the outflowing stream's diversion limit would be applied to the lake and a separate protection elevation for the lake would not be necessary.

Lakes with infrequent surface outflow. For these lakes, protection elevations specific to the lake could be established based on key considerations related to hydrology, ecology, and riparian uses. Water levels at and above the protection elevation are expected to maintain the characteristic hydrology, ecology, and riparian uses of the lake most of the time. Water levels below the protection elevation put one or more of the water body's resources or uses at risk. The protection elevation is used to establish the sustainable diversion limit.

Wetlands: Different types of wetlands have distinct and characteristic seasonal water levels that maintain their characteristic plant and animal communities. Most wetland types in Minnesota depend to some extent on groundwater for at least some part of the growing season. Some wetland types, such as fens, are highly connected to and dependent on groundwater, while others, such as floodplain forests, are more directly influenced by surface-water. However, as yet there is no systematic method for evaluating potential negative impacts on wetlands due to groundwater appropriations, due to limited wetland-related hydrologic data.

The DNR is proposing to establish a comprehensive wetland hydrology characterization and monitoring program statewide. An initial step in this process is to begin testing the feasibility of establishing target hydrographs for the various wetland types, with a particular focus on areas of the state experiencing a heavy demand for groundwater appropriation. A target hydrograph is a range of acceptable water levels throughout the year for each various wetland types, extending from "normal" levels to infrequent or rare low levels that stress the characteristic plant and animal communities. The target hydrograph would be used as a guide for developing allowable diversion limits throughout the growing season to maintain the characteristic hydrologic regime.

Impacts to wetlands are also regulated under other authorities, primarily the Minnesota Wetland Conservation Act and the Public Waters Permit Program. The DNR's goal under this approach would be to avoid wetland drainage that would trigger regulation under those programs.

Methodology

The DNR would focus its efforts to set thresholds for negative impacts primarily in those areas of the state where the intensity of groundwater use and/or scarcity of groundwater supplies is causing concern, such as the groundwater management areas or individual water bodies known to be negatively affected by groundwater use. In these areas, the DNR will implement the following steps:

- 1) establish negative impact thresholds for surface water bodies;
- 2) establish sustainable diversion limits that will maintain protected flows and protection elevations of those water bodies;
- 3) conduct groundwater modeling to determine the effects of groundwater withdrawals on the surface water bodies; and
- 4) assess to what degree individual groundwater withdrawals may need to be adjusted.

The background is a light blue gradient with several realistic water droplets and bubbles of various sizes scattered across it. Some are at the top, some at the bottom, and some in the middle. They have highlights and shadows, giving them a 3D appearance.

SUBCOMMITTEE ON MINNESOTA WATER POLICY

Clean Water Council- Policy Subcommittee

February 23, 2023

Jim Stark, Director

SUBCOMMITTEE ON WATER POLICY STATUTORY POWERS AND DUTIES

- **REVIEWS WATER POLICY REPORTS & RECOMMENDATIONS**
- **REPORTS TO THE MEMBERS**
- **MAKE RECOMMENDATIONS TO ASSIST IN FORMULATING LEGISLATION**
- **SHARE DATA & INFORMATION WITH LCCMR, CWC, LEGISLATIVE STANDING COMMITTEES**
- **COORDINATE WITH OTHERS**

SUBCOMMITTEE MEMBERS

SENATE MEMBERS

- SENATOR CHRIS EATON, CO-CHAIR
- SENATOR RICH DRAHEIM
- SENATOR KENT EKEN
- SENATOR MICHAEL GOGGIN
- SENATOR BILL WEBER
- SENATOR CHARLES WIGER

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- REPRESENTATIVE PATTY ACOMB
- REPRESENTATIVE PETER FISCHER
- REPRESENTATIVE JOSH HEINTZEMAN
- REPRESENTATIVE TODD LIPPERT
- REPRESENTATIVE PAUL TORKELSON

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SENATE MEMBERS

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- SENATOR LANG
- SENATOR WESENBERG
- SENATOR
- SENATOR
- SENATOR

HOUSE MEMBERS

- REPRESENTATIVE SHULTZ
- REPRESENTATIVE SKRABA
- REPRESENTATIVE JACOB
- REPRESENTATIVE
- REPRESENTATIVE
- REPRESENTATIVE

Who's missing?
Rank (H,L)
Are they actionable- Move the issue?
Appropriate for Legislation/ Funding/Agency or
Stakeholder Resource?
Consensus
Report back:
Top Issues (1-2) and missing issues
40 minutes

Legislation

Legislation is a big part of the water management
process



SUBCOMMITTEE PROCESS

- **Two Fall stakeholder meetings were held**
- **Reviewed 50 + legislative issues from members, citizens and stakeholders**
- **Checked in with agencies**
- **Received feedback**
- **Survey followed to prioritize**
- **Bills were drafted**
- **Authors were identified**
- **Most bills have been introduced**
- **Several have had a first hearing**

LEGISLATIVE WATER TOPICS-2023

- 1--NEEDED UPDATE OF THE 1989 GROUNDWATER PROTECTION ACT
- 2-- ADDRESSING AREAS OF GROUNDWATER SCARCITY
- 3--DEFINING SUSTAINABLE GROUNDWATER LIMITS USING TECH ADVANCES.
- 4- VOLUNTARY PRIVATE WELL TESTING
- 5--ENSURING THE SAFETY OF PRIVATE WELLS BY TESTING VULNERABLE AQUIFERS
- 6--IMPROVING WATER AND AGRICULTURE
- 7--TAX CREDIT FOR PRIVATE RIPARIAN BUFFER LANDS
- 8- WATER SAFETY PLANS FOR CITIES- A PILOT
- 9- SOIL-HEALTH ACTION PLAN
- 10--WATER COMMISSION AND THE WASTEWATER ADVISORY COUNCIL
- 11--COMPLETE LAND MANAGEMENT PRESERVATION FOR THE UPPER MISSISSIPPI
- 12--ENHANCED GROUNDWATER RECHARGE
- 13--KEEPING WATER ON THE LAND--WATER RETENTION
- 14--WATER RETENTION—URBAN STORM WATER
- 15--APPROPRIATION TO SUPPORT FIXED COSTS FOR WATERSHED DISTRICTS
- 16-- ASSESSING EMERGING AND UNREGULATED CONTAMINANTS IN DRINKING WATER
- 17-- ADDRESSING WATER UTILITIES STAFFING SHORTAGE
- 18--UPGRADING DRINKING WATER INFRASTRUCTURE
- 19-- INCREASE CITIZEN INVOLVEMENT IN DRINKING WATER SAFETY
- 20--WATER EDUCATION
- 21--PRIORITIZING FOR ENVIRONMENTAL OUTCOMES
- 22--INCREASED TECHNICAL PROFICIENCY
- 23--INCREASE EFFORTS -WASTEWATER AND STORM-WATER TREATMENT OPTIONS
- 24--ADDRESSING DISCONNECTS BETWEEN LAND USE AND WATER QUALITY
- 25--PLAN FOR CHANGES TO WATER RESULTING FROM CLIMATE CHANGE
- 26--STATEWIDE POLICY ON MANURE MANAGEMENT
- 27--WATER APPROPRIATIONS: INTER-BASIN TRANSPORT AND PROTECTION
- 28--ADJUSTING WATER APPROPRIATION PRIORITIES
- 29--REQUIRING LABELING FOR WIPES--WASTEWATER TREATMENT OPERATIONS
- 30--STATE ASSUMPTION OF FEDERAL WETLANDS PERMIT RESPONSIBILITIES
- 31--EMERGING CONTAMINANT SENTINEL MONITORING PROGRAM
- 32--WATER QUALITY TRADING
- 33--STREAMLINE IRRIGATION WATER APPROPRIATION PROCESS
- 34--GROUNDWATER QUALITY: PESTICIDE AND NUTRIENT POLICY AND MANAGEMENT
- 35--CHLORIDE REDUCTION AND THE MPCA REPORT
- 36--FOREVER CHEMICALS (PFOA AND PFOS) IN FOOD WASTE COMPOST
- 37--ENCOURAGING EFFICIENT WASTEWATER AND STORM-WATER TECHNOLOGY AND TREATMENT OPTIONS
- 38--LONG RANGE WATER PLANNING
- 39--FUTURE OF DRINKING WATER- PLANNING FOR THE FUTURE
- 40--CULVERT REPLACEMENT PROGRAM
- 41--ENCOURAGING REGIONALIZATION OF MUNICIPAL WATER SUPPLY SYSTEMS
- 42--STOPPING THE CARP
- 43--SHALLOW LAKES MANAGEMENT
- 44--STATEWIDE MINING POLICY
- 46--CARBON CAPTURE IN MINE WASTE ROCKS
- 47--KEEPING OUR LAKES CLEAN INITIATIVE
- 48—ST. ANTHONY FALLS CUTOFF WALL
- 49--FOREVER CHEMICALS (PFOA AND PFOS)
- 50—IMPACT OF WAKE BOATS
- 51—TESTING FOR AND REMEDIATION OF LEAD IN DRINKING WATER
-

SHORT LIST

1. **DEFINING SUSTAINABLE GROUNDWATER LIMITS USING TECHNOLOGICAL ADVANCES**
2. **VOLUNTARY PRIVATE WELL TESTING**
3. **ENSURING THE SAFETY OF PRIVATE WELLS: IDENTIFYING AND MONITORING VULNERABLE AQUIFERS**
4. **IMPROVING WATER AND AGRICULTURE (PRECISION AGRICULTURE)**
5. **TAX CREDIT FOR PRIVATE RIPARIAN BUFFER LANDS**
6. **WATER SAFETY PLANS FOR CITIES– A PILOT**
7. **WATER COMMISSION AND THE WASTEWATER ADVISORY COUNCIL**
8. **COMPLETE LAND MANAGEMENT PRESERVATION FOR WATER QUALITY, UPPER MISSISSIPPI**
9. **ENHANCED GROUNDWATER RECHARGE. POLICY**
10. **WATER RETENTION—URBAN STORM WATER:**
11. **APPROPRIATION TO SUPPORT FIXED COSTS FOR WATERSHED DISTRICTS**
12. **DE-ICING SALT- TRAINING AND LIMITED LIABILITY CERTIFIED APPLICATORS**
13. **ADJUSTING WATER APPROPRIATION PRIORITIES FOR COMMERCIAL ENTITIES WITH CONSERVATION PLANS**
14. **CARBON CAPTURE IN MINE WASTE ROCKS- POLICY**
15. **KEEPING OUR LAKES CLEAN– LITTERING ON ICE COVERED LAKES**
16. **LEAD TESTING IN CERTAIN FACILITIES– CHILD-CARE**

GROUP 1

DEFINING SUSTAINABLE GW LIMITS USING TECHNOLOGICAL ADVANCES

- proof of concept- merge county atlas products across county boundaries
- provides model architecture- define aquifer budgets
- provide input to one 1w/1p process
- Water budgets can define sustainable limits

VOLUNTARY PRIVATE WELL TESTING;

- supports CWF budget request for private well testing
- CWC/MDH budget request is for chemical analyses
- this bill allocates funds for volunteer support, clinics, well owner education

ENSURING THE SAFETY OF PRIVATE WELLS—IDENTIFY AND MONITORING VULNERABLE AQUIFERS

- review/revise sensitive aquifer information
- Map current GW monitoring over sensitive aquifers
- add monitoring wells, where needed, to complete a network over vulnerable aquifers
- coordinate a common set of baseline analytes across programs

GROUP 2

IMPROVE WATER AND AGRICULTURE

- precision ag improves productivity, water retention, and water quality
- Bill supports UM research, demonstration and education

TAX CREDIT FOR PRIVATE RIPARIAN BUFFER LANDS

- credit for private crop land put into buffers on public
- 37 counties having >30% cropland
- about 1 percent of county land

WATER SAFETY PLANS FOR CITIES– A PILOT

- implements UM/MDH report/recommendations in two pilot cities
- future of drinking water report

GROUP 3

WATER COMMISSION AND THE WATER\ WASTEWATER ADVISORY COUNCIL

- reinstatement of each, as defined in statute

COMPLETE LAND MANAGEMENT PRESERVATION AND WATER QUALITY GOALS FOR THE UPPER MISSISSIPPI

- Upper Miss contains many high-valued cold water lakes
- It also is the source of drinking water for the Metro
- sustainable forest incentive act (SFIA) provides incentive payments private lands
- encourages land owners to keep wooded areas undeveloped
- increased funding would address 70% lake/watershed protection goals in the Upper Miss
- about \$1M
- Supports CWC strategic plan goal

ENHANCED GROUNDWATER RECHARGE

- Plan and policy to address where, when, and how to enhanced recharge where permitted, and allowed

GROUP 4

WATER RETENTION—URBAN STORM WATER

- research and policy to ensure that gw is not being degraded
- policy and funding to understand urban water storage with respect to water quality, reduction of flood peaks, changes to groundwater recharge
- assess of benefits, concerns and site location criteria

TESTING FOR AND REMEDIATION OF LEAD IN DRINKING WATER AT CERTAIN FACILITIES

- statewide testing for the presence of lead in drinking water from child-care- facilities
- appropriation to remediate contamination, where found
- infrastructure transparency tool upgrades for lead service lines
- Included as an amendment in bill on school testing
- Transparence tool funding in another bill

INCREASE LEVY LIMITS FOR WATERSHED DISTRICTS

- increase in the levy ceiling from \$250ok to \$500k
- Increase levy percentage of 0.048 to 0.096 percent

SAVE OUR SALT

- applicator training
- limited liability to certified applicators

OTHER BILLS

ADJUST APPROPRIATION PRIORITIES FOR COMMERCIAL ENTITIES WITH CONSERVATION PLANS

- allows facilities, like golf courses, cemeteries , corporate facilities to irrigate during drought
- creates a new appropriation category
- requires water conservation plan as well as water-quality improvement plan

CARBON CAPTURE IN MINE WASTE ROCKS- POLICY

- some mine-waste rock can sequester carbon from the atmosphere
- Minnesota rocks are abundant and association with mineral deposits
- converts mafic waste rock to carbonate.
- it is a tested process
- State needs a feasibility report guide policy

KEEPING OUR LAKES CLEAN– LITTERING ON ICE COVERED LAKES

- waste left on ice covered lakes in a growing problem
- trash and human waste
- laws do not give CO's the same enforcement as they have for boats
- This attempts to fix this
- Enforcement authority and funding to enforce

BILL STATUS

1. **DEFINING SUSTAINABLE GROUNDWATER LIMITS USING TECHNOLOGICAL ADVANCES**
2. **VOLUNTARY PRIVATE WELL TESTING**
3. **ENSURING THE SAFETY OF PRIVATE WELLS: IDENTIFYING AND MONITORING VULNERABLE AQUIFERS**
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15. **KEEPING OUR LAKES CLEAN– LITTERING ON ICE COVERED LAKES**
16. **TESTING FOR AND REMEDIATION OF LEAD IN DRINKING WATER AT CERTAIN FACILITIES (AMMENDMDNT)**

INTRODUCED IN AT LEAST ONE BODY
AT LEAST ONE HEARING

Thanks!
2,000 Bills and counting



MN Climate Action Framework

Clean Water Council Policy Committee

February 24, 2023

Dana Vanderbosch

MPCA Assistant Commissioner for Water Policy & Agriculture



OUR MINNESOTA CLIMATE



Climate change is happening now

We must accelerate action

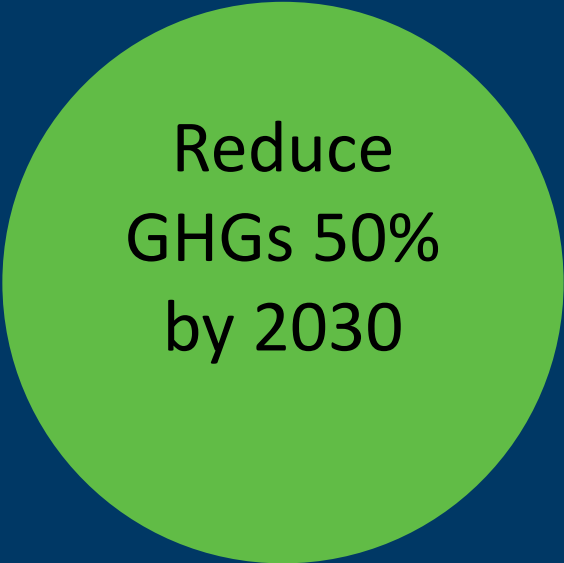
Climate change affects everyone,
but some are hit harder

We must work together to meet
global goals

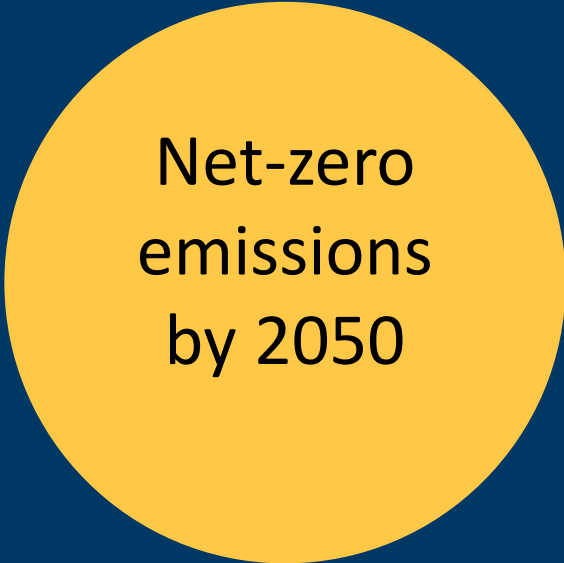
Opportunity to grow our economy
and improve our health, equity,
and the environment

Climate targets

Align with the best science from the Intergovernmental Panel on Climate Change:

A solid green circle containing the text "Reduce GHGs 50% by 2030".

Reduce
GHGs 50%
by 2030

A solid yellow circle containing the text "Net-zero emissions by 2050".

Net-zero
emissions
by 2050

A solid teal circle containing the text "Prioritizing resilience investment over the next 10 years".

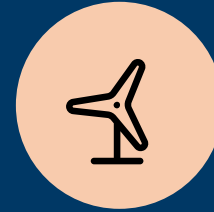
Prioritizing
resilience
investment
over the next 10
years

Need action by all levels of government, businesses, nonprofits, and individuals

Framework goal areas



Clean
transportation



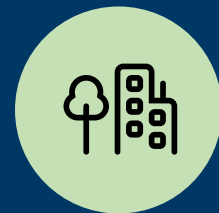
Clean energy and
efficient buildings



Climate-smart natural
and working lands



Healthy lives and
communities



Resilient
communities



Clean
economy

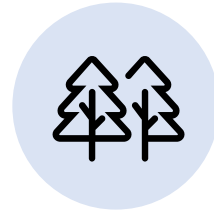
Climate-smart natural and working lands

The vision:

- Absorb and store more carbon, produce food and other products
- Sustain local economies, enhance climate resiliency
- Improve the quality of life for all Minnesotans



MEASURES OF PROGRESS



Climate-smart natural and working lands



By 2035, increase by 25% the amount of carbon sequestered and stored annually in natural and working lands, compared to 2014-2018 average levels.



By 2035, reduce annual GHG emissions in the working lands sector by 25% from 2018 levels.



By 2030, all state-funded or sponsored land, water, and species management plans identify actions to increase adaptation.

Priority actions

- Expand climate-resilient agriculture and forestry
- Increase water storage and infiltration and manage drainage
- Invest in new markets
- Prioritize GW and drinking water
- Manage ag lands to reduce GHG emissions
- Promote local and community-based ag
- Store more carbon
- Restore/expand habitat complexes and corridors
- Accelerate forest, grassland, and wetland restoration



Governor recommendations

- Soil Health Equipment Grants - \$4M
- Bioincentive Program - \$2.5M
- AgBMP Revolving Loan Program - \$2M, \$3M per FY thereafter
- Mitigation and Resiliency for RIM easements - \$7.1M, \$480k thereafter
- Private Lands Grassland/Working Land Restoration Easements - \$22M, \$400k thereafter
- Habitat Enhancement Landscape Program- \$9M, \$1M thereafter



Governor recommendations

- Private lands Peatland Restoration – \$15M, \$710k thereafter
- Accelerated Soil Health Practices – \$13.58M, \$13.58M per FY thereafter
- Accelerated Water Storage and Treatment – \$17M, \$480k thereafter
- Enhancing Grasslands and Restoring Wetlands on WMAs - \$10M
- Private Forest Landowner Technical Assistance, Cost Share and Inventory - \$2M plus \$1.3M thereafter
- Accelerated Tree Seed Collection - \$400k annually
- Protect and Restore Carbon Storage in State-Administered Peatlands ~\$1.5M



Resilient communities

The vision:

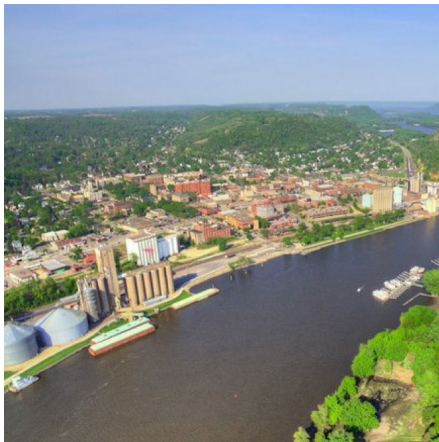
- Communities across Minnesota have the resources and support to plan for and implement projects to build a more resilient future for themselves. Air pollution is reduced, especially in communities most affected by it.
- Physical infrastructure, natural systems, and communities are more prepared for climate impacts and can recover from extreme events.



MEASURES OF PROGRESS



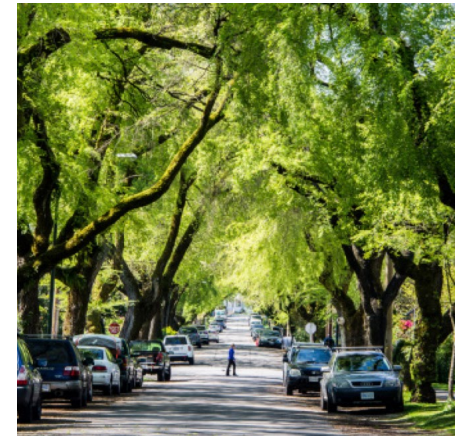
Resilient communities



By 2030, 100% of Minnesotans live in communities with plans that identify climate risks and actions to build resiliency.



By 2026, at least 25 adaptation projects that increase community resiliency are fully funded.



Achieve 30% overall tree canopy cover in Minnesota communities by 2030 and 40% by 2050.

Priority actions

1. Climate smart communities
 1. Provide tech assistance, maps, tools
 2. Deliver necessary funding
2. Healthy community green spaces and water resources
 1. Expand tree planting, preservation
 2. Plant beneficial veg on urban land
 3. Protect, improve water quality, quantity
3. Resilient buildings, infrastructure and business
 1. Expand green infrastructure and stormwater mgmt.
 2. Fund resilient infrastructure, critical facilities



Governor recommendations

- Resilient Communities Grants and Technical Assistance - \$174M, \$1.1 thereafter
- Tribal Governments Technical Assistance - \$4M, \$2M thereafter
- GreenSteps Cities & Tribes Program - \$380k, plus \$190k thereafter
- Community ReLeaf Program - \$15.2M, \$402K thereafter
- Strengthen Minnesota Homes - \$32.5M, \$1.2M thereafter





What's next

- FY 2024-25 Governor's Budget Recommendations / Minnesota Management and Budget (MMB) (mn.gov)
- Drive budget and policy development
- Measure and report progress
- Priorities for guiding action:
 - Impact
 - Equity
 - Economy
 - Health/environment

