

January 2024 Environmental Quality Board meeting

Wednesday, January 17 from 1 – 4 p.m.

Join online via Teams

• For the meeting link and more information, visit the board meeting webpage.

Participating in board meetings

Attending virtually

Members of the public may join the meeting virtually using the Teams link at the board meeting webpage link above. Please review the <u>Guide to Teams Participation</u> for additional information.

Joining the virtual meeting at the Minnesota Pollution Control Agency office

Participate in the meeting virtually with support from Environmental Quality Board (EQB) staff at the Minnesota Pollution Control Agency's St. Paul office (520 Lafayette Rd, St. Paul, MN 55155) Conference Room 102. All visitors must sign in at the front desk.

Transportation options:

- Bicycle: Visit the <u>Saint Paul Bike Map</u> webpage for route information. Outdoor bicycle parking is available to the left of the front doors near the loading dock.
- Transit: Use Metro Transit's Trip Planner to determine the best routes and times.
- Car: You may park in a Visitor Parking space in the parking lot just outside the front door, or park in one of the visitor lots. The visitor lots are the Blue Lot (Olive St. and University Ave.) and the Jupiter Lot (on Grove St. across from the Ramsey County Law Enforcement Center); please see the <u>parking map</u>. Parking in these lots is free of charge. You must register your vehicle at the front desk upon arrival.

Accessibility

Please contact Environmental Quality Board (EQB) staff at least one week prior to the event at <u>info.EQB@state.mn.us</u> to arrange an accommodation. Meeting materials can be provided in different forms, such as large print, braille, or on a recording.

Public engagement opportunities at EQB meetings

EQB encourages public input and appreciates the opportunity to build shared understanding with members of the public. The opportunities for public engagement for this meeting are below.

Oral public comment

The board accepts oral public comments where noted in the agenda. Procedure and guidelines for giving oral public comment:

- If you wish to speak:
 - Virtual: when prompted, use the "raise hand" feature in Teams, located at the top of your screen.
 - In person: sign up at the welcome table before the meeting starts.
- Your remarks will be limited to two (2) minutes. When necessary, the chairperson may limit commenters' time for remarks to ensure there is equal opportunity for the public to comment.
- When the chairperson calls on you to speak:
 - Introduce yourself before beginning your comment.
 - Please keep your remarks to those facts which are relevant and specific, as determined by the chairperson, to the agenda item at hand.
 - Please be respectful of board members, staff, and other meeting participants. Avoid questioning motives. The chair, vice-chair, or other presiding officer will not tolerate personal attacks.
 - Please note that the chair will use their discretion for directing public comment to ensure the board's ability to effectively conduct business.

Written public comment

You may submit written comment to EQB by emailing your letter to <u>info.EQB@state.mn.us</u> or mailing to: Environmental Quality Board, 520 Lafayette Road, Saint Paul, MN 55155. Comments must be received by EQB staff **by noon the day before the meeting**.

Staff will compile letters, make them available to members and the public online, and attach them to the public record. Any written comments received after this deadline will be included in the next meeting packet.

All comments will be made available to the public. Please only submit information that you wish to make available publicly. EQB does not edit or delete submissions that include personal information. We reserve the right to not publish any comments we deem offensive, intimidating, belligerent, harassing, bullying, or that contain any other inappropriate or aggressive behavior.

Agenda

Note that all listed times are estimates and are advisory only.

1. Welcome and roll call (1:00 pm)

Nancy Daubenberger – Chair, EQB; Commissioner, Department of Transportation

2. Approval of consent agenda (1:10 pm)

- Meeting minutes from the November 15, 2023, Environmental Quality Board meeting on packet page 5
- Preliminary agenda for the January 17, 2024, Environmental Quality Board meeting

3. Executive Director's report (1:15 pm)

Catherine Neuschler – Executive Director, EQB

4. Workplan update (1:20 pm)

Type of item: Informational

Summary: The Board will get an update on the progress on key FY24 workplan items.

Presenter: Catherine Neuschler – Executive Director, EQB

5. Environment & Energy Report Card (1:35 pm)

Type of item: Decision

Summary: Throughout its history, the EQB has issued reports on the condition of Minnesota's environment. The current series of Minnesota Environment and Energy Report cards began in 2012, with updates in 2017 and 2019. The role of these report cards has been to provide an easy to understand assessment of Minnesota's environmental quality, giving key information to the public and environmental policy makers.

The proposed 2024 Environment and Energy Report continues the series, with updated information. Key changes were made to align with the state's new climate and energy goals. In addition, the report has a new layout that more clearly differentiates measures that tell us about the condition of the environment from measures of the progress we are making on our programs and efforts to protect and enhance environmental quality. The draft 2024 Environment and Energy Report card is on packet page 27.

Outcome: The Board will approve the publication of the 2024 Environment and Energy Report Card, or request changes.

Presenter: Priscilla Villa-Watt

Public Comment: We will take public comment specifically on this item.

6. Strategic Plan: Draft Mission and Outcomes (3:00 pm)

Type of item: Informational

Summary: In November 2023, the Board provided input to shape the revision of the EQB's strategic plan, specifically covering the mission statement and priority results or outcomes. There was also discussion on how to shape the strategic plan to ensure it includes and places appropriate weight on critical elements such as equity, engagement, trust, and collaboration. The packet contains a brief memo with questions for discussion at the meeting, along with two options of draft language for this portion of the strategic plan; one option (packet page 49) includes these elements as important values for the EQB, while the second option (packet page 53) includes these elements as key outcomes.

Outcome: The Board will provide feedback on the preliminary draft mission and outcomes for the strategic plan. Feedback is particularly requested on the inclusion of the critical elements mentioned above, in order to effectively set up our February discussion on success indicators and strategies for the key strategic outcomes we want to move forward.

Presenter: Catherine Neuschler- Executive Director, EQB

7. Public comment (3:45 pm)

The board welcomes oral public comment. Please see guidance and procedures on packet page 2.

8. Closing and adjournment



November 2023 Environmental Quality Board meeting

Wednesday, November 15, 2023 | 1:00-4:00 p.m. | Virtual

Minutes

1. Welcome and roll call

Chair Nancy Daubenberger called to order the regular meeting of the Environmental Quality Board.

Members present: Grace Arnold, Peter Bakken, Joseph Bauerkemper, Nancy Daubenberger, Kenneth Foster, Tamar Gronvall, Rylee Hince, Daniel Katzenberger, Katrina Kessler, Nicholas Martin, Paul Nelson, Sarah Strommen

Members excused: Brooke Cunningham, Todd Holman, Thom Petersen, Matt Varilek, Charles Zelle

Proxies present: Tom Hogan (for Cunningham), Peder Kjeseth (for Petersen)

Tech reps present: David Bell, Chet Bodin, Kate Fairman, Katrina Hapka, Melissa King, Ray Kirsch, Katherine Lind, Stephan Roos, Eric Wojchik

EQB staff present: Catherine Neuschler, Rebeca Gutierrez-Moreno, Hazel Houle, Jesse Krzenski, Priscilla Villa-Watt, Kayla Walsh

Approval of consent agenda

- Meeting minutes from October 18, 2023, Environmental Quality Board meeting
- Proposed agenda for November 15, 2023, Environmental Quality Board meeting

Motion: Board Member Kessler moved the consent agenda; Board Member Arnold seconded. Motion carries with a unanimous vote.

2. Executive Director's report

Catherine Neuschler – Executive Director, EQB

- New EQB staff: Colleen (Hetzel) Nelson will be starting December 4 as the Environmental Review Program Director
- Board member handbook recently revised and distributed to EQB members

3. Strategic Plan facilitated conversation and workshop

Presenters: Kim Behrens and Kari Cantarero, Management Analysts, Minnesota Pollution Control Agency.

Type of item: Informational

Summary: The Board participated in a facilitated discussion and workshop in support of the EQB's efforts to refresh and update the organization's strategic plan for the next five years. Working in large and small group break-out sessions, they discussed EQB's mission statement and priority results or desired outcomes. This was the first of two such exercises, with the second planned to follow in early 2024.

Discussion: The discussion results are attached.

Outcome: The Board provided input that will be used in drafting an update to EQB's strategic plan.

4. Public comment

No public comments

5. Closing and adjournment

Board Member Kessler motioned to adjourn. Board Member Arnold seconded. All in favor; meeting adjourned.

Environmental Quality Board Strategic Plan Refresh Results

Board Meeting Facilitated Activities | November 15, 2023

Background: At the November meeting, the Board undertook a facilitated exercise to provide information and input to the revision of the EQB's strategic plan. The two facilitated exercises were focused on updating the organizational mission and priority results.

SUMMARY OF BRAINSTORMING INPUT FOR THE MISSION STATEMENT

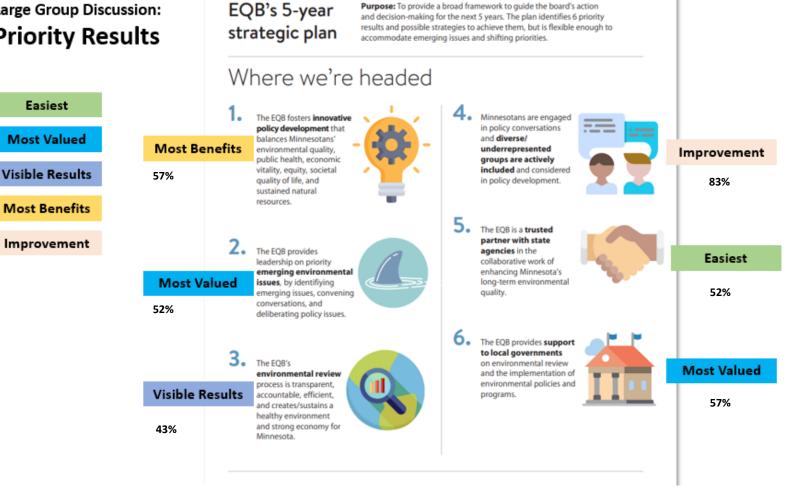
Q1. What do we collectively do as the Environmental Quality Board?			
Room 1	Room 2	Room 3	
 Environmental Review Collective, inter-disciplinary thinking Inter-agency coordination and bringing in public too Collective leadership and environmental stewardship Meaningful public engagement and meeting space Safe space for public input and shared learnings Big-picture policy work and taking it down to very technical level as well Partnerships at local level; communication and clarity for processes; guidance 	 Facilitates for diverse agencies and partners via a common approach Investigate matters of interdepartmental concern Could improve on providing a healthy and quality environment Resolve environmental review conflicts Statute designated roles 116C.04 Receive public input including having public members on the board Communicate issues to the public Recommendations regarding public concerns to each agency and how to collectively address Offer greater collaboration efforts among agencies regarding state wide issues Offer feedback to agencies actions 	 Brings diverse perspectives together (from agencies and public) to discuss environmental issues and perspectives The space where environmental review is defined to be able to implement Only one of the remaining spaces for public input on environment Provides an opportunity to look at specific issues that speak to larger state-wide or agency efforts/goals Oversee rules of the environmental program as directed by MEPA We provide special reporting to the legislature 	

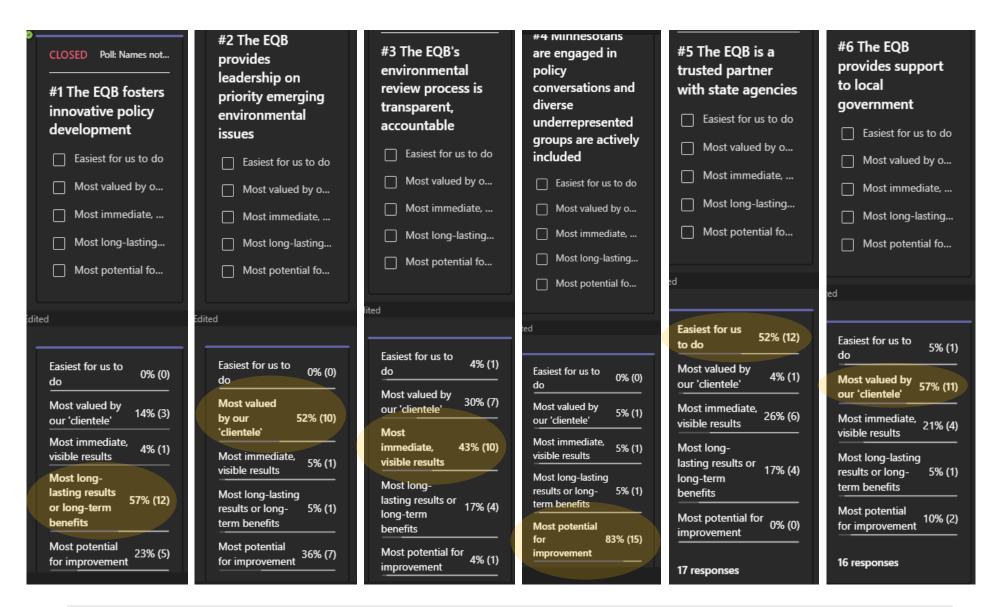
Room 1	Room 2	Room 3
 Blended governance- both public members and agency officials Checks and balances from different perspectives coming together Able to be flexible in regulatory approaches and set own approaches Able to discuss ideas outside of individual agendas Applies multiple lenses to issues, broadens discussions 	 Unbiased view of issues Broad collection of specialties Engagement with broad collection of stakeholders Cross functional collaboration transparency via different mechanisms for public input Unique opportunities to interact with public (not always tied to projects) 	 Public board members are decision makers Board meetings are regularly scheduled for the public and provides an opportunity for the public to observe and provide input Not constrained by laws/rules like other agencies and have a broader scope EQB does not typically act as an RGU, we enable and delegate others to implement rules EQB is place where changes to Environmental review are developed and vetter Tackle issues that require interagency work

Q3. What meaningful outcomes does the EQB deliver?			
Room 1	Room 2	Room 3	
 Balancing economic and environmental interests in the state Meaningful tools, processes for environmental review Upholds meaningful environmental protection program (MN is unique having our own ER program) Delivers recommendations for collective state action (e.g. pollinator plan, water plan, climate/resiliency) 	 Commence brainstorming opportunities for enhancing the environment Stewards of Environmental Review - Leading to informed decisions Educators through the public engagement process – leading to informed decisions Support a common ER process leading to positive Project specific outcomes (less disparity statewide) Structured forum for discussing issues – can highlight success and failures People feeling heard Multiple stakeholder alignment Facilitate informed ER decisions Leading certain cross agency projects – creating an opportunity for cross agency projects 	 Consistency with environmental review Performs important function to decide whether petitions should move forward and which RGU unbiased Mandatory reporting: water plan, environment and energy report, pollinator report Since we're not typically an RGU (not involved with the project) we can provide objective perspectives to rules Flexibility and scope to provide assessments and reports on controversial or emerging topics Improvements to environmental review 	

Q4. Who benefits from these outcomes?		
Room 1	Room 2	Room 3
 Public Agencies Future Generations (as well as today) Private sector (clear project proposal processes) Local governments All beings (incl. natural resources) The environment Underserved populations (targeted outreach for EJ areas, indigenous, BIPOC, etc.) Tribal governments 	 Decision makers (RGU's) All living things (non-people) Public Future generations Agencies and State Government 	 General public, from transparency and consistency Member agencies, space to work together on common environmental issues that cut across multiple agencies Environmental review applicants, consistent body and space for process RGUs and local units of government since they don't get to engage directly as member agencies do Legislature is able to have an agency to assign interagency projects Advocacy groups Regulatory agencies that issue permits, due to EQB oversight of environmental review Minnesota natural resources, MEPA provides additional layer of protection and EQB ensures these rules are implemented

Large Group Discussion: **Priority Results**





Environmental Quality Board Strategic Plan Refresh Results Board Meeting Facilitated Activities | November 15, 2023

SUMMARY OF FEEDBACK FOR THE SIX EXISTING PRIORITY RESULTS (PR)

PR	#1 Innovative Policy Development	#2 Emerging Environmental Issues
Q1	We have good examples of this happening recently. EQB provides gap analysis that helps identify innovations for Minnesota policy and procedures, overall.	This is still important, but aspects of this result are already included in other priority results. Pieces of this result could be absorbed by other priority results without losing any attributes.
Q2	Yes. It requires collective involvement and provides inter- disciplinary perspectives.	Yes. The current mission statement talks about critical environmental issues.
Q3	 Add procedures ("policy and procedures") Include how we do this in collaborative, cross-sector way Add language under "details" to the text of the priority result itself (namely, include "forum") Deliberate adding "climate change" Good relationships (maybe consider this in other priority result?) Consider adding "on emerging issues" here 	 Consider re-wording "identifying emerging issues" since EQB doesn't really identify issues. Consider collapsing this into other priority results Consider moving "emerging environmental issues" into the first priority result

PR	#3 Environmental Review	#4 Diverse/Underrepresented Groups
Q1	Yes, but how do we evaluate this is being achieved?Should the focus shift?	Yes, should be represented in all work done by EQB or stewarded by EQB.
Q2	Yes "stewards of ER"	Yes, engagement through EQB actions and program processes.
Q3	 Prefer economic vitality over strong economy 116C – open for debate of economic vitality rather than require Background for including economy considerations – ER meant to include env. Protection but also consider economic development Include effectiveness definitions within matrix from CI process where possible Effective ER As a public process the focus of transparent, accountable, efficient, is meant to be "baked in" to the process and the real focus of ER is to create a healthy harmonious env. How do we voice this in a way to include a way to support with metrics/evaluations 	 Ensure language is appropriately connected to other agency or statewide actions regarding similar instances Scope too narrow (should pertain beyond policy) Measurements and evaluations to present actual achievement Should this priority also be embedded in each of the other priorities? (mission – vision – values) Details of this priority result are important to define properly. Emphasize in a way that helps EQB achieve and program participants to achieve. Ensure values of underrepresented groups are properly considered, not just agency values Innovative policy ideas – EQB does not appear actively engaged currently (minus some gains via pollinator policy) Does not develop but helps execute

PR	#5 Trusted Partner	#6 Support to Local Governments
Q1	 Yes, it's a statutory mandate. We have aligned resources at state agencies to do it and want to continue. Yes, collaboration and trust are important. We share spaces (physical and work) so we end up having to work together. 	 Yes, it's important to provide support to local RGUs who do not have the resources and experience/expertise to do ER and that this support could possibly be expanded. Yes, and it needs to be updated with the recommendations listed on Q3.
Q2	 Yes, it speaks to collaboration and long-term environmental quality. It's one of the key processes that EQB own to achieve those goals. Yes, because EQB is trusted by public and individual agencies, it's able to bring together all sides of issues to make informed decisions. 	Yes, local governments are critical partners in making sure we can carry out MEPA
Q3	Change: The language of this result "partner agencies" should include other units of government like tribal and local governments since they are impacted by environmental review rules and procedures (ex. climate and GHG emissions difficult for local RGUs to implement)	 Possible drop: Could this priority be combined with #5? Why: Understanding how we define that support happens through the relationships and trust built with partner agencies Why not: Support is separate from relationship building Change: Local government units are not as familiar with environmental review, so they need more assistance that EQB now provides. Because this is so important, it needs to be expanded to provide more support where needed. Clearly define support, possibly to be more proactive. As we update these priority results, we need to evaluate if we are providing the right level of support. Are [we] checking in enough to make sure our support is in alignment with the needs from the local RGUs. A note that staff capacity is an issue to make sure we're creating the right resources local RGUs need

Room 1: Data Gathered

Participants: Sarah Strommen, Kevin McKinnon, Nancy Daubenberger, Ken Foster, Peter Bakken, Kate Fairman, Chet Bodin, Katherine Lind, Eric Wojchik. Facilitator: Kim Nuckles, Scribe: Kayla Walsh

PART 1: Brainstorming input for the mission statement

 Q1. What do we collectively do as the Environmental Quality Board? Environmental Review Collective, inter-disciplinary thinking Inter-agency coordination and bringing in public too Collective leadership and environmental stewardship Meaningful public engagement and meeting space Safe space for public input and shared learnings Big-picture policy work and taking it down to very technical level as well Partnerships at local level; communication and clarity for processes; guidance 	 Q2. What specifically differentiates the EQB from its member agencies? Blended governance- both public members and agency officials Checks and balances from different perspectives coming together Able to be flexible in regulatory approaches and set own approaches Able to discuss ideas outside of individual agendas Applies multiple lenses to issues, broadens discussions
 Q3. What meaningful outcomes does the EQB deliver? Balancing economic and environmental interests in the state Meaningful tools, processes for environmental review Upholds meaningful environmental protection program (MN is unique having our own ER program) Delivers recommendations for collective state action (e.g. pollinator plan, water plan, climate/resiliency) 	 Q4. Who benefits from these outcomes? Public Agencies Future Generations (as well as today) Private sector (clear project proposal processes) Local governments All beings (incl. natural resources) The environment Underserved populations (targeted outreach for EJ areas, indigenous, BIPOC, etc.) Tribal governments

PR	#1 Innovative Policy Development	#2 Emerging Environmental Issues
Q1	We have good examples of this happening recently. EQB provides gap analysis that helps identify innovations for Minnesota policy and procedures, overall.	This is still important, but aspects of this result are already included in other priority results. Pieces of this result could be absorbed by other priority results without losing any attributes.
Q2	Yes. It requires collective involvement and provides inter- disciplinary perspectives.	Yes. The current mission statement talks about critical environmental issues.
Q3	 Add procedures ("policy and procedures") Include how we do this in collaborative, cross-sector way Add language under "details" to the text of the priority result itself (namely, include "forum") Deliberate adding "climate change" Good relationships (maybe consider this in other priority result?) Consider adding "on emerging issues" here 	 Consider re-wording "identifying emerging issues" since EQB doesn't really identify issues. Consider collapsing this into other priority results Consider moving "emerging environmental issues" into the first priority result

Priority Result #1: The EQB fosters innovative policy development that balances Minnesotans' environmental quality, public health, economic vitality, equity, societal quality of life, and sustained natural resources.

Priority Result #2: The EQB provides leadership on priority emerging environmental issues, by identifying emerging issues, convening conversations, and deliberating policy issues.

Q1. Is this priority result still a way we want to work given the vision and the next 5 years? Why or why not?

Q2. Does this priority result align with your mission conversations? Why or why not?

Q3. What would you keep/drop/change to this priority result to update it for this next planning cycle?

No chat comments from Room 1.

Room 2: Data Gathered

Participants: Grace Arnold, Dan Katzenberger, Joseph Bauerkemper, Rylee Hince, Tom Hogan, Ray Kirsch, David Bell. Facilitator: Catherine Neuschler, Scribe: Jesse Krzenski

PART 1: Brainstorming input for the mission statement

 Q1. What do we collectively do as the Environmental Quality Board? Facilitates for diverse agencies and partners via a common approach Investigate matters of interdepartmental concern Could improve on providing a healthy and quality environment Resolve environmental review conflicts Statute designated roles 116C.04 Receive public input including having public members on the board Communicate issues to the public Recommendations regarding public concerns to each agency and how to collectively address Offer greater collaboration efforts among agencies regarding state wide issues 	 Q2. What specifically differentiates the EQB from its member agencies? Unbiased view of issues Broad collection of specialties Engagement with broad collection of stakeholders Cross functional collaboration transparency via different mechanisms for public input Unique opportunities to interact with public (not always tied to projects)
 Offer feedback to agencies actions Q3. What meaningful outcomes does the EQB deliver? Commence brainstorming opportunities for enhancing the environment Stewards of Environmental Review - Leading to informed decisions Educators through the public engagement process – leading to informed decisions Support a common ER process leading to positive Project specific outcomes (less disparity statewide) Structured forum for discussing issues – can highlight success and failures People feeling heard Multiple stakeholder alignment Facilitate informed ER decisions Leading certain cross agency projects – creating an opportunity for cross agency projects 	Q4. Who benefits from these outcomes? Decision makers (RGU's) All living things (non-people) Public Future generations Agencies and State Government

PR	#3 Environmental Review	#4 Diverse/Underrepresented Groups		
Q1	 Yes, but how do we evaluate this is being achieved? Should the focus shift? 	Yes, should be represented in all work done by EQB or stewarded by EQB.		
Q2	Yes "stewards of ER"	Yes, engagement through EQB actions and program processes.		
Q3	 Prefer economic vitality over strong economy 116C – open for debate of economic vitality rather than require Background for including economy considerations – ER meant to include env. Protection but also consider economic development Include effectiveness definitions within matrix from CI process where possible Effective ER As a public process the focus of transparent, accountable, efficient, is meant to be "baked in" to the process and the real focus of ER is to create a healthy harmonious env. How do we voice this in a way to include a way to support with metrics/evaluations 	 Ensure language is appropriately connected to other agency or statewide actions regarding similar instances Scope too narrow (should pertain beyond policy) Measurements and evaluations to present actual achievement Should this priority also be embedded in each of the other priorities? (mission – vision – values) Details of this priority result are important to define properly. Emphasize in a way that helps EQB achieve and program participants to achieve. Ensure values of underrepresented groups are properly considered, not just agency values Innovative policy ideas – EQB does not appear actively engaged currently (minus some gains via pollinator policy) Does not develop but helps execute 		

Priority Result #3: The EQB's environmental review process is transparent, accountable, efficient, and creates/sustains a healthy environment and strong economy for Minnesota.

Priority Result #4: Minnesotans are engaged in policy conversations and diverse, underrepresented groups are actively included and considered in policy development.

- Q1. Is this priority result still a way we want to work given the vision and the next 5 years? Why or why not?
- Q2. Does this priority result align with your mission conversations? Why or why not?
- Q3. What would you keep/drop/change to this priority result to update it for this next planning cycle?

Chat Comments

Criteria for information (objective A)			Criteria for engagement (objective B)			Criteria for process (objectives D and E)		
Scientific integrity	Environmental protection	Measurability	Inclusivity	User- friendliness	Accessibility	Consistency	Quality assurance	Accountability
							~	
means	means using	means	means	means clear	means access to	means	means EQB's	means the project
considering,	information in	identifying	inclusion of	communication,	decision-makers	uniformity of	ability to	proposer's, RGU's,
encouraging,	government	quantifiable	voices that	clear procedures,	and processes	environmental	verify	and Board's ability
or making	decisions to	data for	have	or	so that the	review	accuracy and	to better
available the	safeguard the	understanding	historically	understandable	public can	processes	completeness	demonstrate
most up-to-	environment	project and/or	been	information to	provide	thereby	of information	meeting the
date,	and people in	environmental	marginalized,	interact with	meaningful	promoting	used in the	program's
reputable, and	Minnesota	review	excluded, or	environmental	input into	dependability	environmental	obligation to the
complete		program	disproportional	review; ease or	decision making	and reliability	review	public and to the
science-based		impacts to	ly impacted by	efficiency to	and receive	in	program	environment
information for		human health	pollution and	thoroughly and	explanations	environmental		through reporting,
analysis of		and the	the ability for	accurately	and updates for	reviews;		data sharing,
environmental		environment	those voices to	complete	why certain	eliminates		transparently
and human		A. A. STONES AND AN AN AN	influence the	environmental	decisions are	ambiguities;		explaining
health impacts			conversation,	reviews	made	promotes		decisions, taking
or mitigation			etc.			comparability		responsibility for
						25 63		actions, and being
								able to explain,
								justify, and take
								consequences for them

Priori	ty Results
3. The EQB's environmental review process is transparent, accountable, efficient, and creates/sustains a healthy environment and strong economy for Minnesota.	Details: The public, proposers, and local and state government organizations are clear about implementation requirements.
the vision and the next 5 years? Why or why not? mission converse	ority result align with your Q3. What would you keep/drop/change to this priority result ations? Why or why not? Q3. Update it for this next planning cycle?
Yes, but how do we evaluate this is being achieved? Should the focus shift?	
Vision: Minnesota has healthy and sustainable environmental quality that supports public health, economic vitality, societal quality of life, and sustained natural resources.	

Room 3: Data Gathered

Participants: Katrina Kessler, Peder Kjseseth, Tamar Gronvall, Nick Martin, Paul Nelson, Katrina Hapka, Steve Roos, Melissa King. Facilitator: Rebeca Gutierrez-Moreno, Scribe: Priscilla Villa-Watt

PART 1: Brainstorming input for the mission statement

 Q1. What do we collectively do as the Environmental Quality Board? Brings diverse perspectives together (from agencies and public) to discuss environmental issues and perspectives The space where environmental review is defined to be able to implement Only one of the remaining spaces for public input on environment Provides an opportunity to look at specific issues that speak to larger state-wide or agency efforts/goals Oversee rules of the environmental program as directed 	 Q2. What specifically differentiates the EQB from its member agencies? Public board members are decision makers Board meetings are regularly scheduled for the public and provides an opportunity for the public to observe and provide input Not constrained by laws/rules like other agencies and have a broader scope EQB does not typically act as an RGU, we enable and delegate others to implement rules EQB is place where changes to Environmental review are developed and vetted Tackle issues that require interagency work
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PART 2: Providing feedback for the six existing priority results

PR	#5 Trusted Partner	#6 Support to Local Governments
Q1	 Yes, it's a statutory mandate. We have aligned resources at state agencies to do it and want to continue. Yes, collaboration and trust are important. We share spaces (physical and work) so we end up having to work together. 	 Yes, it's important to provide support to local RGUs who do not have the resources and experience/expertise to do ER and that this support could possibly be expanded. Yes, and it needs to be updated with the recommendations listed on Q3.
Q2	 Yes, it speaks to collaboration and long-term environmental quality. It's one of the key processes that EQB own to achieve those goals. Yes, because EQB is trusted by public and individual agencies, it's able to bring together all sides of issues to make informed decisions. 	Yes, local governments are critical partners in making sure we can carry out MEPA
Q3	Change: The language of this result "partner agencies" should include other units of government like tribal and local governments since they are impacted by environmental review rules and procedures (ex. climate and GHG emissions difficult for local RGUs to implement)	 Possible drop: Could this priority be combined with #5? Why: Understanding how we define that support happens through the relationships and trust built with partner agencies Why not: Support is separate from relationship building Change: Local government units are not as familiar with environmental review, so they need more assistance that EQB now provides. Because this is so important, it needs to be expanded to provide more support where needed. Clearly define support, possibly to be more proactive. As we update these priority results, we need to evaluate if we are providing the right level of support. Are [we] checking in enough to make sure our support is in alignment with the needs from the local RGUs. A note that staff capacity is an issue to make sure we're creating the right resources local RGUs need

Priority Result #5: The EQB is a trusted partner with state agencies in the collaborative work of enhancing Minnesota's long-term environmental quality.

Priority Result #6: The EQB provides support to local governments on environmental review and the implementation of environmental policies and programs.

Q1. Is this priority result still a way we want to work given the vision and the next 5 years? Why or why not?

Q2. Does this priority result align with your mission conversations? Why or why not?

Q3. What would you keep/drop/change to this priority result to update it for this next planning cycle?

Chat Comments

Tester, Peter (MPCA)

is the support information, funding, process-related? Some LGUs don't have either resources or funds to be an RGU, even if they want to perform that function.

Amelia Vohs (MCEA) (Guest)

Amelia Vohs, from Minnesota Center for Environmental Advocacy. I think this is a really critical role for EQB, but one thing I would suggest is that there be greater connection between EQB and the local governments. In my experience, the local governments often don't reach out to the EQB, or they wait until an issue has already arisen before they make the call. A example we see often is a city approves a variance or conditional use permit while environmental review is underway, and then gets in touch with the EQB after someone points out they cannot do that under MEPA. If EQB could proactively talk to local units of government when they see an issue with how they are implementing environmental review (instead of waiting for the city to call EQB) that would help.

Another thing to consider is how EQB's support here can be lasting even with staff turnover at local units of government. For example, are there lasting resources that can be developed in addition to individual trainings or one on one calls?

I love Commissioner Kessler's idea to speak with local governments to see what would be most helpful to them.

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Memo

Date: January 5, 2024

To: EQB Board Members

From: Priscilla Villa-Watt, EQB Communications and Engagement Coordinator

RE: Environment and Energy Report Card

Background

In 2011, then-Governor Dayton issued Executive Order 11-32, which stated:

The EQB shall prepare an environmental and energy report card that identifies metrics which the State of Minnesota can use to measure its performance and progress protecting Minnesota's valuable air, water, and land resources. Once initially established, the environment and energy report card shall be an annual report with renewed priorities, initiatives, and goals and an updated report card.

Responding to that Executive Order, EQB produced the first Minnesota Environment and Energy Report Card (E&E) in 2012. The 2012 report was divided into sections on energy, climate, water, land, and air. In 2014, the graphics from this report were updated through 2014 and posted to the EQB website as a slideshow. The 2017 Report refined the communications and approach to mimic a report card with "grades" and "trends" for each established indicator. The most recent report card was prepared in 2019. EQB did not publish a report in 2021 due to the COVID-19 pandemic.

Audience and Outcomes

The Environment and Energy Report Card is intended for the public, the state legislature, and the Governor. The report helps make important state data more accessible by providing an overall narrative and accessible chart and graphics to communicate the condition of Minnesota's environment and our progress towards key goals on statewide environmental issues. With this information, we hope to engage the public on environmental actions and decision-making processes on relevant environmental issues and help legislators and policymakers make more informed decisions on these issues.

What's in the 2024 report card?

We are happy to share the updated 2024 Environment and Energy Report Card. Although most of the metrics remain the same, some have been updated to reflect new goals set by the Legislature and the state agencies, particularly with climate mitigation. In addition, we decided to reorganize the metrics into two major categories: Air and Climate, and Land and Water. (Compared to the use of five categories in prior reports.) We think this will help readers understand the connection between the major causes of environmental issues, the known effects, and the actions state agencies are taking to address some of those root causes.

Additionally, in reviewing past reports we noticed different types of reporting. Some metrics, such as measures of heat and rainfall, were reporting on the status of Minnesota's environment in a specific area. It is critical to keep track of these conditions and report on their status, but it will take numerous combined actions to change many of conditions. Other metrics, such as those on carbon free electricity, are telling a story about the actions Minnesota is taking to reduce our environmental impact and hopefully improve those environmental conditions. These metrics more clearly measure progress in the plans and actions Minnesota is taking.

Therefore, we reorganized some of the metrics and created a format that provides a more cohesive snapshot of environmental conditions in Minnesota, and more clarity between environmental conditions and our programs, actions, and progress in maintaining and improving those conditions.

Each of the two major sections are therefore further divided into two categories: Conditions and Actions.

- Condition: Metrics that tell us how the status of environmental indicators.
- Action: Metrics where Minnesota is taking action to prevent or minimize our environmental impact.

With these changes, it's easier to see how we are all being impacted by adverse environmental conditions and where Minnesota is taking action to reduce our contribution to pollution or other factors that worsen these metrics.

With Board approval, we plan to release this report on the EQB website on February 5, 2024. We hope it provides useful grounding and information for critical conversations about Minnesota's environmental quality.

Future Work

EQB staff plan to continue to regularly produce and update the E&E report on a biannual basis. We are already thinking about the 2026 update to the report, and intend to work with agency teams and the board to discuss:

- Which, if any, metrics need an update or have new goals.
- Improvements that can be made to the structure or process.
- Ways to better integrate the goals and metrics from the Climate Action Framework.
- Tools to make it easier for readers to compare metrics over the past years and see trends.
- Making the report more interactive online and easier to update.
- Use the report card to inform opportunities for engagement in the coming year.

MINNESOTA ENVIRONMENTAL QUALITY BOARD

RESOLUTION OF THE MINNESOTA ENVIRONMENTAL QUALITY BOARD

Approval of the 2024 Environment and Energy Report Card

Since 2012, the Environmental Quality Board (EQB or Board) has regularly prepared a Minnesota Environment and Energy Report card. This report card was originally required by Executive Order 11-32, which stated: *"The* EQB shall prepare an environmental and energy report card that identifies metrics which the State of Minnesota can use to measure its performance and progress protecting Minnesota's valuable air, water, and land resources."

EQB prepares this report to inform the public, legislature, and Governor on important environmental issues across Minnesota. Following the original report card, the EQB has produced additional report cards in 2017, 2019, and today, ensuring that they are updated with the latest information about the condition of Minnesota's environment and renewed priorities, initiatives, and goals.

The board resolves to approve the attached 2024 Environment and Energy Report Card, to be released by February 5th, 2024.

The board approved and adopted this resolution on January 17, 2024.

Date:

Nancy Daubenberger, Chair Minnesota Environmental Quality Board

Attachments: 2024 Environment and Energy Report Card

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Packet Page 27

Minnesota Environment and Energy Report Card

MINNESOTA

ENVIRONMENTAL QUALITY BOARD



Introduction

The EQB's mission is to enhance Minnesota's environmental quality for current and future generations by leading interagency work to advance meaningful public engagement and facilitate informed decision-making on critical environmental issues. Compiled with the help of staff from several state agencies, the 2024 Minnesota Environment and Energy Report Card provides valuable information for the public and policymakers on the condition of Minnesota's environment, how it is being impacted by environmental threats, and what is being done in response.

The report focuses on key areas of Minnesota's environment: air and climate, and land and water. Each section presents metrics and information that help assess the condition of Minnesota's environment, along with actions being taken to promote and improve environmental quality and respond to changes by promoting equity and resiliency. In alignment with the Climate Action Framework, many of these environmental issue areas highlight the work currently being done to address climate change. Metrics either have a red, yellow, or green score depending on the changes in environmental condition and whether state goals for progress are being met, and show a projected trend. Many of these metrics have been used since 2017, allowing a look at changes over time. Some, especially those related to state actions, have been updated to reflect changing state goals.

Highlights

The current report card shows mixed results.

Key environmental condition indicators show the continued impact of climate change – in higher temperatures, more extreme precipitation and drought, and in insect damage to our forests. The outcome is better for air pollution and water due to the many statewide efforts to address the root causes of concern.

Action indicators – those metrics that are looking at what we're doing to enhance environmental quality – are also mixed. Our key energy actions that contribute to reducing climate change are making progress. Carbon-free electricity and household energy use are both metrics that have improved due to investments in more energy efficient heating systems and the capacity for more renewable energy generation – with 24% of our energy coming from wind.

Since the publication of the 2019 report card, we faced a global pandemic that impacted every aspect of life across the state. The environmental impacts of that pandemic are highlighted throughout the report from lower fuel use and greenhouse gas emissions to shifting trends in recycling. These effects make it harder to project future trends in these areas, and metrics will have to be watched carefully moving forward.

Working together

Minnesota enjoys abundant natural resources and high quality of life, but not all groups and communities share these benefits equally. Some Minnesotans are disproportionately affected by air and water pollution, climate change, and other environmental challenges. In all our work, we seek to end disparities based on race, income, gender, health, and geography. This is critical for making progress on our statewide environmental goals.

The Environment and Energy Report Card is a living document. We hope that it will inspire new dialogue and forms of action. Tackling the complex issues in this report will require innovative approaches and cross-sector collaboration. The EQB invites you to attend our monthly meetings to learn more and join us in creating solutions. Together we can ensure a clean, healthy environment for all Minnesotans.

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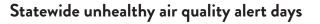
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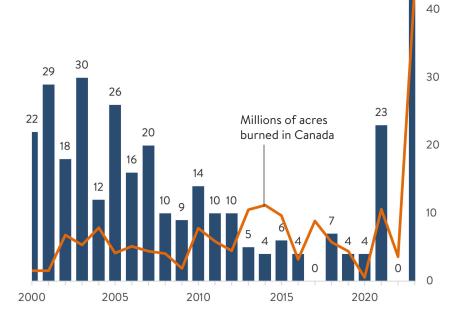
Condition: Air and climate Air pollution

Voluntary efforts and regulation have improved air quality over recent decades, but not for everyone and not enough to ensure that air pollution is not affecting human health. Our air quality meets current federal standards, but environmental standards and conditions are changing, and disparities remain.



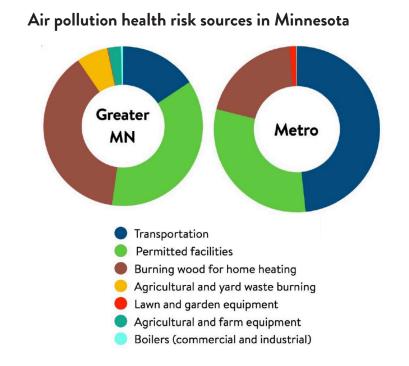
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What's causing air pollution

Minnesota's air quality can differ across the state and fluctuate often, sometimes quite quickly. Wildfire smoke, ground-level ozone on hot summer days, and temperature inversions that trap pollution on calm winter days can create areas of unhealthy air quality and trigger regional air quality alerts. These events are likely to become more common as the climate continues to change. Local air pollution sources are more concentrated in cities, so people who live in cities are exposed to more air pollution and the resulting potential health effects. For example, transportation is the primary source of air pollution-driven health risks in the Twin Cities metro, particularly impacting those who live near large roadways, while wood burning, and industrial processes are the main sources of air pollution-driven health risks in greater Minnesota.

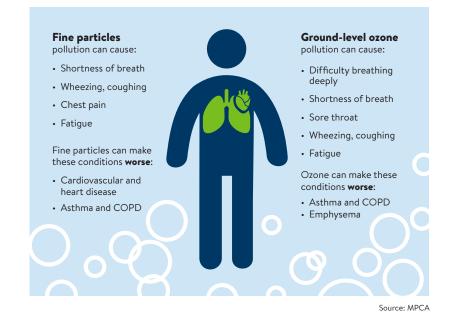


Health and equity

Air pollution contributed to 10% of deaths in the Twin Cities metro area and 9% of deaths in Greater Minnesota in 2015. Fine particle pollution contains a harmful mix of chemicals. The particles are so small they can be breathed deep into lungs and enter the bloodstream. Wood burning for heat or pleasure, wildfires, and diesel exhaust are common ways we are exposed to fine particles.

While all Minnesotans are susceptible to health impacts from air pollution, low-income residents, residents of color, uninsured residents, or residents living with a disability are disproportionally impacted. Some people are more likely to be impacted by smaller amounts of air pollution, including children, older adults, those who have existing heart or lung conditions or diabetes, are pregnant, or work, exercise, play, or live outdoors.

Air pollution and your body



Efforts to improve air quality

We make decisions every day that can affect air quality, such as the fuel we use in our vehicles and appliances or to heat our homes and buildings. Making progress on air pollution calls for many of the same strategies as the climate and energy goals highlighted in this report card and in the Climate Action Framework. Efforts to reduce greenhouse gas emissions, use less energy, shift to renewable energy, and rely less on burning fossil fuels for everyday needs will help reduce overall air pollution. Due to the enduring legacy of past racist and classist decisions, air pollution exposures are even higher in areas with more residents of color and lower-income residents. Focusing on local impacts and prioritizing pollution reduction efforts in these areas is critical to addressing disparities.

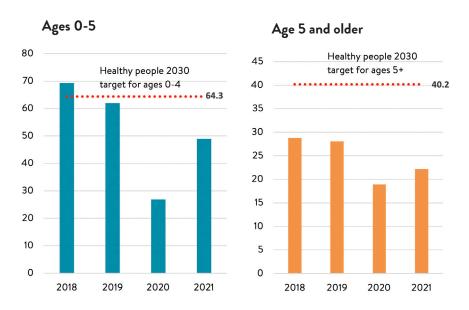
Condition: Air and climate

Asthma

While our rates for asthma-related emergency room visits still meet our goals, we saw an increase in 2021, following a steep drop in during the pandemic in 2020. Asthma inequities persist and we continue to work to increase access to healthcare and provide asthma management education and resources to remedy those inequities.



Asthma emergency room visit rates (per 10,000 people)



What asthma can tell us about our environmental quality

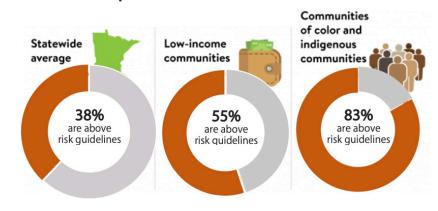
Asthma is a chronic condition that affects the lungs and is characterized by coughing, wheezing, and shortness of breath. Minnesota's most recent data indicate that approximately 1 in 17 children and 1 in 10 adults have asthma. Asthma often starts during childhood but can start at any age. Factors that contribute to developing asthma include genetics, allergies, a severe respiratory infection during childhood, and environmental exposures. Pollution from traffic and industry, along with climate impacts including a longer pollen season, changes in vegetation as species spread north, and an increase in wildfires all contribute to health impacts from outdoor environmental exposures. These exposures create or worsen not just asthma, but other health conditions such as chronic bronchitis, emphysema, chronic obstructive pulmonary disease, and cardiovascular disease and can even lead to death.

Reporting asthma emergency room visits is just one way in which Minnesota tracks data on asthma. This statewide data for asthma, along with other data relevant to health and the environment, can be found on the Minnesota Public Health Data Access Portal. We can also compare our Minnesota rates to the Healthy People 2030 national goals for improving respiratory disease outcomes for a broader view.

- In 2021, Minnesotans made 13,654 emergency room visits and experienced 1,305 hospitalizations for asthma.
- In 2014, asthma cost an estimated \$669 million, including \$615 million in direct medical expenses and \$54 million in lost workdays. More recent data on cost are not available.
- In 2015, 7.4% of Minnesota adults reported that they had current asthma; in 2022, 10% of adults report that they have current asthma. The percentage of adults reporting that they have ever been told by a health care provider that they have current asthma has increased from 11.1% to 14.3%.

Improving our environment to boost our health and well-being

Minnesota needs to continue to reduce ER visits caused by poor air quality. Improving air quality can provide significant public health benefits. If we reduce fine particles and groundlevel ozone by 10% from 2008 levels, we can reduce the annual number of deaths, hospitalizations, and emergency room visits due to heart and lung conditions. Some communities are more likely to be near higher levels of air pollution



Equity

Breathing polluted air is not good for anyone, but health impacts from pollution are not shared equally. Children in the Twin Cities metro area go to the ER for asthma at a rate nearly twice that of children in Greater Minnesota. In some Minneapolis zip codes, asthma hospitalization rates for children are four times higher than the rest of the state.

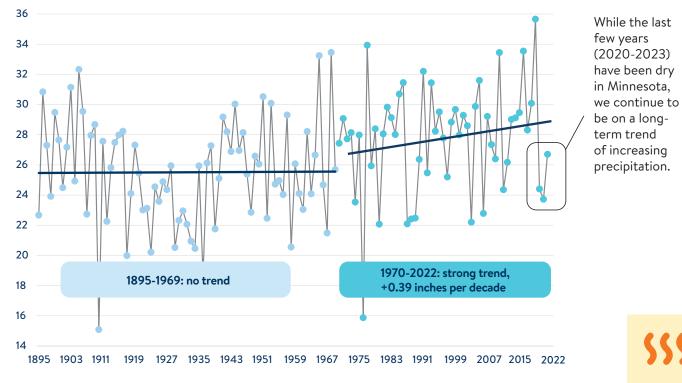
Due to structural inequities, people living near high-traffic roads and heavy industry bear a heavier burden. The highest estimated rates of air pollution-related death and disease in the Twin Cities occur in neighborhoods with the largest percentage of residents who are Black, Indigenous and People of Color (BIPOC), lowincome and uninsured, and who live with a disability. Across Minnesota, Latino, American Indian, and Black adults are 20 to 30% more likely than white adults to have asthma. Further, zip codes with the largest percentage of BIPOC residents had more than five times the rate of asthma emergency room visits related to air pollution compared to areas with more white residents.

Condition: Air and climate Heat and rainfall

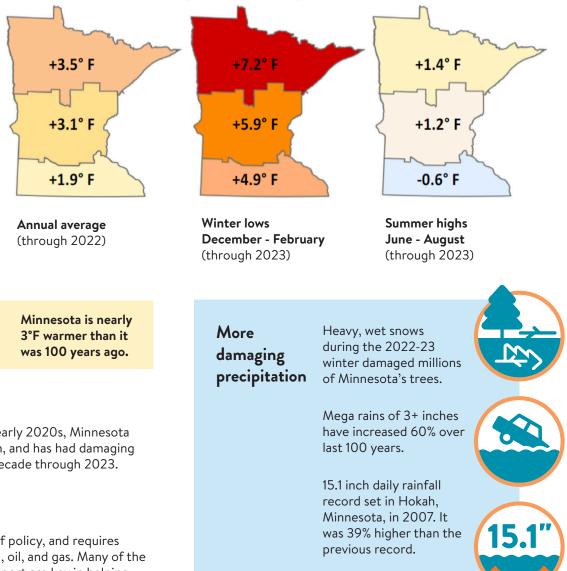
Minnesota has become both warmer and wetter on average as global temperatures have risen.



Minnesota annual precipitation in inches



Total temperature change since 1895



Warmer

Global temperatures are rising because humans have increased greenhouse gas emissions by burning coal, oil, and gas. Winter has become the fastest warming season globally, at all scales, and is a major driver of annual warming rates. In Minnesota, trends towards warmer years are strongly influenced by winter, which is warming several times faster than summer. Winter nights are warming fastest, as shown by increases in average daily low temperatures between December and February. Extremes of cold are less frequent and less severe than they used to be. Rapid increases in Minnesota's low temperatures during the winter represent a direct impact of our changing climate due to rising greenhouse gas emissions.

Wetter

Despite drought conditions during the early 2020s, Minnesota is still getting wetter over the long-term, and has had damaging rain and snow events each year of the decade through 2023.

Coordination is key

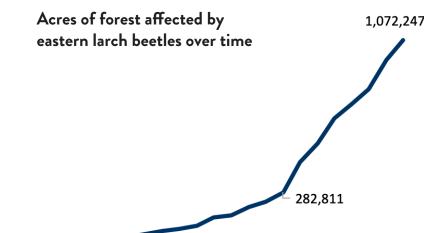
Addressing climate change is a matter of policy, and requires global coordination to stop burning coal, oil, and gas. Many of the goals and initiatives mentioned in this report are key in helping reduce Minnesota's contribution to climate change.

Condition: Air and climate

Climate change and forests

Minnesota's forests provide a wide range of important benefits, but they are susceptible to stressors that reduce these benefits and the health of forests. Climate change increases the potential for negative impacts on forest health in the future.





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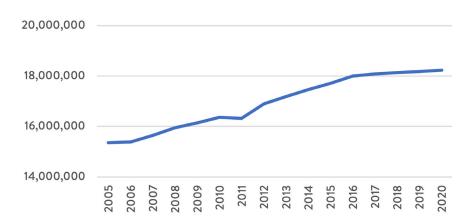
Climate change and forest health

Healthy forests generate a wide range of benefits including diverse wildlife habitat, clean air and water, and carbon sequestration and storage. They also support a robust forest products industry and recreational opportunities. Forest health stressors such as insects, diseases, and invasive plants endanger these benefits by suppressing growth and killing trees across wide areas of the state. In 2023, over one million acres of forest were negatively impacted by at least one of these stressors. Climate, including temperature and precipitation, influences the extent and severity of impacts. Climate change is one of several influential factors driving an unprecedented two-decade outbreak of eastern larch beetle (ELB) in Minnesota's tamarack forests. From 2001 to 2023, ELB affected nearly one million acres, equivalent to 75 percent of all tamarack in the state. Longer and warmer growing seasons have helped extend this outbreak. Climate predictions suggest even longer and warmer growing seasons by mid-century in Minnesota. Other forest health stressors that are partially contained by Minnesota's cold weather, such as emerald ash borer and spongy moth, will also increase in population as winters become warmer.



Eastern larch beetles have killed vast swaths of tamarack forests by feeding under the tree's bark.

CO2-equivalent tons removed from the atmosphere by Minnesota's forests



Carbon storage and sequestration in Minnesota forests

Healthy and growing forests absorb and store heat-trapping gases that are making our winters warmer and precipitation more variable. Minnesota's nearly 18 million acres of forest actively reduce the concentration of carbon dioxide in the atmosphere, helping to slow climate change. In 2020, Minnesota's forests absorbed over 18 million tons of carbon dioxide, which is about the same amount released by four million passenger vehicles driven for one year.

Action: Air and climate

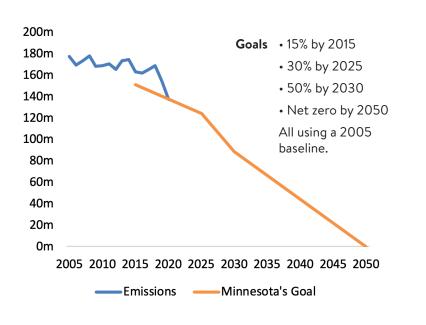
Reducing climate pollution

Emissions in 2020 were 23% below 2005 levels. Significant emissions reductions have been made in electricity generation and in transportation. However, because of the unusual impacts of the COVID-19 pandemic, future trends are uncertain.

Status FAIR Trend

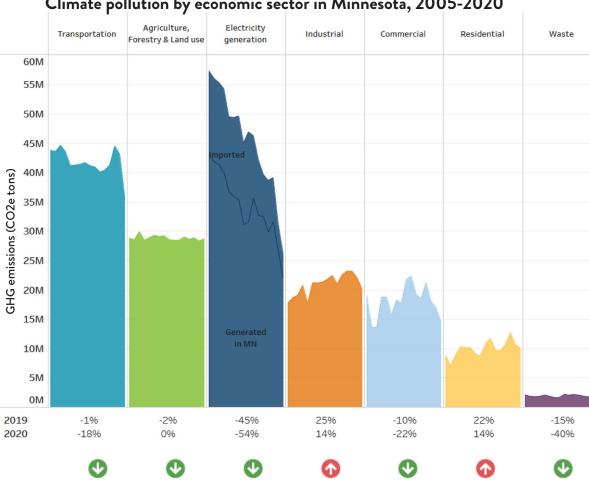
Not enough information to determine a statewide trend.

Minnesota greenhouse gas emissions 2005-2020 and goals from Next Generation Climate Act



COVID-19 and greenhouse gas emissions

From 2005-2020, Minnesota achieved a 23% reduction in greenhouse gas emissions, putting the state on track to meet its goals for the first time, all while seeing economic and population growth. The unusual circumstances of the COVID-19 pandemic resulted in more emission reductions than expected, so future years might show an increase in greenhouse gas emissions, particularly in the transportation sector. Although 2020 data shows Minnesota meeting our goals, a rebound in transportation emissions to prepandemic levels would result in emissions above targets.



Major sources of climate pollution include burning fossil fuels for electricity, transportation, and other industrial, residential, and commercial uses. The release of greenhouse gases such as methane from agriculture and landfills is another contributor.



Minnesota's Climate Action Framework provides a path forward

Major investments from the state and federal governments are accelerating progress in reducing climate pollution. Individuals and communities across Minnesota need to put these tools to work meet Minnesota's greenhouse gas emissions reductions commitments.

• Minnesota has made big progress in the electricity sector, and passage of a new law committing Minnesota to 100% clean energy by 2040 will ramp up progress.

• A key area of opportunity is decarbonizing buildings and industry.

Minnesota needs to pursue energy efficiency through better codes and retrofitting existing buildings. Electrifying fossil-fuel-based heating sources will also get carbon out of buildings and industry.

• Minnesota's natural and working lands can be part of the solution through practices that promote carbon storage.

• In the transportation sector, Minnesota is pursuing vehicle electrification, cleaner fuels, and investments that make it easier to get around without a car.

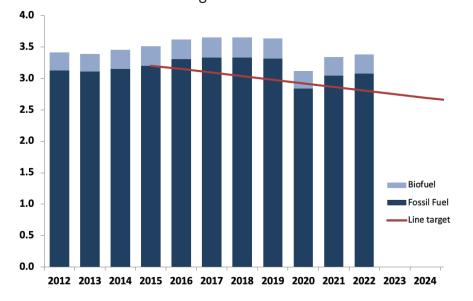
Climate pollution by economic sector in Minnesota, 2005-2020

Action: Air and climate Fuel and transportation

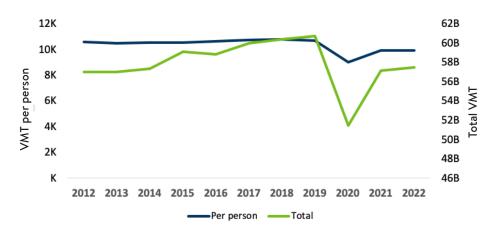
Fuel use gradually increased between 2011 and 2018, nearly returning to peak 2004 level. The COVID-19 pandemic dramatically impacted travel in the state, reducing total fuel usage in 2020 to the lowest point in the 20-year reporting period. Since 2020, fuel usage has continued to increase.



Fuel use in billions of gallons



Vehicle miles traveled





Travel and fuel use

Transportation is the largest contributor to greenhouse gas emissions in the state. While greenhouse gas emissions from the transportation sector have been declining since 2005, Minnesota did not meet the statewide 2015 emissions target. Although continued declines are projected, emissions from transportation fuel use are still projected to be 10 to 15% higher than the 2030 target. While mass transit is currently available at some level across the state, it is not sufficiently developed to accommodate a wide range of daily trips. With limited multimodal options in many parts of Minnesota, people must rely on single-occupancy vehicles to move around.

The lasting impacts of COVID-19 on travel

Over the last 20 years, total vehicle miles traveled in Minnesota steadily increased until 2020 when they decreased by 15% due the impact of the COVID-19 pandemic on travel patterns. In 2021, mileage increased by 10% and is now similar to levels last seen in the early 2000s. Higher numbers of miles driven per person suggests that people in Minnesota do not have effective transportation options to get places they need to go and that those places are likely farther away than they used to be.

Freeway congestion is likely to remain at low levels in the near future. Recent evidence from traffic volume data in the Twin Cities suggests that while daily volumes are rebounding to near pre-pandemic levels, the distribution of trips throughout the day has differed significantly. Volumes during the traditional AM peak period are lower, consistent with many workers continuing to work remotely, while trips during the PM peak period are returning to higher levels.

According to MnDOT's 2021 Congestion Report, highway volume decreased by as much as 50% in some corridors. In 2020, 0.9% of the freeway system was congested, which was nearly a 25-percentage point decrease from 2019. While freeway congestion increased to 5.8% in 2021, it was still well below pre- COVID-19 trends. Freeway congestion in 2022 increased to 13.7%, which suggests that travel patterns are shifting as more people return to in-person work part-time or full-time.

Working towards cleaner, more equitable, and sustainable travel

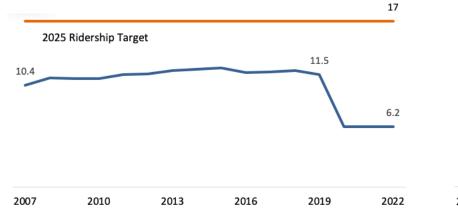
The first goal in the Climate Action Framework highlights making Minnesota's transportation system sustainable, resilient to a changing climate, and supporting equitable transportation options for all people traveling in Minnesota. By doing this, we reduce air pollution, especially in communities most affected by it. Additionally, we continue to work on travel options that are accessible, safe, and plentiful so people can enjoy walking, biking, rolling, and other modes of transit. To achieve our goals:

• Improve transportation systems to reduce single-person travel. A transportation system balanced with thoughtful land use patterns can reduce greenhouse gas emissions by reducing per-person trip lengths. Shifting more trips away from single-occupancy vehicles to high-occupancy vehicles can be encouraged through improvements to transit services and frequency. We must also create more reliable and convenient transit networks, prioritize services in communities where transit is essential, and residents are disproportionately affected by air pollution.

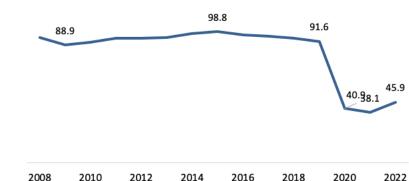
- Increase awareness to shift behaviors. Changing the ways people move around requires new and connected infrastructure, changes in land use, and cultural changes that require long-term planning. Public education and advocacy are also needed to increase awareness of the problems associated with fossil-fuel emissions and the impact of individual travel choices.
- Increase the use of electric, hybrid, or biofuel powered vehicles to reduce fossil fuel use and greenhouse gas emissions. Reducing the number of vehicles that burn fossil fuel and shifting to new technologies to power cars (such as electric powered batteries, advanced biofuels, and hybrid vehicles) offer ways to reduce fossil fuel consumption. Electrifying and increasing the use of light duty electric vehicles (EVs) are important strategies to meet the state's climate goals. Reducing the initial costs of EVs to consumers and increasing access to fast chargers will enable more people to purchase those vehicles.



Greater Minnesota transit ridership in millions



Twin Cities transit ridership in millions



More electric vehicles As of July 2023, there were about 7.3 EVs per 1,000 people.	Since 2022, the Active Transportation Program:	1. Provided 13 communities with active transportation planning services.	2. Selected 20 projects for infrastructure funding.	3. Provided five communities with quick build/ demonstration project planning support.
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Celebrating progress

Electric vehicles The 2023 Minnesota Legislature approved a new EV rebate up to \$2,500 (in addition to the existing \$7,500 in federal tax credits). The 2023 Minnesota Legislature also created an Electric Assisted Bicycle ("eBike") rebate program.

Charging infrastructure The 2023 Minnesota Legislature approved \$13.6 million in one-time funding for electric vehicle infrastructure to support the National Electric Vehicle (NEVI) program.

Federal funds to reduce climate pollution Through the federal Infrastructure Investment and Jobs Act (IIJA), the Carbon Reduction Program (CRP) was created to reduce CO2 emissions from on-road highway sources. Annually Minnesota receives approximately \$20.9 million, with a 1.9% increase each year.

Align transport and climate goals At the direction of the 2023 Minnesota Legislature, MnDOT established a Transportation Greenhouse Gas Emissions Impact Mitigation Working Group to prepare recommendations for implementing transportation greenhouse gas emissions impact assessments for capacity expansion projects on state highways. The goal of an assessment is to align project decision-making with the state's greenhouse gas emissions reductions targets under Minn. Stat., Section 174.01, Subd. 3.

Coordination of clean transportation efforts The 2023 legislature established the Clean Transportation Standard Work Group to prepare recommendations for implementing a Clean Transportation Standard (CTS). The work group will be jointly convened by the Commissioners of Agriculture, Commerce, Transportation, and the Pollution Control Agency. The goal of a CTS is to significantly reduce transportation emissions, create new jobs, attract new investments, and reduce air and water pollution in Minnesota.



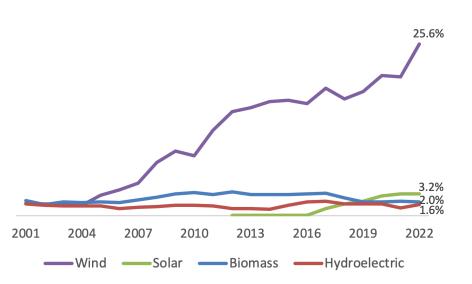
Action: Air and climate

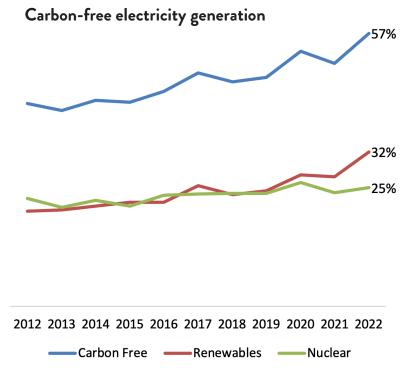
Carbon-free electricity

The trend currently shows carbon-free electricity generation steadily increasing year over year. Due to renewable energy generation, this trend is expected to accelerate in the coming years.



Renewable electricity generation





A shift towards more renewable energy

Electricity generation in Minnesota has rapidly decarbonized over the last 20 years. In the early 2000s, generation was primarily provided by coal power plants; today, carbon-free sources of electricity make up most of the generation. Most of the increase in carbon-free electricity generation has come from the increased generation capacity of renewable sources of electricity, with wind being the primary driver. Solar generation has increased in recent years and the trend is expected to accelerate, although solar currently lags well behind wind generation as a source of renewable electricity.

Making sure Minnesota stays on track

Utilities will need to aggressively expand renewable generation capacity to meet the 2040 carbon-free electricity standard. Minnesota will need to see a steady increase in the amount of electricity generated by carbon free sources each year. The share of electricity from carbon-free sources needs to increase by at least 2.6 percentage points each year for Minnesota to reach that goal. **Solar rising:** Renewable generation in Minnesota has nearly doubled since 2011. Solar generation in Minnesota has increased by over 300% since 2017.

Minnesota is above average in renewable energy production. Nationwide, renewable energy makes up only about 21% of electricity generation. Minnesota gets 26% of its electricity generation from wind alone.



Action: Air and climate

Household heating

From 2020 to 2021, Minnesota saw only a slight increase in the share of households that reported using electricity to heat their homes. Although the current rate of change is relatively slow, the long-term trend is encouraging due to incentives.





Air-source heat pumps, which use electricity, will likely become a major mode of residential heating in Minnesota.

Staying warm

Residential heating using energy sources such as natural gas and propane release carbon into the air and are prone to price fluctuations that hurt consumers. Household heating is one of Minnesota's biggest residential energy demands, and with the passage of the Inflation Reduction Act, analysts are expecting a shift away from heating homes with natural gas and towards using electricity to heat homes, specifically with the use of heat pumps. We are tracking heating with electricity to gauge heat pump adoption. The assumption is that people are choosing efficient heat pumps over inefficient electric heating technology.

Add graphic: What is a heat pump?

More efficient heating (and cooling)

Heat pumps are energy efficient alternatives to furnaces and air conditioners. According to the U.S. Department of Energy, they can provide one and a half to three times more heat energy to a home than the electrical energy it consumes. They provide both heating and cooling and make an ideal option for Minnesotans since they're able to perform in colder climates. They work by using electricity to transfer energy between indoor and outdoor air. Because they move heat rather than generate heat, these systems typically consume less electricity than electricresistance heating systems. In cooling mode, heat pumps function like an air conditioner, moving heat from inside to outside the home. In heating mode, the refrigerant flow is reversed to extract low-temperature heat from outdoors and deliver concentrated high-temperature heat to the home.



The passage of the Inflation Reduction Act, along with state level legislation, has ensured that electrifying residential heating is well resourced and a top policy priority.

Opportunities ahead

With electricity generation relying more on renewable sources, electrification presents an opportunity for residential heating to be less carbon intensive. Minnesota's Climate Action Framework calls for the development of incentives to encourage adoption of electric heating technologies, such as heat pumps. Implementing the Inflation Reduction Act and the Minnesota Residential Heat Pump Rebate Program will help residents with the upfront costs associated to the changes of their home heating equipment.

Action: Air and climate Sustainable materials management

Minnesota is prioritizing a shift to more sustainable materials management. Although the recycling rate has slightly decreased in the last few years, efforts have been made to increase waste reduction and reuse since they offer more greenhouse gas emissions saving than recycling.

Status FAIR Trend Image: Constraint of the second seco

Minnesota's 2030 recycling goals

Individuals and organizations play a big role in reaching our goals. We need to prevent waste, increase reuse, target large commercial waste generators, recover more organics and recyclables, and focus on creating markets for large quantities of material that is currently disposed.

Minnesota has had county-based recycling goals since 1989. Each Greater Minnesota county (outside of the seven-county Metro Area) must recycle a minimum of 35% (by weight) of their total solid waste generation. Goals for the Twin Cities metropolitan area are higher; by December 2030, counties in this area are expected to recycle 75% of the solid waste they generate. Greater Minnesota is currently exceeding its recycling goal with 40.2%. For this measure, recycling includes the reuse of materials.

45.2% statewide recycling rate 49.1% Twin Cities Metro Area 40.2% Greater Minnesota

54.1% is not recycled

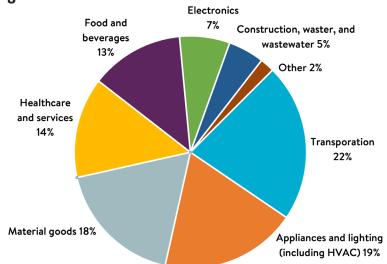
Waste-to-energy 18% Landfill 36.1%



2021 SCORE data

Statewide, materials management decisions reduced climate pollution equivalent to removing 900,000 passenger vehicles from Minnesota roads.

Minnesota's consumption-based greenhouse gas emissions



Materials management and climate

The way we manage materials – from production to waste management – impacts key environmental metrics like climate pollution. In 2021, 4.2 million metric tons CO2-equivalent was saved because of Minnesota's materials management decisions. Tracking environmental impacts, like greenhouse emissions, in addition to weight-based metrics, like recycling rates, highlights opportunities for more sustainable materials and consumption choices.

Increasing recycling and reuse are important but are only one part of improving materials management. The consumptionbased emissions inventory (CBEI) is a method used to estimate greenhouse gas emissions associated with the everyday goods and services people buy. This approach accounts for emissions through a product or service's entire life cycle, regardless of whether those emissions were originally generated in Minnesota, including production/manufacturing, distribution, use, and disposal. Minnesota's CBEI identifies that most climate impacts are from the production and use of goods and materials, not the disposal.

More efforts are needed to reuse and repair

Minnesota is one of the leaders in the country on managing waste, but the CBEI points out the importance of focusing on efforts to reduce and reuse materials. In addition to focusing on reducing climate pollution from industry and electricity generation sectors, everyday Minnesotans can mitigate climate change through individual actions. For example, increasing repair and reuse to double the useful life of Minnesotans' clothing and household furnishings and supplies would be equivalent to increasing statewide vehicle efficiency by 15%.

While Minnesota's statewide recycling rate declined in 2021, the greenhouse gas emissions from materials management also went down. Reusing materials may reduce the recycling rate when there are fewer materials to recycle, but – since greenhouse gas emissions are produced throughout a product's life cycle and are typically higher in the production/manufacturing stage – even with less recycling, increased reuse (and better reuse reporting) results in emissions reductions. Reusing materials means you can avoid the emissions associated with the production of a new material. Recycling offers greenhouse gas emission savings, but reuse offers more; less consumption would save even more greenhouse gases.

Success stories

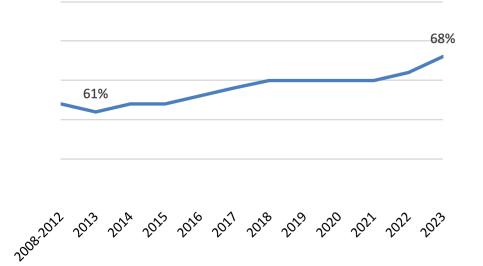
• Reuse in Minnesota is estimated to create between \$3.1 and \$4.7 billion in revenue per year, creating between 36,000 and 54,000 jobs per year. Source: Reuse Minnesota Recycling positively contributes over 27,000 direct jobs at Minnesota companies using recycled materials in manufacturing and generating almost \$8 billion in wages and salaries.

Condition: Water and land Lakes and rivers

Minnesota's lake and streams are showing improvements. While still not attaining our goals, lakes and streams are showing improving trends in water quality over the last 10-year period.

	Packet Page 3
Status	FAIR
Trend	$\mathbf{x} \in \mathbb{R}$

Percentage of lakes meeting water quality standards for recreation (10-year average)

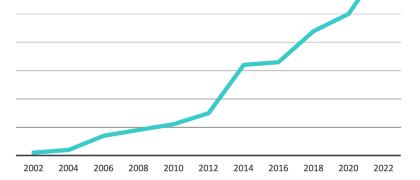


What's affecting our lakes and streams?

Lakes are evaluated based on water quality factors that influence whether they are enjoyable for recreation such as swimming – the water clarity and amount of nutrients and algae. Excess nutrients (often tied to excess sediment) harm recreational use in lakes by leading to excess algal growth. Higher levels of phosphorus can lead to algae production, which can cause nuisance scum conditions, and the potential for toxic blooms that can sicken humans and sicken or kill pets that drink the water. High levels of nutrients can also lead to large swings in oxygen levels, which stress the fish and insect communities. The health of streams is evaluated based on whether they support a healthy fish and bug community. Excess sediment and nutrients, toxic chemicals (chloride, pesticides), degraded habitat, altered flow, and loss of stream connectivity can all contribute to losses of healthy aquatic communities.

Total lakes and streams restored

Since 2002, 68 waters have been restored. While cleanup is expensive, and can take many years, success is achievable. Local partnerships and engagement are key to improving water quality.

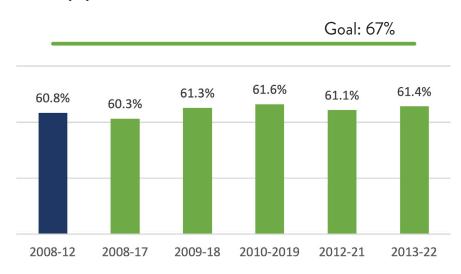


Plans to protect our waters

Water is central to Minnesota's economy and way of life. Supported by the Clean Water Fund, Minnesota has a strong program to monitor our waters and assess how our goals are being met. As of 2022, each of Minnesota's 81 watersheds have been monitored and assessed, giving us a baseline picture of water quality statewide.

The Clean Water Fund Roadmap lays out a path towards achieving water quality goals. For the 25-year life of the Clean Water Land and Legacy Amendment, an improvement of 8% in swimability of lakes and 7% in fishability of streams is projected. We need to continue to protect our waters that are meeting key goals and to restore those waters that are not. Restoring impaired waters can be an expensive and timeconsuming process, and so efforts to maintain and protect aquatic resources before they are degraded are preferred. All Minnesotans can do their part in protecting and restoring waters.

Percentage of healthy streams based on fish population



Some key next steps

- Reduce sediments and nutrients for lakes and streams including continued adoption of stormwater and wastewater management technologies and increased adoption of best management practices on developed land (urban, agricultural, etc.). This includes planting buffer strips along agricultural land and along private residences with shorefront.
- Agricultural lands should be managed to reduce nutrient and sediment runoff into nearby waters. In rural areas, proper upkeep of septic systems is important to prevent leaching of nutrients into surface and groundwater.
- Continued work to strengthen local shoreland ordinances and statewide buffer initiatives will benefit the waters of the state.
- Engage local communities (neighbors, upstream watershed residents) to make sure that everybody understands how their actions contribute to the downstream problem.

Condition: Water and land Nitrate pollution

Minnesota has abundant water resources, but there are threats to our ability to ensure safe and sufficient drinking water in some parts of the state. In some areas, particularly where there is a strong connection between the land surface and the groundwater, nitrate pollution can be a significant concern.

Elevated nitrate levels are a

concern across the state, and some areas - the areas with

many dots - are more vulnerable



Trend 73

Not enough information to currently determine a statewide trend.

What is nitrate?

Nitrate is a naturally occurring compound made up of nitrogen and oxygen. It moves easily in water. Nitrate occurs naturally from decomposing organic materials like plants, and animal or human wastes. It can also come from synthetic nitrogen fertilizer. Minnesota routinely monitors for nitrate in drinking water because of the potential for adverse health effects, particularly to infants, from drinking water high in nitrate.

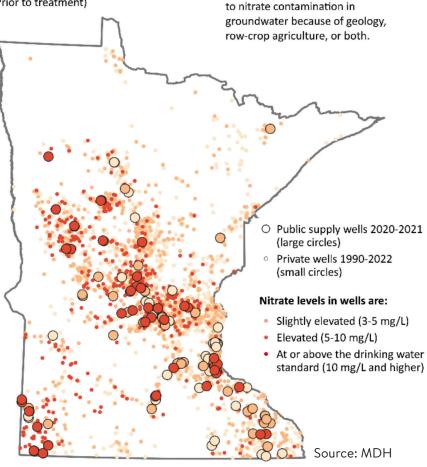
Where is nitrate pollution mostly found?

There are naturally occurring levels of nitrate in groundwater; however, the levels resulting from natural processes are usually quite low (<3 mg/L). Nitrate becomes a concern as levels get closer to 10 mg/L, the level set as the maximum contaminant level for public water systems under the Safe Drinking Water Act and the health risk limit for Minnesota's groundwater.

Nitrate pollution reaching levels above 10 mg/L is more commonly found in aquifers that are vulnerable to contamination from the land surface, this is often related to geology and soil type – such as shallow sandy and bedrock aquifers – and with land uses or sources that contribute nitrate pollution to the ecosystem. Septic systems, fertilizers, manure, and sanitary landfills are examples of sources of nitrate pollution.

Drinking water wells in areas with heavy row crop agriculture and vulnerable groundwater, as well as very shallow wells and wells that do not comply with the Minnesota Well Construction Code, have an increased risk of higher nitrate levels.

Nitrate detected in drinking water wells (Prior to treatment)



- Nitrate is one of the groundwater contaminants that most often exceeds the drinking water standard set to protect human health.
- Aquifers in certain areas of the state are more vulnerable to high nitrate levels in both public water supply and private wells.

Concerns

- Elevated levels of nitrate are an acute concern for babies fed water or formula made with tap water high in nitrate. Consuming too much nitrate can affect how blood carries oxygen and can cause methemoglobinemia (known as blue baby syndrome).
- A growing body of literature indicates potential associations between nitrate/nitrite exposure and other health effects such as increased heart rate, nausea, headaches, and abdominal cramps. Some studies also suggest an increased risk of cancer, especially gastric cancer, associated with dietary nitrate/nitrite exposure, but there is not yet scientific consensus on this question.



Packet Page 41

Percent of wells in a township ≥10 mg/L of Nitrate-N

Less than 20 wells*

Percent of wells in

a township ≥10

<5%

5<10%

■ ≥10%

mg/L of Nitrate-N

<5%

5<10%

■ ≥10%

Monitoring

Most of Minnesota gets their drinking water from groundwater. Public water supply wells and private wells have different protections and are monitored differently.

Private wells

he Minnesota Department of Agriculture's (MDA) manages private well monitoring networks in southeast and central Minnesota to determine nitrate concentrations and trends in these two vulnerable areas. MDA also designed a Township Testing Program in areas more vulnerable to nitrate in groundwater to determine nitrate conditions in private wells. From 2013-2019, MDA conducted a significant sampling effort that resulted in nearly 33,000 private wells voluntarily being tested for nitrate in 344 townships. Those results indicated:

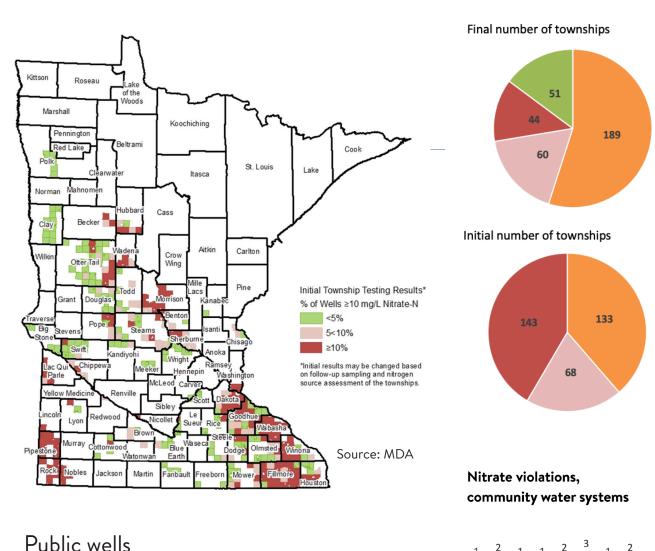
In areas where groundwater is vulnerable to high nitrate levels:

- 41% of townships tested (143) had 10% or more of private wells with levels exceeding the nitrate Health Risk Limit of 10 mg/L.
- Statewide, 9.1% of private wells (2,925) overall have levels exceeding the nitrate Health Risk Limit. These initial results reflect nitrate concentrations in private well drinking water regardless of nitrogen sources, or well construction.
- These values are highly variable by individual townships.

Statewide, 77% of private wells tested have low levels of nitrate (< 3 mg/L).



Department of Agriculture staff sampling a private well.



Minnesota Department of Health (MDH) works with public

water systems to test for nitrate in drinking water at least

including a goal that 95% of public water systems meet

The bar graph shows the number of community and

exceedances over time.

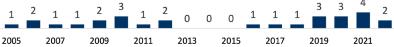
water systems (5,674 out of 5,685).

health-based standards. Minnesota consistently exceeds this

noncommunity public water systems have exceeded the MCL for nitrate. There are approximately 1,000 community water systems and 6,000 noncommunity water systems in Minnesota. In 2022, the nitrate standard was met by 99.8% of community water systems (962 out of 964) and 99.8% of noncommunity

performance goal and aims to have a decreasing trend of nitrate

Community water systems provide water to the public in their primary living space where people live and sleep.



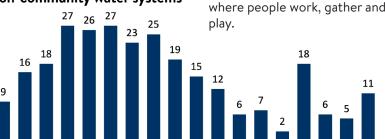
annually. Public water systems are subject to the Safe Drinking Water Act. The U.S. Environmental Protection Agency sets performance goals for Safe Drinking Water Act compliance,

Nitrate violations, non-community water systems

2009

2011

2007



2015

2017

2013

Non-community water systems provide water to the public in places other than their homes, where people work, gather and play

2019

Managing nitrate

Public health goals: Our public health goal is for everyone, everywhere in Minnesota to have equitable access to safe and sufficient drinking water, by having zero nitrate exceedances in community and noncommunity water systems and working to ensure private wells are tested and actions are taken to address nitrate. However, nitrate levels in source water can be affected by factors outside of public water systems' and private well users' control, so it is beneficial to have achievable performance benchmarks to mark progress and trends over time.

Key actions: Minnesota has – and needs to continue to – take big steps to reduce nitrate getting into groundwater and impacting both public water supply and private drinking water wells. Key actions include those to increase fertilizer efficiency and decrease potential losses to the environment and leaching of nitrate into groundwater. Also key, are the implementation of nitrogen fertilizer best management practices (BMPs), nutrient & manure management, and implementation of practices protective of groundwater like continuous cover, low nitrogen input crops, or alternative cropping systems in targeted high-risk areas.

Implementing the Minnesota Nitrogen Fertilizer Management Plan (NFMP) and Groundwater Protection Rule

The NFMP and first in the nation Groundwater Protection Rule provide voluntary and regulatory actions to minimize the impact of nitrogen fertilizer on groundwater. These actions will help protect both private and public water supply wells. The plan relies on local teams to advise on appropriate response activities for the area and to support implementation of best practices. These teams play a key role in developing and implementing locally viable solutions to address elevated nitrate in the public water supply well(s) or local area's private wells.

• Private wells

Testing results from the township testing program have identified townships for implementation of voluntary actions in the NFMP, potentially including monitoring and a locally appropriate set of nitrogen fertilizer BMPS.

Community Water Systems

These systems are addressed under the Groundwater Protection Rule. When community water systems have nitrate concentrations at or above 5.4 mg/L, nitrogen fertilizer best management practices are promoted, and these practices can be required if not adopted voluntarily.

• Noncommunity water systems

MDH monitors trends in nitrate levels over time. When nitrate testing results for noncommunity water systems begin to show increasing trends over time, but are still below the federal standard, MDH staff discuss corrective steps and potential proactive actions with the system operators.

Source water and well protection

Public Source water protection

Some public water systems have surrounding surface and subsurface areas (known as the Drinking Water Supply Management Areas) that are geologically vulnerable with agricultural land uses, which can make their drinking water supply wells susceptible to nitrate contamination. MDH supports these systems through source water protection planning. MDH helps systems develop and implement plans with site-specific, collaborative activities to address drinking water threats, including sources of nitrate pollution. MDH has also established financial and technical assistance programs with partners that public water systems can leverage to address nitrate contamination, such as Source Water Protection Grants.

Special focus on small and noncommunity systems

- Many noncommunity water systems are small businesses or organizations that may be limited in their technical and financial capacities to take on water supply projects.
- Source Water Protection Grants, made possible through the Clean Water Fund, have helped noncommunity water systems resolve nitrate issues by constructing new wells, installing treatment systems, and addressing potential sources of contamination.
- Source Water Protection Grants allow them to take actions that otherwise may not easily or quickly happen, resulting in improved water quality and protection for consumers. Since their inception (2010), grants have addressed numerous critical water issues including nitrate contamination, and resolved instances where the drinking water standards for nitrate were not met.

Private well information and protection

- Private wells must be tested for nitrate when they are first constructed; after construction, testing is largely voluntary.
- Actions need to be taken to prevent contamination in private wells, including ensuring that wells are properly located to prevent contamination from a point source and that they meet well code.

The Minnesota Agricultural Water Quality Certification Program

This voluntary program is an opportunity for farmers and agricultural landowners to take the lead in implementing conservation practices that protect groundwater and reduce nutrient and sediment runoff into nearby waters. Since 2014, the program has worked with over 1,415 farmers to implement conservation practices and commit to sustainability. The program has enrolled over a million acres, saved 282 million lbs. of soil per year, and reduced nitrogen losses on farms up to 49%. Certified farms have also been verified to have consistently higher net income

compared to non-certified farms. Executive Order 19-12 mandates that BWSR, DNR, MDA and MPCA are to incorporate and promote this program through other watershed approaches and programs.

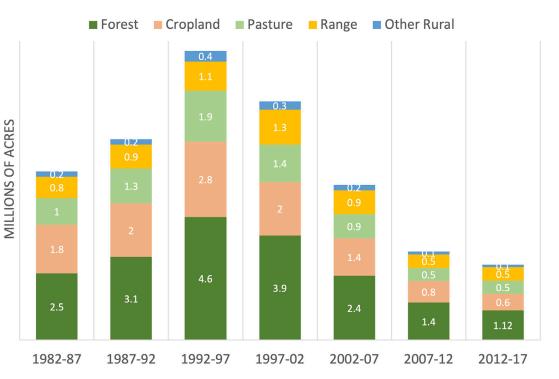


Condition: Water and land Land conversion

As our population and economy grows, we need room for housing, businesses, recreation, shopping, transportation, government services, and more. Since 2002, the rate at which farmland, forest, wetlands, and wildlife habitat is converted to urban and suburban development has decreased.



Rural sources of newly developed land



The effects of land loss

Problems can arise when land is converted from one land use type to another. For example, loss of forest land can reduce carbon sequestration; loss of farmland will often lead to the transition of other land cover types (marginal land or Conservation Reserve Program land) into active farmland; loss of wetlands to agriculture or urbanization can lead to water quantity and quality impacts to surface water systems; and alteration of natural lands by power line and pipeline expansion can lead to natural habitat disruption or loss. We are focusing our efforts to reduce the amount of land conversion and increase preservation and protection of the most affected land cover types from conversion.

Population and land use

Meeting the needs of a growing population is one of the strongest drivers for land conversion. From 2010 to the present, Minnesota's population grew by 7.6%, from about 5.3 to over 5.7 million. By 2050, the state's population is projected to be almost 6.8 million.

As our population and economy grows, we need room for housing, businesses, recreation, shopping, transportation, government services, and more. Additionally, the state is striving to achieve the Minnesota Renewable Energy Standard that includes a shift toward solar and wind as renewable sources of electricity. In the process, we convert farm, forested, and natural lands, as well as other open areas, to developed lands. By doing so, we lose irreplaceable farmland, natural resources, and risk damaging ecosystems.

Development patterns across the state have been changing. The amount of land per new person and per new household has fallen, while the population continues to grow. Reuse and cleanup of existing contaminated sites, reuse of existing buildings, smaller residential lots, and more apartments and other multi-

family dwellings have contributed to this more efficient land use, and reduced the rate we impact our natural areas and farmland.

The benefits of efficient land use include improved accessibility, less costly utilities, public services, and transportation, open space preservation, and less pollution and impervious surfaces (such as pavement).



Successful land conversion

The Metropolitan Regional Parks and Trails System offers largescale, natural resource-based recreation opportunities to all Minnesotans. With 56 regional park and park reserves totaling more than 54,000 acres, over 400 miles of interconnected regional trails, and 8 special recreation features, the regional system provides a wealth of opportunities for recreation as well as protects significant green space and wildlife habitat.

The Metropolitan Council's Park Acquisition Opportunity Fund grant program provides funding for the ten Regional Park Implementing Agencies to acquire park and trail inholdings that are part of the park or trail's long-range plan. Many of the parcels acquired have ecological significance, from prairies and forests to wetlands and shoreline protection. Other parcels may be acquired as trail easements to build out the regional trail system. Funding for the Park Acquisition Opportunity Fund comes from the Parks and Trails Legacy Fund, the Environment and Natural Resources Trust Fund, and the Metropolitan Council.

A recent acquisition for the Minneapolis Park and Recreation Board added land to the Minneapolis Chain of Lakes Regional Park, protecting a view of Lake Bde Maka Ska.



2022 Minnesota total population

Condition: Water and land Water sustainability

Minnesota is at risk of depleting its water supplies in several areas of the state. Sufficient water supply and sustainable water management are vital to our public health, economy, and ecosystems. Despite increases of water use in recent drought years, overall water use per person is decreasing.





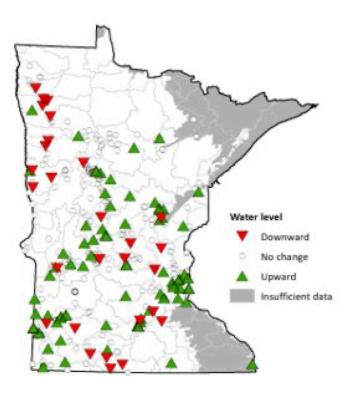
Sustainable water use

Water is our most precious resource, but it's often taken for granted in the "Land of 10,000 Lakes". Although we see a lot of water on the surface, much of what we use in our homes, industries, and agriculture is from groundwater.

Minnesota appears to have a good supply of water, but increasing demand from domestic, agricultural, and industrial users can strain water resources.

When it is dry, people use more water. Drought conditions increase water use that can result in well interferences, water use conflicts, or impacts to aquatic ecology. In some areas, groundwater use has caused aquifer water levels to decline. If this overuse continues, groundwater may not be available as needed in the future.

The Department of Natural Resources is assessing the impacts of groundwater use in areas with historical concerns. They are collaborating with large water users and conducting long-term planning to ensure the sustainability of aquifer resources.



Groundwater level trends

Statewide, only 7% of the wells analyzed show a downward trend for the period between 2003-2022. This is an improvement over the number of wells exhibiting downward trends between 1997-2016 (19%). Water levels in some western Minnesota wells have highlighted local downward trends, while ground water levels in the metro area illustrated an upward trend. Hydrologists are actively investigating potential causes for the downward trends documented in the parts of the state.

About 50% of Minnesota's rivers have been altered.	About 50% of historic wetlands have been drained.	Less storage means less resilience to shifts in precipitation.
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Learning more about our groundwater

Over the past 10 years we've received new funding to continue expanding the states monitoring well system to learn more about our groundwater.

The future of sustainable water management

Minnesota has a rich abundance of lakes and rivers, but these surface waters are impacted by our growing needs. By accommodating land use such as our expanding network of roads, cities, industry, and agriculture, we have decreased the amount of water stored naturally on the landscape and the connectivity of surface waters. We will need to manage our connected surface and groundwater resources to ensure that water can cycle sustainably, replenishing water needed for our uses while supporting ecological health and resilience into the future.

Without places to hold water, Minnesota is more vulnerable to both extreme rainfall and extreme drought. During a heavy rainfall, there is more water running off and reaching the stream, raising flood water levels. During a drought, there is less water stored in places that would slowly replenish our surface and groundwater. Healthy rivers and lakes have floodplains, shorelines and channels that connect important habitats and protect our communities from extremes in rainfall.

Action: Water and land

Public land protection and management

The State of Minnesota manages public lands to maintain habitat and water quality, protect the state's ecological diversity, provide recreational opportunities, promote sustainable economic development.



Maintaining our public lands

Minnesota acquires and manages many types of public lands to address issues stemming from trends in land use change, spread of invasive species, pollution, and a changing climate to sustain the places and experiences we value. We use a series of six goals to evaluate and prioritize acquisition projects that maintain habitat and water quality, protect the state's ecological diversity, provide recreational opportunities, and promote sustainable economic development. The intent is to prioritize acquisitions that meet multiple Strategic Land Asset Management (SLAM) goals, to leverage and magnify the scope and impact of land acquisition efforts overall.

Acres of public land by DNR management type (2022) 3,000,000 2,000,000

0 Aquatic Scientific and State Parks, Wildlife State Forests Management Natural Areas Recreation Management Areas Areas, and Areas Waysides

Land in MN by ownership type

1,000,000

11%	5.6 million acres are state-owned, DNR managed lands
7%	3.8 million acres are federally owned lands

- **6%** 2.8 million acres are state-owned, county-administered taxforfeited lands
- **2%** 0.7 million acres are Tribal owned lands
- 1% 0.3 million acres are county owned lands

Minnesota has approximately 51 million acres of land within its borders.

More than 70% of the lands in Minnesota are privately owned.

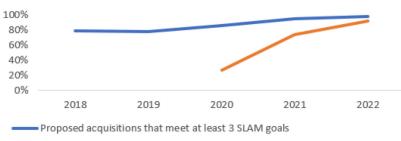
Strategic land asset management goals

- Increase close-to-home outdoor recreation opportunities
- Protect significant and/or rare natural resources
- Protect and restore water resources
- Mitigate and adapt to climate change
- Expand access to existing land holdings
- Consolidate land ownership, creating larger, contiguous blocks

Goal: At least 80% of proposed land acquisitions meet three or more of these goals.

Land aquisitions meeting SLAM goals

(SLAM = Strategic Land Asset Management)



Proposed acquisitions that meet the "mitigate and adapt to climate change goal"

Climate change goals

In 2022, 92% of proposed land acquisitions met the state's goal, up from 74% in the previous year. Acquisitions meet this goal by ensuring lands maintain or increase carbon storage, carbon sequestration or landscape resiliency; create larger blocks of habitat; improve riparian or terrestrial connectivity, or protect specific climate resilient, high biodiversity areas.

Impacts to the land and efforts to protect it

Minnesota is known for its abundant water, but this precious resource is not unlimited and increasing demands for use, as well as water quality degradation, are impacting the long-term sustainability of our water. Invasive species are spreading, threatening native species, and adversely affecting both recreation and natural resource dependent businesses. Prairie, grassland, and wetland habitats are declining, negatively impacting native species and water resources.

Strategic Land Asset Management (SLAM) goals are used to ensure that land acquisitions contribute toward protecting water quality, reducing the spread of invasive species, and protecting prairie, grasslands, and wetland habitats to address the increasing pressures on our natural lands. Our goal is to prioritize acquisitions that meet most of our SLAM goals, increasing the impact of our land conservation activity.

Current trends (past five years)

Stable Statewide, our land portfolio has changed by less than one tenth of a percent.

Aquiring land On average, the state acquires about 9,000 acres of land per year, statewide.

- 69% of these were adjacent to existing DNR complexes, which increases land access, management efficiency, and conservation impact.
- 65% of these occurred in counties where 5% or less of the land is publicly owned.

Selling On average, the state sells 508 acres of land per year, statewide.

We've exchanged 773 acres out of state ownership for 734 acres received into state ownership (land exchanges are value for value, within statutory parameters, not acre for acre).

ENVIRONMENTAL QUALITY BOARD

www.eqb.state.mn.us

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Memo

Date:January 5, 2024To:Environmental Quality Board Members

From: Catherine Neuschler, Executive Director

RE: Strategic plan revised mission and draft outcomes

At the November meeting, the Board undertook a facilitated exercise to provide information and input to the revision of EQB's strategic plan, specifically covering the mission statement and the desired priority results or outcomes. Based on the discussions and feedback, I drafted a slightly revised mission statement and two options for the remainder of the plan - including key outcomes. The two options are based on the Board's discussion about how to shape the strategic plan to ensure it includes and places appropriate weight on critical elements such as equity, engagement, trust, and collaboration. The packet contains two options of draft language for this portion of the strategic plan; one option includes these elements as important values for the EQB, while the second option includes these elements.

At the January meeting, there will be a focused conversation about the draft language and which option or way of presenting the values and outcomes should move forward.

Mission

Both options include a revised mission statement that says "The EQB's mission is to support Minnesotans in making informed decisions that protect and enhance the state's environmental quality. We accomplish this by fostering meaningful conversations; supporting collaborative policy development; and ensuring effective environmental review of potentially impactful projects."

As you review the new mission, consider the following questions, which we will discuss as a full group at the January meeting.

- What words or phrases catch your attention?
- What questions do you have of this mission?
- What implications does this mission have for the Board?
- Are we in agreement with this statement?

Key Outcomes

Both versions of the strategic plan contain key outcomes that follow from the second sentence of the mission statement.

- 1. The EQB fosters meaningful conversations around environmental issues
- 2. The EQB supports innovative state policy development on priority and emerging environmental issues (Current priority issues: climate, water, and biodiversity)
- 3. The EQB maintains and improves Minnesota's environmental review program

One version pairs these with values – designed to be implemented in all our work – of collaboration, engagement, equity and trust. The second version adds two key outcomes:

- 4. The EQB engages all Minnesotans in working towards healthy and sustainable environmental quality, and ensures that historically underrepresented groups are actively included
- 5. EQB is a trusted partner in the collaborative work of enhancing Minnesota's long-term environmental quality

We need to decide at the meeting which version to move forward to ground our discussion in February around the strategies we need to implement to ensure we move towards and meet our key outcomes.

- As you read the priority outcomes, what words or phrases catch your attention?
- Will this streamlined version of the priority outcomes be helpful to us? If so, how? What limitations or gaps do you notice? What implications does it have for our work?
- Is it important to include the values within the outcome or better to separate them out?
- Are these the right outcomes we want to develop strategies to achieve? What changes do you want to recommend?
- Which version do you want to move forward with?

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Strategic Plan 2024 to 2029

Introduction

The 1973 Legislature established the Minnesota Environmental Quality Board (EQB/Board) as a forum for leadership and coordination across Minnesota state agencies on priority environmental issues that are interdisciplinary and cross-jurisdictional. As a public-facing board, the EQB strives to engage Minnesotans and provide greater access to conversations regarding the future of our environment.

Minnesota Statute 116C establishes the Board, its membership, and power and duties. Minn. Stat. § 116C.04 gives the Board the responsibility to investigate interagency environmental issues. The law identifies a range of environmental matters for investigation, including air, water, solid waste management, transportation and utility corridors, energy policy, and planning.

Minnesota Statute 116D – the Minnesota Environmental Policy Act – gives the EQB authorities and functions related to Minnesota's Environmental Review Program. The Board serves as the coordinating body, with responsibilities to:

- Measure and improve the effectiveness of the environmental review program.
- Develop and maintain the rules that establish the types of actions for which environmental review (either an environmental assessment worksheet or environmental impact statement) is required.
- Regularly review and report on those rules and the mandatory categories.
- Review and approve the forms for environmental review.
- Publish the EQB Monitor, which includes required notices for environmental review.
- Take various administrative actions related to environmental review, including designating the responsible government unit.

Supporting One Minnesota Plan

The EQB supports the State's <u>One Minnesota Plan</u> and its mission to "Improve the lives of all Minnesotans by working collaboratively to implement policies that achieve results." The EQB's unique contribution to this goal is the ability to bring multiple agencies and the public together to advance interdisciplinary discussions on complex environmental issues.

As stated in the One Minnesota Plan, "Minnesota does better when state agencies and community partners collaborate to achieve common goals."

EQB joins with individual Minnesotans, communities, and public and private organizations to work collaboratively and implement policies that achieve results. With multiple state agencies and public members of the Board, collaboration across these spaces is a key identity for EQB to leverage and strengthen to support statewide goals.

Specifically, the EQB supports the One Minnesota Plan work to solve problems in the key priority area of Minnesota's environment, while supporting thriving communities and ensuring equity and inclusion.

Strategic Plan

Purpose and Overview

The purpose of this strategic plan is to provide a directional framework to guide and focus EQB's action and organizational decision-making over the next five years. The strategic plan aims to intentionally align the organization's aspirations with its capabilities to achieve meaningful and purposeful outcomes.

The strategic plan outlines EQB's mission, vision, and organizational values. These three components provide high-level guidance about what work EQB can and should do and how that work should be done. They serve as a shared reference point for the EQB, agency partners, and Minnesotans as to the organization's aspirations.

The strategic plan then lays out (three) key outcomes that the EQB wishes to achieve in support of its mission. These are designed to provide direction and focus, while simultaneously accommodating emerging issues and dynamic state needs.

Each key outcome is followed by (three to five) detailed strategies that represent the specific things EQB hopes to do over the next five years to support meeting the desired outcomes. These strategies will guide board and staff activities, such as future work plans and decisions about allocation of resources.

Mission

The EQB's mission is to support Minnesotans in making informed decisions that protect and enhance the state's environmental quality. We accomplish this by fostering meaningful conversations; supporting collaborative policy development; and ensuring effective environmental review of potentially impactful projects.

Vision

Minnesota has healthy and sustainable environmental quality that equitably supports public health, economic vitality, societal quality of life, and sustained natural resources.

Values

The EQB strives to incorporate the following key values in all our work and the way we do it:

- Collaboration: EQB facilitates connections across executive branch agencies; between branches of governments; and between government and those it serves.
- Engagement: EQB ensures that public voices, including diverse and underrepresented groups, are actively included and considered in all our work.
- Equity: EQB works to ensure that we are moving towards our vision of healthy and sustainable environmental quality for all people.
- Trust: EQB is a trusted public entity in the work of enhancing Minnesota's environmental quality and a reliable partner to State, Tribal, and local governments.

Key Outcomes

The following key outcomes are those that the EQB aspires to achieve in our work.

1. The EQB fosters meaningful conversations around environmental issues

What does this mean? The EQB convenes open, approachable and accessible conversations, ensuring that public voices, including diverse and underrepresented groups, are provided a range of opportunities to become involved in key environmental discussions and are actively included and considered. EQB provides Minnesotans a unique space to discuss important environmental issues, particularly those that are cross-programmatic and interdisciplinary. EQB provides a forum for Minnesotans to talk to each other and to governmental decision makers about what matters so that Minnesota has healthy and sustainable environmental quality.

What are we going to do to support it? (Example areas of work)

- Convene Environmental Congress
- Provide information (reports, etc.) that support conversations on big picture issues
- Connect with and hear from youth leaders
- Convene workgroups
- Support conversations between partners, stakeholders, and the Board
- Build and maintain meaningful relationships with diverse groups statewide
- Support equity and inclusion in these conversations, and lift up underrepresented voices and incorporate them into the process

2. The EQB supports innovative state policy development on priority and emerging environmental issues. (Current priority issues: climate, water, and biodiversity)

What does this mean? The EQB coordinates the development and sharing of data and information about key priority and emerging environmental issues. Combining this with our role as a convener of conversations, EQB facilitates interagency coordination so that policy and programs are aligned for public health and environmental protection. EQB provides a forum where information is shared about environmental problems, the actions being taken, and the gaps and opportunities – to make recommendations for collective state action to advance and improve environmental outcomes.

What are we going to do to support it? (Example areas of work)

- Provide data, information, and reports on state agency actions to support making recommendations for collective state action
 - Currently includes: water plan, pollinator action framework, Climate Action Framework
 - o Could include: any additional identified emerging issues or new needs
- Identify emerging issues and initiate and support interagency projects to address them
- Identify, evaluate and discuss concerns, trends, policies, and best practices in environmental protection
- Convene workgroups (to share best practices, identify barriers, and develop innovative solutions).

3. The EQB maintains and improves Minnesota's environmental review program

What does this mean? The EQB ensures that Minnesota's environmental review program meets the objectives of the Minnesota Environmental Policy Act and provides information that supports understanding the impact proposed projects will have on the environment. The EQB is a valued source of information for anyone seeking assistance with environmental review. The EQB measures and monitors program effectiveness, looking at how the program provides usable information, engages with the public, and follows a sound process.

What are we going to do?

• Provide technical assistance and guidance

- Monitor effectiveness based on the board defined criteria (Information: Science-based, supports environmental protection, measurable; Engagement: Inclusive, user-friendly, and accessible; Sound Process: Consistent, quality assured, and accountable)
- Make programmatic changes to support effectiveness

Strategies

The following strategies, grouped by the outcome they support, are those where EQB intends to focus in the coming five-year period. Organizational work planning will be focused on work and projects within these strategic areas that will result in the desired outcomes.

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Strategic Plan 2024 to 2029

Introduction

The 1973 Legislature established the Minnesota Environmental Quality Board (EQB/Board) as a forum for leadership and coordination across Minnesota state agencies on priority environmental issues that are interdisciplinary and cross-jurisdictional. As a public-facing board, the EQB strives to engage Minnesotans and provide greater access to conversations regarding the future of our environment.

Minnesota Statute 116C establishes the Board, its membership, and power and duties. Minn. Stat. § 116C.04 gives the Board the responsibility to investigate interagency environmental issues. The law identifies a range of environmental matters for investigation, including air, water, solid waste management, transportation and utility corridors, energy policy, and planning.

Minnesota Statute 116D – the Minnesota Environmental Policy Act – gives the EQB authorities and functions related to Minnesota's Environmental Review Program. The Board serves as the coordinating body, with responsibilities to

- Measure and improve the effectiveness of the environmental review program.
- Develop and maintain the rules that establish the types of actions for which environmental review (either an environmental assessment worksheet or environmental impact statement) is required.
- Regularly review and report on those rules and the mandatory categories.
- Review and approve the forms for environmental review.
- Publish the EQB Monitor, which includes required notices for environmental review.
- Take various administrative actions related to environmental review, including designating the responsible government unit.

Supporting One Minnesota Plan

The EQB supports the State's <u>One Minnesota Plan</u> and its mission to "Improve the lives of all Minnesotans by working collaboratively to implement policies that achieve results." The EQB's unique contribution to this goal is the ability to bring multiple agencies and the public together to advance interdisciplinary discussions on complex environmental issues.

As stated in the One Minnesota Plan, "Minnesota does better when state agencies and community partners collaborate to achieve common goals."

EQB joins with individual Minnesotans, communities, and public and private organizations to work collaboratively and implement policies that achieve results. With multiple state agencies and public members of the Board, collaboration across these spaces is a key identity for EQB to leverage and strengthen to support statewide goals.

Specifically, the EQB supports the One Minnesota Plan work to solve problems in the key priority area of Minnesota's environment, while supporting thriving communities and ensuring equity and inclusion.

Strategic Plan

Purpose and Overview

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The strategic plan outlines EQB's mission and vision. These provide high-level guidance about what work EQB can and should do. They serve as a shared reference point for the EQB, agency partners, and Minnesotans as to the organization's aspirations.

The strategic plan then lays out key outcomes that the EQB wishes to achieve in support of its mission. These are designed to provide direction and focus, while simultaneously accommodating emerging issues and dynamic state needs.

Each key outcome is followed by detailed strategies that represent the specific things EQB hopes to do over the next five years to support meeting the desired outcomes. These strategies will guide board and staff activities, such as future work plans and decisions about allocation of resources.

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What are we going to do to support it? (Example areas of work)

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- Connect with and hear from youth leaders
- Convene workgroups
- Support conversations between partners, stakeholders, and the Board

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- Identify, evaluate and discuss concerns, trends, policies, and best practices in environmental protection
- Convene workgroups (to share best practices, identify barriers, and develop innovative solutions).

3. The EQB maintains and improves Minnesota's environmental review program

What does this mean? The EQB ensures that Minnesota's environmental review program meets the objectives of the Minnesota Environmental Policy Act and provides information that supports understanding the impact proposed projects will have on the environment. The EQB is a valued source of information for anyone seeking assistance with environmental review. The EQB measures and monitors program effectiveness, looking at how the program provides usable information, engages with the public, and follows a sound process.

What are we going to do? (Example areas of work)

- Provide technical assistance and guidance
- Monitor effectiveness based on the board defined criteria (Information: Science-based, supports environmental protection, measurable; Engagement: Inclusive, user-friendly, and accessible; Sound Process: Consistent, quality assured, and accountable)
- Make programmatic changes to support effectiveness

4. The EQB engages all Minnesotans in working towards healthy and sustainable environmental quality, and ensures that historically underrepresented groups are actively included.

What does this mean? The EQB provides opportunities for the public to influence environmental policy, programs, and outcomes – and ensures that those opportunities are clearly shared, available, and accessible to all. EQB develops communication and engagement strategies to reach out to all people, especially diverse stakeholders. EQB builds and maintains meaningful relationships with diverse groups statewide, to support the inclusion of underrepresented groups and environmental justice communities in conversations, policy development, and program implementation. EQB considers equity in all our work.

What are we going to do? (Example areas of work)

- Communications and engagement strategies
- Meetings, forums
- Focus groups

5. EQB is a trusted partner in the collaborative work of enhancing Minnesota's long-term environmental quality

What does this mean? EQB is a trusted partner to State, Tribal, and local governments. EQB provides information that supports and facilitates connections across executive branch agencies; between branches of governments; and between government and those it serves. EQB provides information that supports responsible governments in carrying out their roles and responsibilities relating to environmental review.

What are we going to do? (Example areas of work)

- Provide technical assistance on environmental review
- Convene workgroups (to share best practices, identify barriers, and develop innovative solutions)
- Lead cross-agency projects

Strategies

The following strategies, grouped by the outcome they support, are those where EQB intends to focus in the coming five-year period. Organizational work planning will be focused on work and projects within these strategic areas that will result in the desired outcomes.