MINNESOTA ENVIRONMENTAL QUALITY BOARD

May 2023 Environmental Quality Board meeting

Wednesday, May 17 from 1 - 4 p.m.

Join in person or online

- In person: 520 Lafayette Road, St. Paul, MN 55155, Conference Room 100
- Online: For the meeting link and more information, visit the board meeting webpage.

Participating in board meetings

Attending in person

The Environmental Quality Board (EQB) will convene its meeting in person in conference room 100 at the Minnesota Pollution Control Agency St. Paul office building. 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.

Attending virtually

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

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

In this meeting, EQB will accept oral public comment during agenda item 6.

Procedure and guidelines for giving oral public comment:

- If you wish to speak:
 - o In person: sign up at the welcome table before the meeting starts.
 - Virtual: when prompted, use the "raise hand" feature in Webex, located at the bottom of your screen.
- 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 EQB meeting packet.

Agenda

1. Welcome and roll call

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

2. Approval of consent agenda

- Meeting minutes from the April 19, 2023, Environmental Quality Board meeting on packet page 5
- Preliminary agenda for the May 17, 2023, Environmental Quality Board meeting

3. Executive Director's report

Catherine Neuschler – Executive Director, EQB

4. Genetically Engineered Organism update

Type of item: Informational

Summary: The board is given powers in statute (Minnesota Statutes, section 116C.91 through section 116C.95) and rule (Minnesota Rules, chapter 4420 and Minn. R. 4410.800) related to the permitting and the environmental review of genetically engineered organisms (GEOs). Staff will present an overview of these authorities, which are also described in the materials starting on page 7 of the packet.

Outcome:

- The board understands their authorities related to GEOs under Minn. Stat. 116C, Minn. R. ch. 4420 and Minn. R. 4410.8000 related to permitting and the environmental review of releases of GEOs.
- The board provides direction to staff on 1) if or when developing a specific permitting program for GEOs is or will likely be necessary; and 2) additional questions and information that should be provided prior to developing any program on GEOs.
- The board will have background sufficient to make any future decisions on establishing such a program.

Presenter: Rebeca Gutierrez-Moreno – State Pollinator Coordinator, EQB

5. Continuous improvement update

Type of Item: Informational and Discussion-based

Brief Summary: The board will hear an update from staff and consultants regarding the Environmental Review Program continuous improvement effort starting on page 10 of the packet. Staff will present on the updated draft criteria, criteria definitions, and draft matrix for prioritizing improvements. The board will review and react to a test of the matrix on page 14 of the packet.

Outcome: Confirm the criteria definitions and matrix scoring meet the needs of the board. If they do not, discuss why not and suggest changes.

Presenters: Kayla Walsh – Environmental Review Program Administrator, EQB; Karen Gaides, Mariyam Naadha – Management Consultants, Minnesota Management and Budget

6. Public comment

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

Comment is especially requested on the topics in agenda item 4 and agenda item 5, and comments on those topics will be prioritized if time constraints exist.

7. Closing and adjournment



April 2023 Environmental Quality Board meeting

Wednesday, April 19, 2023 | 1:00-4:00 p.m. | 520 Lafayette Road, St. Paul, MN 55155, lower level conference rooms and online via Webex.

Minutes

1. Welcome and roll call

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

Chair Daubenberger welcomed new board member, Daniel Katzenberger.

Members present: Grace Arnold, Peter Bakken, Joseph Bauerkemper, Nancy Daubenberger, Kenneth Foster, Daniel Katzenberger, Katrina Kessler, Mehmet Konar-Steenburg, Nicholas Martin, Kevin McKinnon, Thom Petersen, Alice Roberts-Davis

Members excused: Brooke Cunningham, Rylee Hince, Paul Nelson, Sarah Strommen, Gerald Van-Amburg, Charles Zelle

Proxies present: Dan Huff (for Cunningham), Susan Vento (for Zelle), Stephan Roos (for Petersen)

EQB staff present: Catherine Neuschler, Rebeca Gutierrez-Moreno, Hazel Houle, Jesse Krzenski, Kayla Walsh, Denise Wilson

Other staff present: Karen Gaides (Minnesota Management and Budget), Mariyam Naadha (Minnesota Management and Budget)

2. Approval of consent agenda

- Meeting minutes from March 15, 2023, Environmental Quality Board meeting
- Proposed agenda for April 19, 2023, Environmental Quality Board meeting

Motion: Board Member Bakken moved the consent agenda; Board Member Roberts-Davis seconded. Motion carries with a unanimous vote.

3. Executive Director's report

Catherine Neuschler - Executive Director, EQB

- Currently scheduling one-on-one introductory meetings.
- Legislative updates:
 - As of April 5, the EQB's change item for the climate change calculator was in both omnibus budget bills
- Online submission service project brief update:
 - o Likely to have soft launch late April
- Moving forward, EQB is planning hybrid meetings.

4. Pollinator Action Framework update

Presenter: Rebeca Gutierrez-Moreno - State Pollinator Coordinator, EQB

Rebeca to schedule workshops in May and June for appointed agency contacts. Commissioners are also welcome.

5. Public comment

No public comments.

6. Continuous Improvement update

In keeping with the integrity of Roberts Rules, which says the Chair has authority over the conduct of the meeting. The Chair invited MAD consultants to facilitate this agenda item.

Presenters: Kayla Walsh – Environmental Quality Board; Karen Gaides and Mariyam Naadha – Management Consultants, Minnesota Management and Budget

Kayla presented and introduced the MAD consultants. MAD consultants presented engagement data and facilitated an open discussion on the draft prioritization criteria and how those could be used in a matrix to evaluate environmental review program improvement ideas.

7. Closing and adjournment

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

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Internal memo

Date: May 5, 2023
To: Environmental Quality Board (EQB)
From: Rebeca Gutierrez-Moreno, PhD - EQB State Pollinator Coordinator

RE: Environmental Quality Board regulatory framework for the release of genetically engineered organisms

Background

Genetic engineering involves using biotechnology to introduce targeted changes in an organism's DNA so that the organism will display desired characteristics. This technology has multiple applications, advancing new developments in industry, agriculture, and medicine; for instance, crops resistant to pests and the development of novel vaccines have been developed with genetic engineering techniques. However, genetically engineered organisms (GEOs) may pose unknown risks to the environment, and proper regulations for their release are necessary.

In Minnesota, significant legislative and regulatory development action related to genetic engineering occurred during the late 1980s and early 1990s. The EQB appointed a series of working groups, task forces and an advisory committee to advise the board on this issue and develop recommendations on the state's role in regulating any release of GEOs into the environment. The primary recommendations resulting from these efforts were that:

- The board be designated the coordinating agency for Minnesota state regulatory activities relating to GEOs;
- An environmental assessment worksheet be required for any proposed release, with EQB as the RGU;
- Minnesota establish a permitting system under the board for all releases;
- An advisory committee be established to provide advice on both general issues of genetic engineering and on issues of specific proposals; and
- Minnesota be proactive in developing and obtaining the knowledge base needed for meaningful regulation.

In response to these recommendations, the 1989 Minnesota Legislature (Laws of Minnesota 1989, Chapter 346) enacted amendments to Minnesota Statutes, Section 116C.91 through Section 116C.95, which require: 1) a permit for the release of genetically engineered organisms into the environment; 2) at least an environmental assessment worksheet (EAW) for all such releases in Minnesota; and 3) direct the board to adopt rules to give effect to these requirements.

Rulemaking was initiated in 1989. The advisory committee involved in rulemaking included members from industry, public interest and environmental groups, the academic community, state agencies, and the general public. The proposed rules related to permitting releases of GEOs (except in direct medical application) were codified in Minnesota Rules Chapter 4420, and the EAW requirements for the release of GEOs were included as modifications to Minn. R. Ch. 4410.

Minnesota GEO regulatory framework

The EQB has authority over the release of GEOs per Minnesota Statutes, Sections 116C.91 through 116C.95 and related rules:

- Minn. R. 4420. Provides an orderly and timely permitting process for the release of GEOs,
- Minn. R. 4410.8000. Provides direction for environmental review for the release of GEOs.

The rules establish a process with the following steps:

- 1. Application acceptance or rejection (4420.0025)
- 2. Preparation of draft release permit documents (4420.0030 subp. 3), and preparation of the EAW (4410.4300 subp. 35 and 4410.8000 subp. 1A)
- 3. Comment period on the draft release permit documents (4420.0030 subp. 6), and for the EAW (4410.1600)
- Board decision on the potential for significant environmental effect (4410.1700 and 4410.8000 subp. 1C), on the need for a contested case hearing (4420.0030 subp. 10), and on the issuance of a permit (4420.0035)

These statutes and rules recognize that there are or may be multiple state and federal agencies with programs for reviewing the release of GEOs, and direct that the Board work to prevent duplicative requirements or process wherever possible.

In order to avoid duplication, when a different agency requires a significant environmental permit for the release of any GEO, the Board can essentially defer to that agency's requirements and not issue a release permit. In 1991, the board determined that the Minnesota Department of Agriculture (MDA) had significant environmental permit for agriculturally-related GEOs: plants, fertilizers, pesticides, plant and soil amendments. The 1991 Minnesota Legislature gave the MDA the authority and responsibility to permit these GEOs. Currently, MDA's authorities fall under Minn. Stat. 18F and corresponding Minn. R. Ch. 1558. Additionally, the United States Department of Agriculture (USDA), the Environmental Protection Agency (EPA), and the United States Food and Drug Administration (FDA) have jurisdiction over agriculturally-related GEOs. MDA collaborates with the USDA and EPA in their regulation.

What is coming?

To date in Minnesota all releases of GEOs have been agriculturally-related. However, non-agriculturally-related GEOs are in development. For instance, using up-to-date genetic engineering, scientists are developing new methods for the genetic biocontrol of regulated invasive species such as the common carp (*Cyprinus carpio*), pests like the spotted-wing drosophila (*Drosophila suzukii*), and nonnative species like mosquitoes (*Aedes aegypti*).

Genetic biocontrol is a new frontier on the application of genetic engineering, one which has the potential to increase the efficacy of invasive species control. Although this technology aims to reduce adverse off-target effects to the environment from their application, the full scale of the consequences of their release are still unknown.

In preparation for new impending non-agriculturally-related GEO projects, the Department of Natural Resources convened an interagency ad-hoc group to share information and understand current state agency-authorities related to permitting their release in Minnesota. The group is comprised of staff from the Department of Natural Resources, Agriculture, Heath, the Pollution Control Agency, the Board of Animal Health, and the EQB.

At the moment, the future demand for non-agriculturally-related GEO permitting and environmental review is unknown. The EQB has not yet implemented its authorities on this subject and has the opportunity to discuss and determine a course of action.

Meeting outcome

- The board understands its authorities under Minn. Stat. Section 116C.91 through 116C.95 and Minn. R. 4420 related to permitting GEOs, and Minn. R. 4410.8000 related to the environmental review of GEOs;
- The board will provide direction to staff on additional questions and information that might be needed prior to developing any program on GEOs; and
- The board will have background sufficient to make any future decisions on establishing such a program.

MINNESOTA ENVIRONMENTAL QUALITY BOARD

Memo

Date: May 5, 2023

To: Environmental Quality Board Members

From: Environmental Quality Board Members and Management Analysis and Development

RE: Environmental Review continuous improvement effort

During the April 2023 meeting, Environmental Quality Board (EQB or Board) members provided feedback on the draft criteria for an effective environmental review program and draft matrix. The interagency continuous improvement team also provided feedback. Taking this into consideration, the following changes were made:

- Consolidated 12 criteria into 9
 - o "Public engagement" was removed, and portions of its definition were added to "inclusivity"
 - o "Transparent" was removed, and portions of its definition were added to "accessible"
 - "Programmatic integrity" was removed
- "Understandable" was re-titled to "user-friendly"
- Updated definitions
- Organized the criteria by objectives in rule 4410.0300
- Added scoring on a scale of 0-2

How to use the packet information (attachments)

The May 17 board packet information for item 5 includes the following:

- 1. Draft matrix version 2.0 with criteria definitions and scoring instructions (attachment 1)
- 2. List of improvements and their sources (attachment 2)

The draft matrix version 2.0 includes criteria definitions that were edited based on board and interagency continuous improvement team feedback. Once finished, the matrix is intended to be used by EQB staff to order the improvements.

The list of improvements is included only to showcase the quantity and wide array of comments EQB received. There are over 200 ideas that EQB staff would run through the matrix.

Continuous Improvement Process

The draft continuous improvement process includes more than the matrix. It consists of the following six steps:

- 1. Run the continuous improvement process (at least annually)
- 2. Ensure improvements apply to EQB
- 3. Use the prioritization matrix
- 4. Order prioritized list
- 5. Staff determine validity, time, resources, etc. to execute
- 6. Board sequences improvements

Memo: Environmental Review continuous improvement effort

Goal of May 17, 2023 board meeting

The goal of the meeting is to gather board member feedback to refine and finalize the prioritization matrix. The board should consider the following:

- Review, discuss any potential changes, and confirm that the criteria and criteria definitions meet the board's needs
- Review, discuss any potential changes, and confirm that the matrix design and scoring meet the board's needs

After the May board meeting, EQB staff and consultants will consider feedback, make any necessary changes, and include the results into a draft report. The report will be available to the board prior to the June, 2023 board meeting.

Attachment 1: Draft matrix version 2

Attachment 2: Improvement ideas and recommendations summary table

May 5, 2023

Draft matrix version 2

Scoring instructions

Each criterion will receive a score of either 2, 1, or 0 points.

2 Points: If an improvement <u>directly</u> results in a criterion as defined below, award 2 points.
1 Point: If an improvement <u>indirectly</u> results in a criterion as defined below, award 1 point.
0 Points: If an improvement maintains or does not address a criterion as defined below, award 0 points.

Criteria of an Effective Environmental Review Program in Minnesota

- 1. Scientific integrity means the availability or access to the most up-to-date, reputable, and complete science-based information for analysis of environmental and human health impacts or mitigation
- 2. Environmental protection means increasing requirements to ensure government decisions directly safeguard the environment and people in Minnesota
- 3. **Measurability** means identifying quantifiable data for understanding project and/or environmental review program impacts to human health and the environment
- 4. **Inclusivity** means the inclusion of voices that have historically been marginalized, excluded, or disproportionally impacted by pollution; the ability for those voices to influence the conversation so that disproportionate impacts are reduced going forward; engagement and outreach emphasized for environmental justice communities, making public participation easier, more systematic, and more intentional
- 5. **User-friendliness** means clear communication, clear procedures, or understandable information to interact with environmental review; ease or efficiency to thoroughly and accurately complete environmental reviews
- 6. Accessibility means access to decision-makers, access to information, and access to processes so that the public can provide meaningful input into decision making and receive explanations and updates for why certain decisions are made
- 7. **Consistency** means the uniformity of environmental review processes thereby increasing dependability and reliability in environmental reviews; eliminates ambiguities to promote comparability
- 8. **Quality Assurance** means increased ability to verify accuracy and completeness of information used in the environmental review program
- 9. Accountability means the project proposer's, RGU's, and Board's ability to better demonstrate meeting the program's obligation to the public and to the environment through reporting, data sharing, transparently explaining decisions, taking responsibility for actions, and being able to explain, justify, and take consequences for them

Documented major changes from version 1 to version 2

- Removed "public engagement" and grouped it with "inclusivity" while recommending that it also be highlighted in the EQB's overall strategic plan
- "Understandable" was re-titled to "user-friendly"
- Removed "transparent" and grouped it with "accessible," while recommending that it also be highlighted in the EQB's overall strategic plan
- Removed "programmatic integrity" while recommending that it also be highlighted in the EQB's overall strategic plan.
- Updated definitions based on interagency team and Board member feedback
- Organized the criteria by objectives in rule 4410.0300
- Added scoring on a scale of 0-2

MN Rule 4410.0300

Subp. 4. Objectives.

The process created by parts <u>4410.0200</u> to <u>4410.6500</u> is designed to:

A. provide usable information to the project proposer, governmental decision makers and the public concerning the primary environmental effects of a proposed project;

B. provide the public with systematic access to decision makers, which will help to maintain public awareness of environmental concerns and encourage accountability in public and private decision making;

C. delegate authority and responsibility for environmental review to the governmental unit most closely involved in the project;

- D. reduce delay and uncertainty in the environmental review process; and
- E. eliminate duplication.

								Packet Page 14
Criteria for	providing us	able	Criteria for engagement			Criteria for procedures		
information (objective A)			(objective B)		(objectives D and E)			
Scientific integrity	Environmental protection	Measurability	Inclusivity	User- friendliness	Accessibility	Consistency	Quality assurance	Accountability
	2 Points: If an improvement <u>directly</u> results in a criterion as defined below, award 2 points. 1 Point: If an improvement <u>indirectly</u> results in a criterion as defined below, award 1 point. 0 Points: If an improvement maintains or does not address a criterion as defined below, award 0 points.							
means the availability or access to the most up-to- date, reputable, and complete science-based information for analysis of environmental and human health impacts or mitigation	means increasing requirements to ensure government decisions directly safeguard the environment and people in Minnesota	means identifying quantifiable data for understanding project and/or environmental review program impacts to human health and the environment	means the inclusion of voices that have historically been marginalized, excluded, or disproportionally impacted by pollution; the ability for those voices to influence the conversation so that disproportionate impacts are reduced going forward; etc.	means clear communication, clear procedures, or understandable information to interact with environmental review; ease or efficiency to thoroughly and accurately complete environmental reviews	means access to decision- makers, access to information, and access to processes so that the public can provide meaningful input into decision making and receive explanations and updates for why certain decisions are made	means the uniformity of environmental review processes thereby increasing dependability and reliability in environmental reviews; eliminates ambiguities to promote comparability	means increased ability to verify accuracy and completeness of information used in the environmental review program	means the project proposer's, RGU's, and Board's ability to better demonstrate meeting the program's obligation to the public and to the environment through reporting, data sharing, transparently explaining decisions, taking responsibility for actions, and being able to explain, justify, and take consequences for them

Attachment 2

ltem number	Source	Improvement ideas/ responses/ recommendations
1	Engagement HQ	Account for lifecycle greenhouse gas emissions to be accounted for in all projects.
2	Engagement HQ	Add Lifecycle Greenhouse Gas Emissions in all your Environmental Reviews Calculating only the current greenhouse gas emissions rather than the full lifecycle impact of any project does not adequately protect the future of Minnesota. We need to start thinking long term about our children and their futures. The short-term emphasis on jobs that harm our children and short term profits for corporations has got to stop. It is past time to get real about climate change
3	Engagement HQ	An effective environmental review provides information actually used to make decisions and meaningfully involves the public in the process. In the view of MCEA, an effective environmental review process includes: Information that is actually used to make decisions, improve projects, and avoid environmental harms. Information that is understandable and useful for decision makers and project proposers and is written in common sense language without technical jargon so it is accessible to anyone. Information that is provided early enough in the process to be able to inform and affect outcomes. Information sufficiently supported by data and widely accepted science. Information presented through a process that meaningfully involves members of the public, educates the public about environmental effects, and responds to their concerns. Members of the public should feel like their input is welcome, not like adversaries in the process.
4	Engagement HQ	Assess all future environmental ramifications of any proposed project, both positive and negative. Any harm is of consequence.
5	Engagement HQ	Clarify the criteria for MN Rule 4410.4300 Subpart 26 and Subpart 27.
6	Engagement HQ	Comment response to "Include Scope 3 Emissions in All Environmental Review" This is very well put - there are a couple other proposals noting the need for full life cycle / scope 3 emissions, which highlights how important this update is to improve accuracy and holistic approach.

ltem number	Source	Improvement ideas/ responses/ recommendations
	Source Engagement HQ	Eliminate the comparative environmental analysis process for pipeline environmental review. The EQB should eliminate the alternate environmental review process for pipelines found in Minnesota Rules chapter 7852 because it does not comply with the Minnesota Environmental Policy Act ("MEPA"), creates confusion, and does not provide for sufficient public engagement. Any pipeline projects that were previously allowed to use the comparative environmental analysis should be put back into the mandatory EIS category found in 4410.4400, subp. 24. First, the comparative environmental analysis for pipelines does not comply with MEPA because it does not address the same issues as an EIS when it is used for pipelines that only require a routing permit. In that instance, the comparative environmental analysis does not require a sufficient analysis of alternatives, including alternative sites, technologies, modified designs or layouts, modified scale or magnitude, and alternatives incorporating reasonable mitigation measures, as well as the no action alternative. Alternative forms of environmental review must address the same issues as an EIS pursuant to Minn. Stat. 116D.04, subd. 4a. Using the comparative environmental analysis for pipelines that only require a routing permit clearly does not meet this requirement when the environmental review does not contain an alternatives analysis that complies with Minnesota Rule 4410.2300, subd. G. This problem has been recognized since the creation of the comparative environmental analysis and was even documented in the SONAR for the rules in Chapter 7852 (then Chapter 4415). Second, the rules in 7852 create confusion. There have been numerous lawsuits and arguments before the Public Utilities Commission about whether the comparative environmental analysis's interaction with the citizen petition process is muddled. Third, the rules in 7852 provide next to no information about how the public engages with and comments on the comparative
		in 7852 provide next to no information about how the public engages with and comments on the comparative environmental analysis, making the process opaque, confusing, and inaccessible for the general public. The comparative environmental analysis is not serving its purpose of "address[ing] the same issues and utiliz[ing] similar procedures as an environmental impact statement in a more timely or more efficient manner," and it should therefore be eliminated, and the EIS used instead.

ltem number	Source	Improvement ideas/ responses/ recommendations
8	Engagement HQ	Environmental quality in the State of Minnesota is 50 years behind where it should be. The MPCA is really the Minnesota Pollution Agency!
		Look up the Washington County Landfill history and see all the decades of endless mistakes made there by the MPCA. This was Solid Waste Landfill #1 (SW-1) approved by the MPCA and placed in a chain of Lakes area in an unlined gravel pit with standing groundwater in it. The MPCA has aerial photographs of the trash being pushed into the groundwater. Because of all the negligent actions of the MPCA over many decades, 3M PFC chemical pollution was spread far and wide by the MPCA from the Washington County Landfill in Lake Elmo to a huge area of South Washington County.
9	Engagement HQ	Environmental review decisions need to be made in light of treaties signed w/ the Indigenous people of this state, which are still valid
		Also, please include lifecycle greenhouse gas emissions as part of your calculations - not just direct and indirect emissions. Thank you for your time!

ltem number	Source	Improvement ideas/ responses/ recommendations
10	Engagement HQ	Environmental review must include an assessment of environmental justice issues.
		The EQB's rules do not currently require any assessment of Environmental Justice in environmental review. This must change. According to the MPCA, "low-income neighborhoods and communities of color have higher potential exposures to outdoor air pollutants and have more sources of pollution. In addition, the social, economic, and health inequities that these populations face can make them more vulnerable to the effects of air pollution." See https://www.pca.state.mn.us/about-mpca/environmental-justice. In order for environmental review to serve its primary purposes of informing decision makers and the public of the potential environmental effects of a proposed project, these effects must be considered in the context of their impact on the Indigenous people, people of color, and low income people who live in environmental justice areas. Minn. Stat. 116D.04 requires that all EISes "analyze those economic, employment, and sociological effects" that would result from the project. Although the EQB's rules do not interpret this language, several recent EISs have in fact considered Environmental Justice. For example, the EIS for the Line 3 pipeline included a separate Environmental Justice analysis. The Department of Commerce's assessment noted that members of several Tribal communities would be adversely and disproportionately impacted by the project. MCEA recommends that the EQB develop guidance and make rule changes as necessary to require all environmental review documents to include: 1) An assessment of how a proposed project will affect Indigenous people, people of color, and low income people in census tracts identified by MPCA as "areas of increased concern for environmental justice,' using the MPCA screening tool, and 2) A determination of whether the adverse effects of the project are disproportionately borne by Indigenous people, people of color, and low income people.
11	Engagement HQ	Environmental review must look at lifecycle GHG emissions
		Recent improvements on the Environment Assessment Worksheet (EAW) only include calculation of direct and indirect emissions. Full lifecycle accounting of emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation and release of massive amounts of carbon. Please update the agency guidance and/or the EAW to include full lifecycle accounting of GHG emissions related to a project, along with the currently required calculation of direct and indirect emissions.

ltem number	Source	Improvement ideas/ responses/ recommendations
12	Engagement HQ	Environmental review should balance environmental protection with the needs of Minnesota farmers.
		As a farmer, I would like to see greater representation from the agriculture industry on the EQB. Activists and lawyers like to use our permitting and review process to bully farm families who want to do nothing more than grow their businesses for the next generation. I want clean water and air and a livable environment as much as any Minnesotan, but I do not believe balancing a thriving agriculture industry with environmental concerns is a zero-sum game. Too many people want to oversimplify agricultural permitting and operate as if certain farm projects are inherently bad even when all legal and engineering requirements have been met. In many cases farm permitting cases, whether they be drainage or livestock facilities can actually represent an opportunity for environmental improvements.
13	Engagement HQ	Environmental reviews must take into account community demographics due to health disparities and socioeconomic effects on vulnerability
		Cumulative impacts and stronger EPA standards for pollutants need to be created to, at the very least, halt further harm, but more-so eliminate the grandfathered culprits of sacrifice zones and environmental justice areas. Until they exist, reviews must consider pre-existing conditions.
14	Engagement HQ	Environmental reviews should always be based on the available science and data, not dollars. Focus on future generations
15	Engagement HQ	Evaluate a permit application in the context of previous granted applications to weigh effects of cumulative impacts on all health facets
		Consider cumulative effects of multiple permit grants on human health: physical, mental, spiritual, and on integrity of ecological systems.

ltem number	Source	Improvement ideas/ responses/ recommendations
16	Engagement HQ	Examine all long-term climate impacts of a project
		The Minnesota Environmental Partnership appreciates the EQB's work to improve the Environmental Assessment Worksheet and account for potential projects' climate impacts. We suggest that this aspect of the review be strengthened to account not only for direct and indirect emissions, but for the project's lifecycle emissions. Oil pipelines, for example, exacerbate the climate crisis not only by consuming energy for their operation but also by enabling - and indeed encouraging - the consumption of highly carbon-dense fuel. In order to effectively live up to our climate action obligations, Minnesota must not take a neutral stance on fossil fuel transportation merely because the direct emissions will be generated downstream.
		While the EAW may not be able to directly address the demand for oil and other carbon-intensive fuels, it should not disregard the effects of carbon-enabling activities like oil transport. We respectfully request that the EQB add a full lifecycle accounting of greenhouse gas emissions to its review process.
17	Engagement HQ	Follow state rules and order EISes on large-scale feedlots
		It is clear that large feedlots have the potential for significant environmental effects. Therefore, the EQB and MPCA should be enforcing existing law and ordering EISes on all proposed new or expanding feedlots with more than 700 animal units.
18	Engagement HQ	health assessments should be included with environmental reviews. ALL environment reviews
19	Engagement HQ	Housing Industry Feedback
		Housing First Minnesota respectfully offers the following comments on the Environmental Quality Board's (EQB) Environmental Review (ER) continuous improvement project. By way of background, Housing First Minnesota is the state's leading voice for the housing industry, representing member firms engaged in all aspects of housing, including new home construction, land development, remodeling and the related trades. Our organization also operates Minnesota's Green Path, the state's leading energy-efficient new construction program. On volume, our members build the most energy-efficient new homes in the country, helping to make Minnesota the leader in energy-efficient construction among growing states.
		Crafting effective policy requires an understanding of how Minnesota's critical industries operate, as well as understanding of how the proposed policies can be both used and misused. It also requires an understanding of how a new or amended policy will work into the broader regulatory environment for that sector.

ltem number	Source	Improvement ideas/ responses/ recommendations
		During the recent update to the EAW (specifically question 7), our organization experienced challenges with the process used by the ER team
		Understanding Housing, A Critical Industry: From our viewpoint, ER staff did not engage in a meaningful discussion regarding the potential negative impact the proposal could have on the state's troubled housing market. The bulk of the discussion centered around debating the merits of the proposal without much focus on how it would fit into Minnesota's housing market today. Minnesota has underbuilt new housing for a decade and a half. This critical lack of housing in a growing state is what is driving up existing home prices and monthly rents.
		Understanding Housing's Challenges: One of the greatest challenges to the construction of needed new housing is the steady presence of opposition to housing growth and development projects. These anti-housing efforts and groups are known colloquially as NIMBYs, which stands for Not-In-My-Back-Yard. This term applies to those who oppose new housing for a variety of reasons, which includes being opposed to change or who may live in their community. These groups sometimes rely on coded exclusionary language and often utilize regulatory structures to achieve growth opposition objectives.
		Illustration and Case Study: In California, the creator of state-level environmental reviews is now working to exempt housing from ER requirements because anti-housing groups have weaponized ERs as a tool to block housing. ERs in California were used as a tool to exclude segments of the population from finding housing in growing communities.
		Conclusion: Across the nation, states are working to remove barriers to the construction of new and needed housing. Ten states have or will have enacted housing policy reforms by 2024. Minnesota, which has a housing crisis as severe or worse than these ten states, stands apart as a state failing to lift barriers while working to create new ones.
20	Engagement HQ	I have been involved in many Stream Restoration projects. EAW's are not intended for this type of work and costly and do not add value

ltem number	Source	Improvement ideas/ responses/ recommendations
21	Engagement HQ	Include full life cycle emissions when calculating EAW in environmental review to protect our land, water, and air. (6 times) I appreciate the EQB's recent improvements on the Environment Assessment Worksheet (EAW) to include calculation of greenhouse gas emissions for projects undergoing environmental review. However, the current agency guidance on the revised EAW only requires calculation of direct and indirect emissions, rather than full
		lifecycle accounting. Calculating lifecycle emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation/release of massive amounts of carbon, possibly for decades and well beyond the time frame just for construction. I ask that you update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to a project, in addition to the currently required calculation of direct and indirect emissions.
22	Engagement HQ	issue clear guidance for how far upstream and downstream a source needs to look at its impact. For example should the impacts of the further processing of a Cu/NI product in a smelter somewhere or the impact of the generation of power used be considered?
23	Engagement HQ	Life cycle impacts must be considered
24	Engagement HQ	Lower EAW Threshold for Feedlots All feedlots with more than 400 animal units should be required to complete an Environmental Assessment Worksheet (EAW). Currently, operations with fewer than 714 dairy cattle, 1,000 beef cattle, 3,333 hogs, 55,555 turkeys, or 200,000 broiler chickens are not required to do any environmental review, unless their location requires one or an EAW petition is granted.
25	Engagement HQ	Make sure all submitted projects receive a fair review before granting so said projects will not have negative impacts on the environment. The environmental review has to be strong and have the integrity to not put short term profits ahead of long term negative impacts. The EQB's job is to strengthen and defend our water, land, and air, not be lax about protecting it

ltem number	Source	Improvement ideas/ responses/ recommendations
26	Engagement HQ	Minnesota environmental review currently allows a "bait-and-switch" process where project proponents propose the smallest possible "project" for review so that the full impacts on water, air, lands, health, Treaty-reserved rights, and climate are not considered before a project is studied and approved. Not only is cumulative environmental review deferred until after developments are in the ground, but once the initial project is constructed state agencies do all they can to ensure that a comprehensive review of later stages and impacts is never done. Minnesota's current environmental review process lacks scientific integrity and emphasizes short-term profits over long-term cumulative adverse impacts. It is a distortion of the purpose of environmental review. Relatively simple rule changes could address these fundamental problems. (12 times)
27	Engagement HQ	More Checks & Balances within the MnDNR License to Cross Public Lands & Waters Program I had a project for which an ACOE NWP and a MnDNR License to Cross Public Water License were required (among others) for a federal waterway crossing. We submitted the applications, and received the ACOE NWP in a few weeks. Much later we inquired with MnDNR about the status of the License request, and were informed that the project was being held up at the ACOE for a NWP (the same crossing the ACOE had already issued a NWP for). So we contacted both ACOE project managers - the one that had already issued our NWP for this crossing the one that was in the process of writing a duplicate NWP for this same crossing, and discussed with them. The duplicate NWP was abandoned and the MnDNR issued the License. The MnDNR reviewers needs to know that their work is not occurring in a vacuum - our scope of work (as an environmental consultant) is to acquire ALL environmental permits necessary for our client's projects - wetlands, waterways, licenses, endangered species, archaeological, etc. Thus the License request is just one small part of the overall project scope. The MnDNR staff should have asked us about the ACOE NWP before sending the request on to the ACOE, thereby saving all involved parties much time and effort. There needs to be a better system of checks and balances within the Licensing program to prevent duplication of effort with other permitting entities.

ltem number	Source	Improvement ideas/ responses/ recommendations
28	Engagement HQ	More EISs should be ordered based on the potential for significant environmental effects. The EQB should explore why so few EISs are ordered by RGUs and propose changes to guidance or rules that would ensure projects that have the potential to significantly affect the environment undergo an EIS, as required by MEPA. Under MEPA, an EIS must be ordered when a project has the "potential for significant environmental effects." Minn. Stat. 116D.04, subd. 2a. But in practice, RGUs rarely—almost never—find that a project has the potential
		for such effects. Considering the numerous environmental issues in our state, from impaired waters to greenhouse gas emissions, it seems highly unlikely that no projects approved since 2015 have any potential to significantly affect the environment, yet almost no discretionary EISs were ordered during that time. From the years 2015 to 2020, between 48 and 86 EAWs were conducted each year, but during that same time only 1 or 2 EISs were conducted every year. It appears most of those EISs were conducted because they triggered a mandatory category, not because an RGU determined a project had the potential for significant environmental effects. This is not the way MEPA was intended to work. Only an EIS requires an analysis of alternatives to a project, which is one of the most important ways that environmental review can lead to improvements in a project. When a project actually has the potential to significantly affect the environment, RGUs should order an EIS. Given the amount of pollution in our state, it is simply not possible that every project that completed an EAW was successfully modified to prevent it from having potential significant environmental effects, so that an EIS was not warranted. In other words, the fact that virtually no projects are found to have a potential significant environmental effect in Minnesota shows that something is wrong in the environmental review process, and the EQB should explore this problem and potential solutions for it.
29	Engagement HQ	Now that EAWs consider GHG emissions, add guidance about what level of GHG emissions should require an EIS. Now that the EAW requires consideration of GHG emissions, there should be guidance to developers about what level of GHG emissions should be considered a potentially significant environmental effect, so that an EIS would be ordered.
30	Engagement HQ	Passing a law requiring electricity to be green, but not allowing mining for minerals? Anaerobic digesters, ethanol, nuclear should be studied The MNERP should not be biased against any energy sources.

ltem number	Source	Improvement ideas/ responses/ recommendations
31	Engagement HQ	Petitions EAW petitions should be automatically granted if 50 or more signees live within 10 miles of the proposed project. The public should also be able to petition for an EIS if 100 or more people who live within 10 miles of the proposed project sign a petition. Those who would be most impacted by a proposed project deserve to know what the potential impacts are and to have a voice.
32	Engagement HQ	Please include a project's lifecycle greenhouse gas emissions in the Environmental Assessment Worksheet. It is unrealistic to omit lifecycle emissions from an environmental review. The goal is to get a handle on, and control, environmental quality, which cannot be done when a major piece of the environmental puzzle is left off the table. Lifecycle accounting is necessary to give us the information we need to make fully informed decisions about projects that affect environmental quality.
33	Engagement HQ	Please include full lifecycle accounting of greenhouse gas emissions related to a project in addition to direct and indirect emissions.
34	Engagement HQ	Please listen to the experts on water quality for the state's water. I'm talking about the dedicated people at Water Legacy, MCEA, etc.,.
35	Engagement HQ	Please update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to projects
36	Engagement HQ	Re-evaluate the criteria for trail construction on public lands, including regional parks. We are in climate and extinction crises. Trail EAW
37	Engagement HQ	Remember that Treaty Rights come before company rights.
38	Engagement HQ	Require clear language standards and document length limits so the average citizen has half a chance to be able to understand these docs
39	Engagement HQ	Revise the EAW from only requiring calculation of direct and indirect emissions of a project to full lifecycle accounting of impact
40	Engagement HQ	Since the MPCA is responsible for enforcing air quality standards around feedlots, they should do continuous monitoring. The only way to assess whether a feedlot is meeting state air quality standards is to continuously monitor air quality in all directions for one year. Do that.

ltem number	Source	Improvement ideas/ responses/ recommendations
41	Engagement HQ	Take action to plug holes in fed. and MN regul frame to prevent "creeping approval" without full environ reviews including foresee expansion
42	Engagement HQ	The entity that completes the EAW should be unrelated to the proposed project, the project developer and the RGU.
		Since the ideas here will be shared with third-party consultants, I am going to provide specifics for context. For the Mankato Motorsports Park proposed by Bradford Development in Eagle Lake, the EAW was completed by Bolton and Menk, Inc. They were hired by Bradford Development to draw up the plans for the Mankato Motorsports Park. Bolton and Menk also does work for the City of Eagle Lake. After a court challenge, it was determined that the EAW was incomplete. There were many citizens that had expressed both verbal and written concerns about the potential environmental impacts and the conclusions drawn in the EAW. The Department of Natural Resources even wrote a lengthy letter expressing their concerns and providing specific actions that could be taken. Bolton and Menk presented their responses and findings to the Eagle Lake City Council and the council voted that the EAW was complete and an EIS was not needed. There is now a new court case challenging the decision not to complete an EIS. The City of Eagle Lake has already annexed and paid for the property for the proposed development. They have also invested a great deal of time and paid legal fees to defend their decisions to the court. Bradford Development, Bolton and Menk and the City of Eagle Lake all have a vested interest in this project. I believe that whoever completes the EAW should be independent. By that I mean have no relationship with either the project proposer or the RGU. It should be an independent entity that knows how to do an EAW and has no ties to any of the parties involved. At the very least, no connection whatsoever to the project proposer. That is not to say that anything inappropriate has happened in this case. However, when dealing with environmental concerns, it is best to remove any potential conflicts or biases to ensure compliance with state environmental policy. I would also suggest that "Working with Consultants: A Guide for Local Governments" be required reading for all members of an RGU. Not because I think that a consultant w

ltem number	Source	Improvement ideas/ responses/ recommendations
43	Engagement HQ	The EQB should create mandatory EIS categories based on the amount of GHGs a project emits. As part of the Climate Action Framework, Minnesota has set goals to reduce its GHG emissions by 50% by 2030 and to achieve net-zero emissions by 2050. Doing so will require significant changes across all sectors: transportation, agriculture, electricity generation, industrial, commercial, residential, and waste. As we work as a state to cut our GHG emissions, any new projects that will emit large amounts of GHGs should be subject to additional scrutiny. Requiring an EIS for large emitters will help project proposers, decision-makers, and the public to understand where the emissions are coming from and provide information about alternatives, mitigations, and new approaches that could decrease emissions. EQB should commence a rulemaking process that would add this as a mandatory category and that would explore appropriate levels that would trigger an EIS for different types of projects.
44	Engagement HQ	Trails and Ditches-fencing This is to be added to previous issues with trails and ditches. Fencing along trails had typically been split rail where needed. Most recently the additional trail added on was a chain link fence. This is Cass County, Cty Rd. 77. Many wetlands line the sides of the road. I frequently assist turtles in June crossing the road to lay their eggs. A chain link fence does not allow them to travel to the area of laying eggs. They cannot pass under the fence. This is similar to GPS that has been ingrained in them for 1,000's of years. Where they live and where they lay eggs are 2 different areas and we should respect that.

ltem number	Source	Improvement ideas/ responses/ recommendations
45	Engagement HQ	Tribes should be consulted during projects that impact Tribal Land
		Coordination Policies for Collaborative Work between Tribal Staff and State Agency Staff Federally recognized Indian tribes are sovereign nations. Within the boundaries of Minnesota, tribes retain hunting, fishing, and other usufructuary rights that extend throughout the state. To protect usufructuary rights, or property rights, tribes have a legal interest in the natural resources and co-management responsibilities that are shared with the state. At the earliest opportunity, to demonstrate respect for the unique legal relationship with tribes, state agencies are required to conduct meaningful consultation on matters of common interest to purposely achieve mutually beneficial solutions. At a minimum, a EQB should: 1. As early in the process as possible, provide tribal staff all relevant information. 2. Provide the tribe with technical assistance and/or data, if requested. 3. Ensure the tribe has sufficient time to consider the information provided. 4. Collaboratively set meeting or conference call dates and times. 5. Address tribal concerns in a timely manner, and keep the tribes informed of project or process developments or changes. 6. Consider alternatives. Act in good faith and be open to looking at things from the tribe's perspective. 7. Document the coordination process by sending minutes or a summary after phone calls or meetings. 8. Accept the tribe's recommendations unless compelling reasons require otherwise. After the first coordination meeting on a topic, the EQB should provide written updates demonstrating that tribal recommendations have been considered, and how they were resolved. Rationale for not accepting a recommendation must be provided, as well as indicating where Tribal suggestions will be included. If no tribal recommendations are going to be included from the first meeting, tribes may reasonably conclude that meaningful consultation thresholds have not been met, and further coordination meetings or teleconferences
		on that topic would not be productive for tribal staff with limited resources. In this situation, tribal leaders may choose to engage with agency leaders to determine alternative outcomes. However, if an approach to an issue substantially changes from the first meetings where no suggestions were incorporated from Tribes, the meetings can begin again if the Tribes express an interest.
		There are training programs available to help EQB learn how to properly work with Tribal governments. Generally, meaningful consultation requires direct engagement with appropriate Tribal officials and staff. A simple letter or notice does not constitute meaningful consultation.
		I strongly encourage EQB to develop its relationship with Tribes throughout this revision process and to implement any Tribal recommendations that will promote coordination in environmental review. This may

ltem number	Source	Improvement ideas/ responses/ recommendations
	Source	Include the development of internal EQB procedures for Tribal coordination and guidance for other agencies conducting environmental review.
46	Engagement HO	We know the majority of these mining proposals are just a "foot in the door". Proposing a minimal project
46	Engagement HQ	We know the majority of these mining proposals are just a "foot in the door". Proposing a minimal project when it is obvious that only a larger project will make it more profitable.

ltem number	Source	Improvement ideas/ responses/ recommendations
47	Engagement HQ	 "It is important to include life cycle emissions when calculating EAW in environmental review in order to protect our environment." I agree with Catherine on this note - it is increasingly clear that we need more comprehensive and accurate data for environmental and climate impacts, and ensuring full life cycle measures are included is important.
48	Engagement HQ	A thorough analysis of the short term and long term effects on Minnesota's water, air, lands, health and climate. A policy that foresees the destructive nature of a request. A policy that protects rather than turns over the management, use and rights to wild areas. This would include the protection of our forests and open spaces from the expansion and use of all terrain vehicles of any kind.
49	Engagement HQ	Accept science. Acknowledge that industry is driven by money and legal loopholes to avoid accountability. Treaty rights matter. Toxins kill
50	Engagement HQ	Add Alternatives Analysis to EAWs I suggest adding analysis of alternatives to EAWs, as alternatives analysis was initially intended to be the core of MEPA. When MEPA was first passed, many more projects went through an EIS, and therefore, through alternatives analysis. When review was shifted to RGUs, the number of EISs dropped precipitously, and now, few projects see an EIS, and almost never do RGUs order an EIS in cases where they are not required by statute. I propose that more projects should undergo alternatives analysis. Short of requiring more EISs, the best way to do this would be to add this to EAWs. I discuss this in my recently published law review article, which you may read here: https://open.mitchellhamline.edu/cgi/viewcontent.cgi?article=1310&context=mhlr

ltem number	Source	Improvement ideas/ responses/ recommendations
51	Engagement HQ	Adjust the description of mitigation in Rule 4410.1700, subd. 7 to codify existing law and fix the mitigations loophole. The definition of what constitutes a "mitigation" under Minnesota Rule 4410.1700, subd. 7 should be modified to include the definition that the Minnesota Supreme Court established in Citizens Advocating Responsible Dev. v. Kandiyohi Cnty. Bd. of Comm'rs, 713 N.W.2d 817, 835 (Minn. 2006) ("CARD"). Despite this definition being the law of this state, it is often overlooked when RGUs assess whether environmental effects are mitigated. Under CARD, the Supreme Court ordered that mitigations may only be considered if they are: 1) specific, 2) targeted, and 3) certain to be able to mitigate environmental effects. Mitigations that amount to only "vague statements of good intentions" are not sufficient to find that a project's potential significant environmental effects will be "mitigated" under Rule 4410. 1700, subp. 7. Moreover, EQB should prohibit the practice of finding a project's effects will be "mitigated" simply because there is a law on point that prohibits the type of pollution at issue. This is especially x since there are often very few enforcement staff available to visit facilities and ensure compliance with the law. The simple existence of a law that prohibits pollution is not a specific, targeted, and certain mitigation, especially when there is little staff available to actually visit facilities and ensure pollution to groundwater or surface waters. The mere fact that this prohibition exists in law is not a "specific, targeted, and certain mitigation" to prevent drinking water and surface water pollution from a given facility, and should not be treated as such during environmental review.
52	Engagement HQ	All environmental reviews should include lifecycle greenhouse gas emissions I am concerned that the current agency guidance only requires the calculation of direct and indirect emissions, rather than accounting for the emissions a project will generate throughout its full lifecycle. For example, without looking at lifecycle emissions, the climate impact of the actual oil in an oil pipeline isn't counted – only the impact of the electricity to run the pumps that push it through the pipe. I ask that you update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to a project, in addition to the currently required calculation of direct and indirect emissions.

ltem number	Source	Improvement ideas/ responses/ recommendations
53	Engagement HQ	ALL greenhouse gas emissions should be considered in any environmental project review. It's the total that matters.
		I appreciate your recent improvements on the Environment Assessment Worksheet (EAW) to include calculation of greenhouse gas emissions for projects undergoing environmental review. However, the current agency guidance on the revised EAW only requires calculation of direct and indirect emissions, rather than full lifecycle accounting. Calculating lifecycle emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation/release of massive amounts of carbon. I ask that you update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to a project, in addition to the currently required calculation of direct and indirect emissions.
54	Engagement HQ	An effective environmental review provides information actually used to make decisions and meaningfully involves the public in the process. In the view of MCEA, an effective environmental review process includes: Information that is actually used to make decisions, improve projects, and avoid environmental harms.
		Information that is understandable and useful for decision makers and project proposers and is written in common sense language without technical jargon so it is accessible to anyone. Information that is provided early enough in the process to be able to inform and affect outcomes. Information sufficiently supported by data and widely accepted science.
		Information presented through a process that meaningfully involves members of the public, educates the public about environmental effects, and responds to their concerns. Members of the public should feel like their input is welcome, not like adversaries in the process.
55	Engagement HQ	Assess Full Impacts Require a full assessment of the environmental impacts over the lifetime of a proposed project or facility. Consider realistic expansion plans and how the product and its production materials will be disposed of. The public should see the complete environmental assessment of a project's impact including greenhouse gas emissions, health impacts, stream flows, water quality impacts, air quality impacts, and landfill impacts. An assessment should provide not just the direct emissions or outputs, but the environmental context of the
		project so that its cumulative impact can be addressed.

ltem number	Source	Improvement ideas/ responses/ recommendations
56	Engagement HQ	Better consistency within the MnDNR License to Cross Public Lands & Waters program
		Better consistency within the MnDNR License to Cross Public Lands and Waters program is needed. In my experience, projects are not regulated uniformly across different review personnel. For example, for a project with three parallel conduits crossing state lands in multiple review areas, one reviewer licensed all three conduits as a single crossing; in another review area each conduit is licensed separately (and fees are thus triple). In some cases license fees end up in the thousands of dollars. Additionally, for a project crossing multiple review areas, one reviewer required the company name to be on the license a very specific way and another reviewer required it in a different, very specific, way. This wasted a lot of time with attorneys and company admin having to signing draft licenses multiple times until an agreement could be reached.
57	Engagement HQ	Better coordination between MPCA and Department of Agriculture and local County feedlot officials on manure application. Also, MPCA and feedlot officials should actually READ and analyze the annual manure/ nutrient reports. If half a field is a "do not apply area" and the math shown that the application rate is for the entire field, then they either didn't avoid the setbacks, or they are overapplying on half.

ltem number	Source	Improvement ideas/ responses/ recommendations
58	Engagement HQ	Burning biomass should not be counted as carbon neutral in greenhouse gas emissions calculations. EQB's current guidance regarding calculation of greenhouse gas emissions recommends counting emissions from burning biomass as carbon neutral, unless they result from permanent land use change. Revised EAW Guidance at 10 (Jan. 2022). This guidance should be revised to count GHG emissions from burning biomass without considering whether the biomass relates to land use change.
		 without considering whether the biomass relates to land use change. There is scientific consensus that burning biomass instead of fossil fuels risks accelerating climate change. Charles Moore, Playing with Fire, EMBER (Dec. 16, 2019) https://ember- climate.org/app/uploads/2022/02/Ember-Playing-With-Fire-2019.pdf. Demonstrating this consensus, in 2021, nearly 500 scientists wrote a letter to President Biden and other world leaders urging countries to stop treating biomass as carbon neutral or low carbon in their calculations of greenhouse gas emissions. Peter Raven, Letter Regarding Use of Forests for Bioenergy (Feb. 11, 2021). This is because burning biomass is, in fact, a very dirty way of obtaining energy. For each unit of energy produced, burning wood is likely to add two to three times as much carbon to the air as burning fossil fuels. Peter Raven, Letter Regarding Use of Forests for Bioenergy (Feb. 11, 2021), https://www.woodwellclimate.org/letter-regarding-use-of-forests-for-bioenergy/. Cutting down trees to burn for energy cannot be considered a climate solution. The reason some emissions calculators count biomass emissions as carbon neutral is because they assume the equivalent of all the plants that were cut for burning will grow back and absorb the equivalent amount of carbon from the air. See Revised EAW Guidance at 10. But no one is required to ensure this regrowth occurs, and in practice it rarely happens. Phillippe Leturcq, GHG displacement factors of harvested wood products: the myth of substitution, Scientific Reports (2020). Even if it does, the process takes decades, meaning those climate-affecting gases will be in the atmosphere during the next few decades when emissions must be reduced immediately and drastically to stave off climate disaster. Biomass Sustainability and Carbon Policy Study, Manomet Center For Conservation Sciences, (Jun. 2010), https://www.manomet.org/wp-content/uploads/2018/03/Manomet_Biomass_Report_Exe

ltem number	Source	Improvement ideas/ responses/ recommendations
59	Engagement HQ	 clean-up of Minnesota River and rivers in watershed I heard on NPR that essentially all waters south of I-94 are impaired and I understand it is mostly by agriculture drainage. I am part of a collaboration seeking to require an EAW for all agricultural drainage projects in the Minnesota River Watershed. Further to this, an overall Minnesota River Watershed EIS seems to be required for assessing individual EAW's for agricultural drainage on individual projects, to facilitate farming as well as protecting the waters of Minnesota. Pollution of rivers and aquifers by agriculture seems to be much more widespread and severe than pollution by mining and should be a focus of EQB.
60	Engagement HQ	Comment Period Length Make the standard public comment be 60 days from when notice is given to local communities. Especially during spring planting and fall harvest, 30 days is simply not enough to learn about a proposed project, understand what is being proposed, and submit a public comment.
61	Engagement HQ	Comment response to "Include Lifecycle Greenhouse Gas Emissions in All Environmental Review" Proposed projects requiring environmental review must include an accounting of lifecycle greenhouse gas emissions. Anything less than inclusion of lifecycle emissions in a greenhouse gas emissions calculation invalidates the review.
62	Engagement HQ	Consider cumulative pollution burden already existing in a community before allowing additional burdens. Permits are usually granted based on an individual project, not considering the overall pollution burden that already exists in an area or a community.
63	Engagement HQ	Consider the addition of a toxics review board that utilizes the Precautionary Principle ahead of any chemical product to be used in MN. Precautionary Principle

ltem number	Source	Improvement ideas/ responses/ recommendations
64	Engagement HQ	Consistency and Transparency
		Many of the projects I work on require us to complete the environmental review more than once. For example, a project on a Wastewater Treatment Facility could have funding through the Clean Water Revolving Fund (administered by MPCA), Small Cities (administered by DEED), and MN DNR Local Trails (administered by DNR). If the facility is large enough it will also have an EAW. Each of these has its own requirements for environmental review forms, public notices, and processes. And most of these will not accept an environmental review prepared for the other. This gets confusing for the Public that sees multiple environmental review notices for the same project. It wastes a lot of money and time and can result in contradictory findings from different agencies even though they all reviewed the same information in a previous review.
		It would be great if there was consistency and improved transparency so that State Agencies were comfortable accepting a completed review done for another State-administered program for the same project instead of requiring a new report covering the same information.
65	Engagement HQ	Count lifestyle emissions in environmental review
		In many ways Minn. leads the way in assessing environmental impact, and I like the recent inclusion of greenhouse gas emissions on the EAW. However, this guidance only requires calculation of direct and indirect emissions, rather than full lifecycle accounting. Calculating lifecycle emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation/release of massive amounts of carbon. I ask that y
66	Engagement HQ	Define OHV "trail" vs. OHV "area
		There are different criteria for mandatory EAWs for OHV trails (25 miles) vs. areas (80 acres), but no legal definition of the terms "trail" and "area". This has resulted in a proposed 200-acre OHV area (entirely on city property, high density trails, one access point) being termed a "trail" to avoid state environmental review. Alternatively, require mandatory EAWs for all new OHV trails/areas other than minor re-routes as recommended by a 2003 Legislative Audit.
67	Engagement HQ	Do NOT assume you have to accept a permit and that you are just working out the details. You can say no, it is not a Yes, but scenario.

ltem number	Source	Improvement ideas/ responses/ recommendations
68	Engagement HQ	Don't allow issues/mitigations to get kicked down the road by saying they will be dealt with later "in permitting"
		overall decisions cant be made on an EAW/EIS if some issues/mitigations are left to a later process (i.e. permitting programs). Often these issues don't even get addressed there either! Permitting and environmental review should move together (side-by-side) versus the environmental review going first, to avoid these issues.
69	Engagement HQ	Engage in Meaningful Tribal Consultation
		Throughout this improvement process, EQB should engage in meaningful consultation with Tribes. If EQB proactively engages with Tribes now, it can better promote coordination with Tribes both before and during environmental review.
		Tribes are governments, not special interest groups. Due to Tribes' sovereign status and the subject-matter expertise of their environmental departments, Tribal concerns must be given "significant weight" in environmental review. In re City of Cohasset's Decision on Need for an EIS for Proposed Frontier Project, N.W.2d, No. A22-0550, 2023 WL 1770149, at *8 (Minn. Ct. App. Feb. 6, 2023). Accordingly, all parties to environmental review would benefit from early and meaningful consultation.
		The importance of Tribal consultation is rooted in the longstanding relationship between Tribal Nations, the United States, and the individual states. Although there are some state statutes that discuss consultation, the principle of intergovernmental coordination runs much deeper - it is necessary to the legitimacy of state decision making and strong governmental relationships, which ultimately benefit all Minnesota citizens.
		If needed, there are training programs available to help EQB consult effectively with Tribal governments. Generally, meaningful consultation requires direct engagement with appropriate Tribal officials and staff. A letter or notice inviting Tribal comment does not constitute meaningful consultation, but too often that is all Tribes receive.
		I encourage EQB to develop its relationship with Tribes throughout this revision process and to implement any Tribal recommendations that will promote coordination before and during environmental review. This may include the development of internal EQB procedures for Tribal coordination and guidance for other agencies conducting environmental review.
70	Engagement HQ	Ensure that when mining companies apply for permits, they are including expansion plans. No bait and switch!

ltem number	Source	Improvement ideas/ responses/ recommendations
	Source Engagement HQ	Improvement ideas/ responses/ recommendationsEnvironmental Justice issuesThank you for this opportunity to comment. Community Members for Environmental Justice (CMEJ) is a community-based organization, committed to addressing the environmental injustices occurring disproportionately in pollution-burdened neighborhoods. Many of our concerned residents and families live or work in areas of the Twin Cities heavily impacted by the legacy of fossil fuel pollution in the state. CMEJ is located in North Minneapolis, an environmental justice (EJ) community - a low-income community of color with multiple sources of industrial pollution generating a legacy of environmental health issues. This disproportionate burden of air, soil, and water pollution in this area has been well documented across
		It is clear that climate change effects will not be experienced equally by communities, and that legacy pollution exacerbates impacts. Living near toxic waste dumps, freeways and other sources of exposures that are harmful to health is highly correlated with race as well as socioeconomic status. A 2014 University of Minnesota Study showed people of color are exposed to nearly 40 percent more polluted air than whites, and Minnesota is among the top 15 states in the nation with the largest exposure gaps between people of color and whites. 2 LP Clark, DB Millet, JD Marshall, "National patterns in environmental injustice and inequality: outdoor NO2 air pollution in the United States," PLOS One, 9(4), e94431, (2014). Furthermore, some of the most severe climate change-related weather disasters in the U.S. have had a disproportionate impact on low-income communities. Already vulnerable communities pose a unique challenge for mitigating climate change. For this reason, the federal government's Council on Environmental Quality had established as one of its climate adaptation national goals to "(p)rioritize the most vulnerable: adaptation plans should prioritize helping people, places and infrastructure that are most vulnerable to climate impacts and be designed and implemented with meaningful involvement from all parts of society". White House Council on Environmental Quality. 2010. Progress Report of the Interagency Climate Change Adaptation Task Force: Recommended Actions in Support of a National Climate Change Adaptation Strategy. Our recommendations for improving environmental review are as follows: 1. Establish a robust EJ Engagement Strategy for all Environmental Review processes and proposed rule changes. We are troubled by the loose language by the EQB around engagement of environmental justice communities. Environmental Review is a critical tool for community accountability and understanding of larger
		infrastructure and high impact projects. The EQB's framing of "meaningful engagement" as something that "happens when all participants have the chance to feel heard and understand the basis for decisions, even if they would prefer a different outcome, (pg 5)" is inadequate. Feeling "heard" is not enough. To date, we have

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	Source	not seen a robust EJ community identification and engagement strategy laid out by the EQB in its Environmental Review processes. This is unacceptable given the extreme racial and economic disparities in the state of Minnesota across multiple metrics. Meaningful engagement first means a definition by the EQB of what an environmental justice community is, a tailored engagement approach to engagement of that impacted geography/population, and EJ communities being given the tools and resources to understand the technical aspects of a project to effectively provide comment and participate. Critically, any meaningful engagement must include outcome, not just process – namely the ability to affect the results positively to the benefit of impacted communities. Relying on broad surveys and individual spot interviews based on staff's personal relationships, without a clear articulation of a coherent environmental justice engagement plan, is highly problematic. Bias informs what a "representative sample" of ER participants looks like. What measures are taken to make sure disparately impacted communities, historically marginalized peoples were/are equitably heard from and involved in this process to influence the outcome is important. How were individual interviewees chosen and what measures were taken to ensure fair representation of all Minnesotans, but most importantly representation of those that have been and will be most impacted by climate change? For example, how were transient and unsheltered populations taken into account and involved in the engagement process - how will they be taken into account in the EAW and EIS processes? 2. EQB must have a strong definition of Environmental Justice to inform its engagement processes and criteria for FAWs and EISs. Environmental Justice is the right to a clean, safe, and healthy quality of life for people of all races, incomes, and cultures, including Black, Native, and people of color. Environmental justice emphasizes accountability, democratic practices, remedying the hist
		plan to mitigate its GHG impacts. Communities where the proposed project is located must benefit from any proposed mitigation, and a project should be able to quantify and demonstrate that community benefit. Too

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		often mitigation plans are negotiated between the state and project developers, with communities most impacted having no say or engagement in terms of what they see as a benefit. Emission reductions/benefit must occur where the pollution impacts are. Offsets and other mitigative measures in other locations are fundamentally unjust, as they inherently increase the pollution burden within an already impacted community. This is particularly the case for overburdened EJ communities, as GHG emissions are not emitted in isolation – they also include other toxic pollutant emissions, adding to the overall cumulative pollution burden. 5. x Cost Accounting of GHG lifetime emissions with estimations on a yearly basis. The inventory of emissions should project lifetime emissions with estimations on an annual basis. x Cost Accounting should be standard, including loss of traditional plant medicines and ecological/traditional value as well as the full environmental footprint as determined through life cycle analysis methods. This would include emissions from extraction, transportation, and raw materials used in project construction. For example, a facility constructed using concrete will account for the emissions from mining, processing, and transportation of concrete. This is important to account for the emissions from mining, processing, and transportation of concrete. This is important to account for the Resolved. The RGU or acting authority over the MEPA process for projects needs to not have a vested interest, or a real or perceived conflict of interest. For example, a City government should not be the RGU for its own City project. This is a conflict of interest and should be accounted for in the ER rules. 7. Anti-racism training by state employees and EQB board members working on Environmental Review should be required. State employees and others such as board members working on the environmental review process should be required to take annual and ongoing anti-racism development courses. This should be a preventative

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72	Engagement HQ	EQB should ask for more funding and staff.
		The EQB is entrusted with critical jobs—investigating environmental problems, coordinating state programs that may affect the environment, ensuring agency compliance with state environmental policy, and reviewing environmental rules and permitting criteria, among others. Minn. Stat. § 116C.04, subp. 2. Now, the EQB has embarked on an important and ambitious project to update the environmental review process in our state. But the EQB has very limited staff, and it has been without an executive director for a significant period of time. The EQB plays a critical and necessary role in preserving Minnesota's environment. This key agency should be fully staffed to successfully carry out all of its statutorily required duties. To that end, the EQB should request more funding for additional staff positions from the Legislature to ensure the agency has the staff to implement the agency's programs and important directives.
73	Engagement HQ	EQB should develop stronger coordination with Tribes. MCEA strongly encourages the EQB to use the continuous improvement process to develop its relationship with Tribes and to implement any Tribal recommendations received that will promote coordination with Tribes both before and during environmental review. This may include the development of internal EQB procedures for Tribal coordination and guidance for other agencies conducting environmental review.
74	Engagement HQ	 Feedlot permit review by the MPCA should be an environmental review - not a legal review. If info is , reject the permit. MPCA gathers a lot of information. But if the info is - can't possibly be x - MPCA helps the applicant fix the information rather than tell them "No." Currently this is a check-box rubber-stamp process. Regardless of the information gathered, it is approved as long as all the documents were completed.
75	Engagement HQ	Feed-to-Market For environmental review of feedlots to be holistic, it should also include the entire chain of production from feed to market, rather than just the facility itself. Otherwise, you're not accounting for all the fossil fuels used in transportation, the loss of soil carbon to grow feed, and more.
76	Engagement HQ	For quality reviews, broaden the scope to include ALL proposed trails in Minnesota - require at least an environmental worksheet or EIS.
77	Engagement HQ	Honor treaties and Indigenous sovereign nations' rights and requests to land use

ltem number	Source	Improvement ideas/ responses/ recommendations
78	Engagement HQ	I live in the Arrowhead region and would like to remind decision makers that "this is somebodies backyard". Wildlife impact important
79	Engagement HQ	 Improve annual public reporting on the accumulative impact of all approved projects, including impacts on water and projected GHG emissions As the state deals with water quality issues and climate change, policymakers, agencies and the public need to better understand the accumulative impact of the projects approved in the state. Understanding the impact of any individual project is important, but so is understanding the accumulative impact of approving many projects. EQB should already have this information, and hopefully can make it available in a publicly accessible format.
80	Engagement HQ	Improve Federal Endangered Species Act Compliance Section 9 of the federal Endangered Species Act ("Act") prohibits ANY PERSON from "taking" an endangered species of fish or wildlife. Note "person" under the Act includes businesses and other corporations. The Section 9 take prohibition applies to federal and non-federal activities, including activities on private property. "Take" is broadly defined under the Act. To take a species is to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect. Harm includes activities that destroy or significantly modify habitat to an extent that it actually kills or injuries the endangered species. Harassment includes intentional or negligent act or omission which creates the likelihood of injury by annoying it in a way that disrupts normal behavioral patterns. Despite the Act's applicability to state and private projects, state EAWs typically fail to adequately discuss effects to federally endangered and threatened species. EAWs also typically fail to address compliance strategies for projects that are reasonably certain to result in "take" under the Act. Absent this information, RGUs are making project approval decisions without taking a hard look at the proposed project's effects to species protected by the Act. Note that many proposed projects occurring within the Twin Cities metro are reasonably certain to result in take (i.e., adverse effects) for the federally endangered rusty-patched bumble bee per USFWS guidelines. In greater Minnesota, take of northern long-eared bats is also reasonably certain to occur in many cases.

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81	Engagement HQ	In general, effective programs have clear and agreed upon regulations with minimal interpretation required, standardized process, equitable program requirements, adequate staff resources, measurable achievable metrics that are preferably outcome based with human health and environmental benefits, and ongoing stakeholder feedback.
		Specifically for the Environmental Review program, with respect to climate impacts, possibly need rulemaking to define what exactly is the criteria and standard is for "potentially significant environmental effects" so that RGUs can make meaningful and informed EIS-needs decisions, make the environmental review and petition process function better for our Tribal governments with early and often engagement. Also, more analytical tools and methods are needed to evaluate the adequacy of proposer submitted GHG carbon footprints, climate adaptation and climate resiliency information.
		Need a common approach/methodology for all RGUs to comprehensively and consistently evaluate and analyze air, surface water, ground water, and land Cumulative Human Health and Environmental Effects and Impacts.
82	Engagement HQ	Include health impact assessments and prioritize consideration of impacts pollutants that adversely impact existing health issues locally
		Human health impact assessments should be included with environmental reviews. And health assessments should trigger additional environmental review of and regulatory limitations on emissions and pollutant discharges that will result in worsening health outcomes in communities, watersheds and air-sheds where existing health outcomes are already adversely impacted by the cumulative pollution burden resulting from existing entities permitted to emit or discharge pollution into the air and water of the area.
83	Engagement HQ	Include Lifecycle Greenhouse Gas Emissions in All Environmental Review (6 times)
		I appreciate your recent improvements on the Environment Assessment Worksheet (EAW) to include calculation of greenhouse gas emissions for projects undergoing environmental review. However, the current agency guidance on the revised EAW only requires calculation of direct and indirect emissions, rather than full lifecycle accounting. Calculating lifecycle emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation/release of massive amounts of carbon. I ask that you update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to a project, in addition to the currently required calculation of direct and indirect emissions.

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84	Engagement HQ	Include Lifecycle Greenhouse Gas Emissions in All Environmental Review
		Without this metric any data will be incomplete and inaccurate.
85	Engagement HQ	Include lifecycle greenhouse gas emissions in all your environmental reviews
		It is important to consider all aspects of the environmental impact of any building projects. So it's important not just to consider the construction but also what impact actually occurs with the operation occurring within the constructed project as well as what happens at the end of the usefulness of that building.
86	Engagement HQ	Include overall environmental status of area when determining an EAW in reviewing a project's impact EAW include the level of use in the area, type such as trails for hikers, powersports, bikers, etc. In addition, map out the access routes already in place to waterways, parking areas, logging roads, etc. to evaluate the level of current fragmentation. Determine the overall level other indices critical to a protect the habitat, wildlife, local communities, and user needs of quiet vs power. These parameters are key to making sound decisions on the impact of a project based on the pre-existing conditions.
87	Engagement HQ	Incorporate Social, Economic Impacts into EAWs Environmental Assessment Worksheets do not consider potential economic or social impacts. As large-scale feedlots and other proposals that require EAWs inherently impact local economies and communities, these impacts should be considered in EAWs.
88	Engagement HQ	Low Frequency Noise from wind turbines causes sickness in people and animals. Assess it. Commerce, Public Utilities Commission, MDH, MCPA, legislators and 3 governors have known since at least 2010 that inaudible LFN (below 3 hertz) is destroying rural health and driving Minnesotans from their homes, AND since on February 1, 2010 the PUC committed to address it in all future wind site permits in MN, I think that should happen.

ltem number	Source	Improvement ideas/ responses/ recommendations
	Source Engagement HQ	Improvement ideas/ responses/ recommendations Mitigations and Alternatives should be considered in the EAW. When environmental review was created, it was designed with the understanding that most projects would perform an EIS, based on the environmental effects identified in an EAW, which was to serve only as a short screening document. The project's EIS would then discuss the significant environmental impacts of the project, appropriate alternatives to the proposed action, and methods by which the environmental impacts of the project could be mitigated. Minn. Stat. 116D.04, subd. 2a. This analysis in the EIS was critical to the mandate of Minnesota's environmental review process that, "[n]o state action significantly affecting the quality of the environment shall be allowed where such action has caused or is likely to cause pollution, impairment, or destruction so long as there is a feasible and prudent alternative." Minn. Stat. 116D.04, subd. 6. However, over time Minnesota's environmental review program has evolved so that projects avoid an EIS at all costs, and the vast majority of projects instead only perform an EAW, which in turn has become more robust. The consequence of this evolution is important—this means that the assessment of appropriate alternatives
		and mitigations are wholly absent for projects going through environmental review because those assessments are included in the EIS only, not the EAW. Without these analyses, critical information required by environmental review is missing for most projects, and it is impossible to assess whether there are "feasible and prudent alternatives" to most projects. To remedy this, the alternatives and mitigations analysis required for EISes should be incorporated into the EAW as well. Doing so will give decision-makers better information, will allow decision-makers to make better decisions, will incentivize better designed projects, and will better serve environmental review's purpose to "promote the general welfare, to create and maintain conditions under which human beings and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of the state's people." Minn. Stat. 116D.02, subd. 1.

ltem number	Source	Improvement ideas/ responses/ recommendations
90	Engagement HQ	MN Drainage Concerns The Minnesota Environmental Policy Act, Minn. Stat. § 116D.04, subd. 2a(a), requires an environmental impact statement for any project that has the "potential for significant environmental effects." Drainage projects have dramatically altered Minnesota's landscapes and significantly affected our water quality. For example, increased flow to the Minnesota River from drainage tiles has caused high sediment levels, unstable stream banks, ravines, and collapsing bluffs. These conditions create an environment in which macrophytes (plant life) or mussels (clams, etc.) are unable to survive due to lack of oxygen, sunlight, and hard surfaces to which they can attach. Further, nutrients and pesticides make their way to our rivers and streams, leading to algae blooms, fish kills, and drinking water contamination. Yet under the current EQB rules, it is not clear that environmental review is required for many drainage
		projects. Although the Minnesota Rules provide for mandatory environmental review of some drainage projects, in many cases environmental review is discretionary. See Minn. R. 4410.4300, subps. 20, 24(B), 26, 27(A). In practice, environmental review is often not required even where the project have the potential for significant environmental effects. Environmental review is essential to understand the downstream impacts of drainage project, especially their cumulative impacts to the Minnesota River and other at-risk or already-impaired watersheds. It is only once those impacts are understood that mitigation measures can be developed to reduce or prevent downstream and cumulative impacts. EQB should provide for clarity for all interested parties, including downstream landowners and public citizens, by promulgating a mandatory environmental review category for drainage projects.
91	Engagement HQ	Never trust mining or pipeline companies to say what they mean or mean what they say. If there is a loop hole, they will find it.

ltem number	Source	Improvement ideas/ responses/ recommendations
92	Engagement HQ	Please do not allow "bait-and-switch" practices to occur when it comes to MN's environmental health. I've seen "bait-and-switch" practices in action in MT where we live 5 months of the year. MT's governor and majority of the state legislators don't believe in regulations or restrictions on business expansion that directly impacts human and environmental health. MT DEQ and DNRC ramrodded an approval for an expansion of a gravel pit in my community with an addition of a 23 acre open-cut mining permit without adequate environmental impact research. It also allows the company to add an asphalt and cement factories on the premises, with very little oversight on current (and future) environmental mitigation efforts by the gravel pit located on the shores of the Madison River, a Mecca for fly-fisher-people from around the world. And the MT DEQ and DNRC almost got away without a town hall meeting!! Thankfully, there are conscientious environmentalists in MT, swimming against powerful, reactionary folks who are against regulations and restrictions on businesses. The environmentalists rallied support for a town hall meeting after the permit was approved. We are still waiting for the final decision from the state. Don't let MN turn into a MT. That's not a good thing.
93	Engagement HQ	Please add "lifecycle" emissions to the way emissions must be calculated. Whenever I buy something I take into account all the indirect factors in determining whether the price for the item make it something I want to buy. We need to consider all the indirect and lifetime emissions for all our state projects too. Thanks!
94	Engagement HQ	Please take into account the lifecycle greenhouse emissions into the required calculation of projects. Also, thank you for all you have do! Lifecycle Greenhouse Emissions
95	Engagement HQ	Project proposers should no longer be allowed to fund the preparation of environmental review documents for their own projects even if the money is funneled through a state agency the optics are poor. If the agency is short of review staff they should hire more!

ltem number	Source	Improvement ideas/ responses/ recommendations
96	Engagement HQ	Properly consider cumulative environmental impacts of individual projects in context of overall pollution burden in watershed/airshed
		A major flaw for environmental review programs in many parts of Minnesota, and especially in frontline communities, is that permits are usually reviewed based upon an individual project's environmental impact and pollution but does not considering the overall pollution burden in a broader area community, watershed, air-shed. This flaw should be rectified by incorporating an analysis of a project's contribution to cumulative pollution burdens that will occur in concert with other, neighboring industries and sources of emissions and pollution discharge
97	Engagement HQ	Protect our environment from the carcinogens we are being exposed to. Remove Mining from Agricultural. Keep it away from housing clusters. remove mining from agriculture
98	Engagement HQ	Public Hearings Hold a public hearing in the county where a project is being proposed to take official public comment and answer questions about the proposal.
99	Engagement HQ	Public Notice Sending a postcard to all Minnesotans who live within a 10-mile radius of a proposed project with details on how they can learn more about the project, how they can provide input, and what the timeline is. Current public notices are not visible enough for local communities.
100	Engagement HQ	 Recognize the public policy need for accelerating clean energy infrastructure to meet Minnesota's carbon free electricity standard. Fresh Energy encourages EQB to make updates to the Minnesota environmental review process that streamline review for clean energy projects like wind, solar, energy storage, and transmission lines, which will be essential for enabling the state to meet its 100% carbon free electricity standard while ensuring affordable and reliable electricity service for all Minnesotans. It is important to continue to ensure energy project development is environmentally responsible and minimizes negative impacts to environmental justice areas and under resourced communities. We encourage the EQB to prioritize improvements to the review process that balance these imperatives with the need to build more clean energy infrastructure in Minnesota and reduce the burden and time for review of these projects given the scale and speed required to meet our state's electricity standard and economy-wide goals.

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101	Engagement HQ	Require a comprehensive environmental review for all motorized recreation trails - EAW for short and EIS for longer systems. This review should include not only impacts to wildlife and habitat but negative economic impacts to communities and quiet use recreationists.
102	Engagement HQ	Require an environmental impact assessment (EIS) prior to considering making new hiking trails or ORV trails
103	Engagement HQ	Require initial environmental review to include reasonably foreseeable project expansions. Authorize judicial review of scoping decisions (5 times)
104	Engagement HQ	 Require initial environmental review to include reasonably foreseeable project expansions. Authorize judicial review of scoping decisions. As Paul Hawken says, we live on a dying planet. We must put the future of life at the heart of everything we do. No project should proceed if it, or a future expansion of it, contributes to the further degradation of our soil, water, air, plants, animals, or ecosystems. Environmental review is a must to ensure our planet can support life.
105	Engagement HQ	Require initial environmental review to include reasonably foreseeable project expansions. Authorize judicial review of scoping decisions. No bait and switch permitting should be allowed in Minnesota where pollution-creating companies such as copper sulfide mining interests acquire permits for initially small projects but then over time, develop them into large, potentially very environmentally threatening operations. Historically these have such bad consequences for our natural resource treasures and we can ill afford risking the likes of the waters of the BWCAW, the St Louis River, its estuary or ultimately Lake Superior.
106	Engagement HQ	Require initial environmental review to include reasonably foreseeable project expansions. Authorize judicial review of scoping decisions. Stop "bait and switch" in MN environmental review. Protecting our environment aids our economy; to think otherwise is totally misguided and unsustainable.

ltem number	Source	Improvement ideas/ responses/ recommendations
107	Engagement HQ	Require lifecycle greenhouse gas emissions be included in environmental review The recent inclusion of greenhouse gas emissions in the EAW process should be extended to lifecycle greenhouse gas emissions to accurately assess the impact of a project. The current agency guidance published in December only requires calculation of "direct and indirect" emissions, which is misleading and incomplete for assessing a project's real impact. Calculating lifecycle emissions is especially important for making sound decisions about fossil fuel infrastructure, because these types of projects will often enable the transportation/release of massive amounts of carbon. I ask that you update the agency guidance and/or the EAW to include a full lifecycle accounting of greenhouse gas emissions related to a project, in addition to the currently required calculation of direct and indirect emissions.
108	Engagement HQ	Require the MNPUC to strictly follow the MN ERP in their approval process whenever their decision could impact state waters or wetlands.

ltem number	Source	Improvement ideas/ responses/ recommendations
109	Engagement HQ	Revise language regarding MEPA appeals in Minn. R. 4410.0400 to be consistent with MEPA.
		MCEA proposes revising language about the format of appeals in Minn. R. 4410.0400, subp. 4 because the Rule is inconsistent with MEPA.
		The Rule provides that decisions on the need for an EAW, the need for an EIS, the adequacy of an EIS, and the adequacy of an alternative urban areawide review ("AUAR") document may be reviewed through a declaratory judgment action in district court. This language came from the 1980 version of MEPA, which was enacted before the Court of Appeals was created. However, in 2011, the Minnesota Legislature revised MEPA to authorize review of decisions on the need for an EAW, the need for an EIS, or the adequacy of an EIS pursuant to the Minnesota Administrative Procedure Act in the Court of Appeals. Minn. Stat. 116D.04, subd. 10. Accordingly, the rule is now inconsistent with the statute with regard to the method of obtaining judicial review for such decisions.
		The Rule should be revised to be consistent with MEPA. This would ensure parties are aware that (1) these decisions are now reviewed in the Court of Appeals and (2) a petition for writ of certiorari must be filed and served within 30 days of notice of the final decision in the EQB Monitor. In addition, because the statutory language does not specifically provide for judicial review of an AUAR, MCEA proposes that the language of the rule be changed to provide for review of an AUAR in the Court of Appeals as well, to ensure that review of all decisions may be obtained in the same manner. See Final Alternative Urban Areawide Review and Mitigation Plan For the Upper Harbor Terminal Development, 973 N.W.2d 331 (Minn. App. 2022).
		MCEA proposes the following rule language:
		Decisions by an RGU on the need for an EAW, the need for an EIS, the adequacy of an EIS, or the need for or adequacy of an AUAR are final decisions and may be reviewed as provided in Minn. Stat. 116D.04, subd. 10.

ltem number	Source	Improvement ideas/ responses/ recommendations
110	Engagement HQ	Revise the mandatory EAW category for water appropriations to add more projects that use significant amounts of water.
		The mandatory EAW category for new water appropriations should be changed in two ways: (1) revising the category for appropriations for commercial or industrial purposes to projects that use an average of 5 million gallons of water per month, and (2) revising the category for appropriations for irrigation so it is not limited to projects in one continuous parcel or from one source of water. These changes will help ensure the state has sufficient water as we face increasing demands on our water supply and the uncertainty of climate change. Currently, pursuant to Minn. R. 4410.4300, subp. 24, an EAW is triggered for a new appropriation for commercial or industrial purposes of surface or groundwater that averages 30 million gallons or more per month. This is a massive amount of water, enough to provide for the needs of nearly 3,300 households each year. See https://www.epa.gov/watersense/how-we-use-water (average American family uses around 300 gallons of water per day). Projects that still use a significant amount of water—enough to have the potential for significant environmental effects—certainly will fall below this threshold. The same rule triggers an EAW for new appropriations for irrigation of 540 acres or more "in one continuous parcel from one sources. These limitations on the EAW requirement encourage gamesmaship by water appropriators that does not actually decrease environmental impacts. Water use is likely to become a more acute environmental issue in our state in the near future. Large water appropriators—like dairy farms or water bottlers—are looking to our state's groundwater for profit. And climate change is introducing uncertainty to the long-term sustainability of our water appropriations. Climate change is introducing uncertainty to the long-term sustainability of our water appropriations. Climate change is introducing uncertainty to the long-term sustainability of DNR. See https://www.usgs.gov/centers/southwest-biological-science-center/science/climate-change-and-drought. Much of the west and
		groundwater, as the large volume of water encourages runoff, not infiltration. MCEA's proposed changes to the mandatory EAW category would help ensure that groundwater appropriations meet the standard found in Minn. Stat. 103G.287, subd. 5, which requires that groundwater use be "sustainable to supply the needs of future generations" and "not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply and private domestic wells."

ltem number	Source	Improvement ideas/ responses/ recommendations
111	Engagement HQ	Since agencies (MPCA feedlots) use MN Department of Health's rural well map, MDH should have more than 20% of rural wells on their map. MPCA feedlot permits require that the applicant provide a rural well map of wells within one mile of the proposed project. In my area that map - under the responsibility of the MDH - had about 20% of the wells. Either wells and their locations matter, or the MPCA is proving that their feedlot permitting is just a checkbox exercise - not an environmental assessment.
112	Engagement HQ	State agencies should receive preference over local governments to act as the RGU conducting environmental review. The RGU selection procedures in Minn. R. 4410.0500, subp. 5, should be revised to give preference to the selection of state agencies as RGUs over local governmental units that do not have the same experience with environmental review. The Minnesota State Auditor studied this issue and found that, unlike state agencies that have staff working full-time on environmental review, individual local governments perform environmental review "only sporadically." This lack of experience, the Auditor found, can lead to problems in the review of a project, including the quality and thoroughness of EAWs. In addition, members of local government decision-making bodies may not have sufficient training to make decisions about the information disclosed in environmental review, the Auditor found, even though they must determine whether the EAW demonstrates a potential for significant environmental effects. Importantly, local governments often appear to be proponents of the projects they are supposed to be reviewing, introducing the possibility of bias into environmental review. These problems could be addressed by changing the rules to give preference to a state RGU that has more experience with environmental review, rather than the governmental unit with "the greatest responsibility for supervising or approving the project as a whole," which is not always clear and does not always lead to the most effective review process.
113	Engagement HQ	Stop Bait & Switch programs where mining companies get a small project environmentally ok-ed but then can switch it to a much larger project

ltem number	Source	Improvement ideas/ responses/ recommendations
number 114	Engagement HQ	Stream Diversion - Subpart 26 of EAW Recommendations: Recommend modifying this category to exempt stream realignment projects on streams (both trout and warm water streams) that fit the following criteria: the project 1) is ecologically-based, 2) is grant-funded, 3) adds sinuosity to the project reach, and 4) is implemented by the RGU. Justification: South St. Louis SWCD is currently working on a project to restore a ditched reach of a trout stream in Duluth. This creek is impaired for aquatic life and this project has long been a high priority for delisting the stream according to area natural resource professionals. The project has been vetted and is 100% funded by LSOHF dollars administered by the MN DNR River Ecology Unit. In spite of the project's clear environmental goals and outcomes, South St. Louis SWCD is required to complete an EAW because of the mandatory category criteria. Completing an EAW properly requires significant staff capacity and takes away from the other good work that our office does. It is not in the spirit of the law to require EAWs for stream restoration projects that seek to restore floodplain connectivity and ecological function to highly degraded, ditched trout streams using grant funding. Our office has completed many EAWs in the past and has never once received a comment through the
		process that has resulted in any meaningful change in the project scope or design. Any questions or concerns about project particulars can be addressed through the various permitting processes that these projects have to also go through.
115	Engagement HQ	Support strong Cumulative Impact Laws Coordinate with all relevant agencies to ensure strong legislation, policies and administration of Cumulative Impact laws.
116	Engagement HQ	The admin should support reinstating the MPCA Citizens' Board with a focus on representation from both rural and urban residents of environmental justice communities, which face the brunt of the environmental, social, and economic impacts of industrial projects. We know this is not something the EQB has the authority to do, but we urge you to support legislative efforts to do so.

ltem number	Source	Improvement ideas/ responses/ recommendations
117	Engagement HQ	The alternative EAW form for feedlots should be revised to require the same climate change information included in the new EAW form. The EQB recently, and rightfully, revised the EAW to include information relating to climate change— calculations of greenhouse gas emissions, discussions of emissions mitigations, and climate resiliency measures. To ensure this critical information is gathered for every project, the alternative EAW form used for feedlots also should be revised to include this information, as soon as possible. The climate analysis performed for feedlots currently is significantly less robust than that in the new EAW form, despite the fact that feedlots are a significant source of greenhouse gas emissions. Feedlots need to perform the same climate analysis required of other projects in Minnesota.

ltem number	Source	Improvement ideas/ responses/ recommendations
118	Engagement HQ	The EQB should create a new mandatory environmental review category for drainage projects that addresses cumulative water quality impacts.
		Despite the stark evidence that drainage systems negatively impact water quality in the Minnesota River Basin and other watersheds throughout the state, Minnesota's environmental review program is not equipped to address these impacts. In some cases, existing mandatory EAW or EIS categories do intersect with drainage projects. However, to capture drainage impacts with more precision, EQB should create a mandatory category attuned to drainage projects that threaten Minnesota River Basin water quality. MCEA recommends that EQB add a new mandatory category with reasonable thresholds to address cumulative water quality impacts. Like the mandatory EAW category for animal feedlots in Minn. R. 4410.3200, subp. 29, this category could include a general threshold that applies across the State and a more conservative threshold that applies to sensitive areas, such as waterbodies impaired for turbidity and total suspended solids ("TSS") like the Minnesota River Basin. The statewide general threshold could operationalize one of the environmental criteria in 103E.015 that local drainage authorities are supposed to consider before they approve a drainage project, such as whether the proposed drainage project will increase the likelihood of downstream floods for 5- or 10-year flood events. This is especially important given the increased frequency and intensity of precipitation events associated with climate change. The sensitive-area threshold could operationalize one of the goals in regional water quality plans for the Minnesota River Basin, such as any increase in flow volume and/or peak flows for a 1.5-2 year flood event. The MPCA would be an appropriate RGU for this mandatory EAW category because of its regulatory authority over water quality impacts from sediment and nutrient loads, as evidenced by both the MPCA Nitrogen in Minnesota Surface Waters Report (2013) and the MPCA Sediment Reduction Strategy for the Minnesota River Basin and South Metro Mississipi River (2015). The existing mandatory EAW categories do not ade
		The cumulative impacts of cropland tile drainage systems on our State's water quality are known and widespread. Drainage projects have the potential to increase erosion and sediment loads, increase nutrient loads from

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number		cropland runoff, and destroy wetlands, along with their critical ecosystem functions to filter pollutants and sediment. The MPCA Nitrogen in Minnesota Surface Waters Report (2013) outlines that cropland tile drainage accounts for 37% of statewide nitrogen contributions to surface waters in an average precipitation year and 43% in a wet (90th percentile precipitation) year. The most heavily drain-tiled watersheds in the state, like the Minnesota River Basin, have extremely high rates of crosion and sedimentation. In large part because they have been heavily drain-tiled, streams in the Minnesota River and Greater Blue Earth River basin are on the state impaired waters list for high turbidity and (TSS) and fail to meet water quality standards that protect fish, insects, and other aquatic life. Finally, drainage systems have converted over 90% of marshy wetland landscapes into crop land in southern and western areas of the state. The cumulative water quality impacts from drainage are particularly severe in the Minnesota River Basin in southern Minnesota. Since 1991, flow volumes in the Lower Minnesota River have more than doubled, which means that for every inch of precipitation there is about two inches of water runoff. Furthermore, annual peak flows have increased by almost 80% on average since the early 1990s. Site-specific research shows that the installation of surface drainage and subsurface tile drainage is a critical factor in these dramatic hydrologic changes, as well as increased corn and soybean cultivate and changes in frequency and intensity of precipitation associated with climate change (Schottler et al., 2013; Foufoula-Georgiou et al., 2013; Gupta et al, 2015). These increased flows have led to extreme rates of erosion and sedimentation in tributaries throughout the Minnesota River Basin. A new mandatory EAW category aimed at water quality impacts from drainage projects is critical to help Minnesota River Basin poy 25% by 2030. The watershed-scale TMDLs and One Watershed One Plans arcoss the Minneso
		project in the Minnesota River Basin that will increase peak flow for a 1.5-2-year flood event. The impacts from

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	Source	Improvement ideas/ responses/ recommendations a 1.5-2-year flood event are important to address because these are the more frequent flood events that lead to near-channel erosion and increased sedimentation downstream, as identified in the MPCA Sediment Reduction Strategy for the Minnesota River Basin.

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119	Engagement HQ	The EQB should explore methods to improve the cumulative analysis undertaken by RGUs in all forms of Environmental Review.
		 A. The EQB should review the definitions of cumulative impact and cumulative potential effect and revise the rules so that there is a single definition. Currently Minn. R. 4410.0200 includes two slightly different definitions for the terms "cumulative impact" and for "cumulative potential effect." This causes confusion for RGUs, project proposers, consultants, and the
		public. We suggest that the rule be clarified to create just one definition. EQB's rules implementing MEPA introduced the necessary concept of cumulative impacts/effects, which are impacts that, while on their own may not be significant, nevertheless may be significant when considered in the context of the ongoing and probable effects on the environment and public health from other past, present, and reasonably foreseeable future actions.
		MCEA is cognizant of the Minnesota legal precedents dealing with cumulative impacts, including Citizens Advocating Responsible Development v. Kandiyohi County Board of Commissioners. However, we believe it is time to clarify through rulemaking what a cumulative impact/effect is under MEPA using one term, and how RGUs ought to be considering them in EAWs, AUARs, and EISs.
		 B. The EQB should consider ways to improve the cumulative impacts analysis, so these analyses are actually being performed, and not glossed over, in environmental review documents. The cumulative impact analysis is an essential part of MEPA review. In the decades since MEPA was enacted
		and the environmental movement began, we have come to appreciate the importance of assessing how our shared environment can be degraded and public health can be compromised by multiple small actions over time. For example, a permit granted for one pollution-emitting factory may not have a significant effect on the quality of our air, or the health of our children, but placing one hundred similar factories in the same census block may have severe effects. Aside from air pollution, this concept of numerous individually insignificant
		actions resulting in severe problems might be thought of as the problem of our time: it has led to the intertwining problems of air pollution, water pollution, climate change and biodiversity loss. And, we know that frequent exposure to pollution sickens people and takes years off our lives. And we know that these burdens are disproportionately born by marginalized and underserved communities.
		Cumulative impacts analysis is not new. Federal agencies have been scoping and preparing such analyses for decades and there are several comprehensive guides on best practices for cumulative impact analysis. In addition, the MPCA is experienced in assessing the cumulative impacts of new sources of air pollution through its "Cumulative Levels and Effects" analysis. See https://www.pca.state.mn.us/business-with-us/air-permitting-in-south-minneapolis.
		The EQB has published guidance on how to assess the expected environmental and health harms of a project in context of the preexisting and expected future harms. However, this guidance appears insufficient to drive a

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		sufficient cumulative analysis. For example, the City of Cohasset in its Frontier Project EAW did not attempt to consider how air quality would be affected by the project when considered together with the existing air pollution emitted by the adjacent Boswell coal plant. Nor did the RGU look at the additive effect of the tailpipe emissions from the trucks to and from the site as part of the cumulative impacts analysis. Instead, the RGU stated that: "The proposed project's long-term operations may contribute to a minimal increase to the cumulative potential effects on the surrounding air emissions, as allowed by the air permitting process." In other words, despite the fact that the plant would have been a major source of air emissions, and despite including no cumulative emission data nor cumulative emission analysis, the RGU concluded that the air emissions from the project would be so small when compared to the pre-existing pollution levels, that no further cumulative impacts analysis was required. This is not a cumulative impacts analysis. In another example in the AUAR context, the City of Minneapolis ignored the well-documented, pre-existing high levels of pollution in North Minneapolis when it considered the potential cumulative impacts of the Upper Harbor Terminal Project. The City failed to consider whether the air emissions from the Project, plus the vehicle emissions from the cars traveling to the amphitheater, could, when assessed in the context of the pre- existing levels of air pollution in North Minneapolis, have a cumulative significant effect on air quality and human health. Put differently, RGUs appear to be avoiding the cumulative impact problem by focusing on their determinations that the environmental effects from projects will be small or well-mitigated. According to these RGUs, no real cumulative analysis is then required, because of this initial project-specific determination. What these RGUs ignore is that the environmental harms from existing projects ofthen have had significant adverse
120	Engagement HQ	The guidance on the revised EAW only requires calculation of direct and indirect emissions, rather than full lifecycle accounting. Change!

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121	Engagement HQ	The life history of a project must be considered. A product or project is not just now. It also has a future and a past. The historical and future pollution impacts of a product or project must be part of an overall environmental review; especially when considering green house gas emissions.
122	Engagement HQ	The most "disinterested" level of government should be assigned as RGU - not the most local, who are often fully committed to the project. Seek RGU's that can fairly evaluate the public interest
123	Engagement HQ	There should be public transparency in discussions between project proposers and RGUs. Naturally, project proposers and RGUs have to work together in order to complete the environmental review process. However, discussions between the project proposers and the RGUs occur behind the scenes, without knowledge of the public. The public is often told that as a result of discussions with the RGU, the project proposer modified their project to improve it and reduce its environmental effects before the environmental review document was completed. However, because these conversations occur out of the public eye and before the environmental review process, there is no public-facing documentation of the RGU's concerns and changes to the project in response. Sharing how a project proposer has been willing to change the design of its project to mitigate the project's possible environmental effects will help build more trust in the environmental review process and in the RGUs that perform it. If this information is never shared with the public, the public can only assume that projects are rarely, if ever, asked by RGUs to change in order to reduce their impacts, leading to pervasive distrust of the environmental review process and the agencies and governments that perform environmental review. If projects are modifying their designs to reduce their impacts, this is something the public should know as part of the environmental review process.
124	Engagement HQ	Third party contractors should no longer be allowed to draft environmental review documents They represent an inherent conflict of interest since their primary clients are industry

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125	Engagement HQ	Trails and Ditches Ditches, a valuable source of food and wildlife habitat for birds, small mammals, and pollinators are being replaced by trails. Trails can be enriching for humans, but most are not eco-friendly. The replacement is 8-12 ft. wide of asphalt that emits heat and can burn feet of dogs and wildlife. Black dirt and grass fills the ditch where it had been loamy soil, wildflowers, native grasses, and nesting areas. Another negative impact, straw laced with plastic netting that entangles wildlife, birds and inserts plastic into their diet.
126	Engagement HQ	transparency There have been many projects that been approved that don't support the environment long term. MN has pristine environments that have been damaged with approved plans that include unrealistic expectations that those environments will become pristine after the project is finished. There is no logic in expecting the environment to become repaired after oil leaks, chemical releases, and additional roads that have been constructed to complete projects. There needs to be full realization and communication of any damage short term and long term on our part of this planet.
127	Engagement HQ	Treaties are the supreme law of the land and should be honored in every project under consideration. Our Indigenous relatives have been good stewards of our natural resources for millennia. They negotiated treaties with settlers to try to preserver those resources and the EQB should study our obligations under those treaties and follow them.
128	Engagement HQ	 Tribal governments as elected officials representing a sovereign nation have a right to petition the state as a governmental body. Tribal governments as elected officials representing a sovereign nation have a right to petition the state as a governmental body and not as a "citizen group". Tribes should not have to procure 100 signatures to request any form of environmental review.

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129	Engagement HQ	Tribal governments were not contacted regarding this "modernization" effort and were not provided information about how to participate.
		The EQB has invited the general public to participate in this rulemaking but has not initiated consultation with Tribal Nations. 2. EQB should be working with Tribes on a one-on-one basis to ensure that tribal concerns are fully understood by the EQB, and an open dialogue is maintained during these types of institutional processes. Tribes are governments, not special interest groups. Due to Tribes' sovereign status and the subject-matter expertise of their environmental departments, Tribal concerns must be given "significant weight" in environmental review. In re City of Cohasset's Decision on Need for an EIS for Proposed Frontier Project, A22-0550, 2023 WL 1770149, at *8 (Minn. Ct. App. Feb. 6, 2023). Accordingly, all parties to environmental review would benefit from early and meaningful consultation with Tribes.
130	Engagement HQ	Update environmental review notification requirements
		Modify Minn. R. 4410.1500 to include a mechanism requiring all RGUs to notify local/state agencies when a proposed project will be undergoing environmental review to ensure agencies do not make final governmental decisions on the proposed project until environmental review has been completed.
		The first notice for most projects in the EQB Monitor or other local media is typically announcing the opening of a comment period on an environmental review document. This creates a gap in time/communications between an RGU determining a proposed project will undergo environmental review and other government agencies becoming aware of the environmental review for said proposed project; thus not being aware of the enactment of the prohibition on final governmental decisions.
131	Engagement HQ	When a project requires an aquifer test for a water appropriations permit, the aquifer test must be included in the EAW.
		The EQB should revise its guidance to clarify that when a project that needs a water appropriations permit requires an aquifer test, the results of the aquifer test must be included in the EAW. Under Minn. Stat. 116D.04, subd. 16, when an EAW is required for a proposal that will require a groundwater appropriation permit from DNR, the EAW must include "an assessment of the water resources available for appropriation." The Legislature considered this requirement so important, that it is the only specific item MEPA itself (rather than the MEPA rules promulgated by EQB) requires to be included in the EAW. But what constitutes an "assessment of water resources available for appropriation" is not defined. The EQB's current guidance states that the assessment "should focus on the ability of the water source to supply the needed

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		water (drawdown) and the effects to surface water features that are dependent on groundwater." EAW Guidelines, at 28. Importantly, water resources are not "available for appropriation" merely because they exist. Minnesota statutes allow DNR to issue a water appropriation permit only if DNR "determines that the groundwater use is sustainable to supply the needs of future generations and the proposed use will not harm ecosystems, degrade water, or reduce water levels beyond the reach of public water supply and private domestic wells." Minn. Stat. 103G.287, subd. 5. DNR has other rules limiting its ability to grant water appropriation permits as well–for example, water appropriations may not affect domestic wells (Minn. Stat. § 103G.261(a)(1)) or harm calcareous fens (Minn. Stat. § 103G.223(a)). Accordingly, to truly assess whether water resources are available for appropriation, the EAW should provide sufficient information to determine whether the proposed water appropriation meets the statutory standards. When DNR has questions about whether a proposed water appropriation may be lawfully permitted, it orders an aquifer test, during which water is pumped at the proposed rate for a test period to determine how the groundwater, nearby surface waters, and groundwater dependent features will be affected. However, because of the timing of the environmental review and permitting processes, the results of the aquifer test often are not completed until after the EAW is published. This creates a situation where the best available "assessment of water resources available for appropriation" is not included in the EAW as required by MEPA, and no alternative assessment that is able to fairly analyze the ability of the water appropriation permitting process does not involve public notice and comment like environmental review does. Accordingly, unless the aquifer test is included in the EAW, not performed later. Secondly, the water appropriation permitting process does not involve public notice and comment like environmental r
132	Engagement HQ	When reviewing future projects & the impact on the environment, the environmental impact has to be prioritized over jobs/money. Earth trumps jobs

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133	Engagement HQ	Wind turbine siting permits should have actual environmental review. EIS level or higher. Enron wrote MN's siting standards in the 1990s. They don't protect human health wildlife or the environment. The PUC has refused to enter into rule writing for at least 15 years. They never adopted rules for large wind projects - they use their Enron standards for small wind.
134	Engagement HQ	You need to create an appeal process that does not involve going to District Court. BWSR has a decision appeal process that you could copy.
135	Listening session	am reluctant to suggest a conference sort of apparatus and we have so many of these right now. That said, EQB, created in 1973 it may be very important and useful to kick around the concept of a backward look, how well is this doing, with the resources the agency representation, the intersection with our legislative political process it might be worthwhile to at least discuss of concept of taking the residue from this discussion and thoughtfully looking at the opportunities to improve. We have so many issues confronting us we do need to better; it is fun to praise the past and recognize the good, but the fact is we are severely challenged and our systems much work better than they are. Thank you.
136	Listening session	I might build off Hudson suggestion of GIS map, rather than having a fixed category of mandatory review. A GIS map could be developed that shows portions of state that are under significant degradation, such as a MN river watershed. If you have a water-related project, in that water shed, you could go to GIS map and see automatically that would be a mandatory review because it is already significant where the resources have been degraded. If you have biodiversity loss in other parts of the state, a similar GIS map, could show if you are going to be an extractive process or even a mineral component, it would be mandatory EIS because that area has been degraded by the kind of land use change you are proposing. So it would be a real time updated feedback mechanism where people would understand just by going to a map that they are proposing a project that has already the type of which has already contributed to degradation so it would be real-time feedback, everybody would know where and what kind of project requires closer scrutiny So I think an interactive GIS map that plots these things out would be very functional and very real-time responsive.
137	Listening session	I was just told it's extremely difficult for a small municipality to even approach EAWs

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138	Listening session	Mu suggestion is to look backwards, and look at all the indicators that show continued decline, in biodiversity we have bird populations, amphibians, every class of living things in decline, and if a project is proposed that is going to contribute to that, that should be a key indicator for everyone, yet we do not do that, tie outcomes to past outcomes, the old adage continuing to do the same thing expecting different results is insanity, that's what we are doing, continue to do environmental review in the same way, continue to get degradation of resource, there are ways to turn that needle in the opposite direction, right now environmental review is not doing that conversation needs to be continued
139	Listening session	The public utilities commission called for environmental review of a new oil-fired power plant. Two agencies mistakenly issued permits in gross violation of MEPA. One of the agencies realized they had committed an oops and they fixed it and the other one was MCPA, and they did not fix. The only way to deal with this was to sue MCPA and they refuse to talk to me. It would be very useful if the EQB could serve as a go between. I am not saying that the EQB could become a court but if it could issue advisory opinions, as many attorney generals do, advisory opinion that that petitioners could use and even if the EQB could provide some sort of redress to petitioners short of brining a lawsuit then, people in my position, would not be forced to sue an agency when they do not really want to. Which I think would be better for everyone. As someone who has represented petitioners, it is unfortunate agencies do not treat representatives of the petitioners on the same level as the applicant. The applicant usually gets to say their piece It would be very functional that that person be included in decisions until the environmental review has been completed to the extent they are not included, that increases litigation risk for agency and that is not good for anybody. It is unfortunate that agencies like PCA rely on applicant to determine if there is an environmental review. Both in the line 3 example and the situation where I just explained and dropped the blog in the chat box. cases PCA issues, issued permits for Line 3 and illegal one for power plant. If they actually went through the trouble of checking the monitor or talked to me or talked with the representative of the RGU, they would not have issued this permit. Shows something dysfunctional.
140	Listening session	A mandatory EAW is necessary due to the impacts of agricultural drainage on the watersheds in the Minnesota River Basin
141	Listening session	Additional training opportunities for LGU's, especially small LGU's that deal infrequently with EAW's. How to determine whether a request falls within the mandatory EAW categories

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142	Listening session	Back in the early teens, EQB held a retrospective evaluation of environmental reviews, And I suggest you go back and review the recording of that session. Chuck Dayton made some poignant comments, who was one of the co-authors of the environmental policy act. He pointed out that since there was a bifurcation of EAW worksheet from EIS', the predominant document is an environment assessment which does little to educate the public on what alternatives are available. Should the worksheet itself be abandoned, it should be amended to include a survey to include of the alternatives would accomplish the project's public interest perspective. Most projects are using a component that is in the public sphere, the public domain, and in order to earn that slice of the public domain air, water, soil, forest, etc. a project should justify its public interest, that it is benefiting, rather than detracting from that interest, so if there was a broad survey of alternatives that would not only serve the interest of the project proposer but would meld that with the broader public interest that instrument of the EAW would function better than it does now. Right now, it provides an off ramp, instead of an on-ramp to consider alternatives that would serve the greater public interest.
143	Listening session	Bring EQB publications into line w/ Current Science – Publications such as the biennial report to the Legislature, the Climate and Energy Report Card, Pollinator Report, the Emerald Ash Report all need to reflect the current science on the top five drivers of biodiversity losses including land use, habitat losses, chemical pollutants, invasive species and the climate crises
144	Listening session	Close Biodiversity/Climate Crises Loophole - Revise EQB guidance and EAW form to both reflect and capture the urgency, scope and scale of the on-going dual Biodiversity/Climate crises. Begin by changing the narrative; use "climate crises or emergency" and "ecosystem dysfunction crises" rather than softer terms like "climate change" or referencing endangered or threatened species. Ecosystems can collapse well before any monitored species makes the Threatened or Endangered species list – we are not monitoring nearly enough species populations to know when an ecosystem is threatened. Ecosystem functions are existential to human, individual species can be but are often not indicative of critical ecosystem thresholds or broader population trends.
145	Listening session	Concur with the ideas around training for small LGUs - EAWs have the potential to get expensive if/when in- depth field surveys are required for improving the environmental review information. Additionally, funding or cost-share information on how small LGUs can leverage other funds to ensure they are in compliance with MN environmental regulations and guidelines.
146	Listening session	Of course MPCA has their map (and I believe U.S. DOE has one) ER could emulate scientific literature, professional publication undergoes multiple rounds of objective, disinterested peer review. EQB could create a pool of experts to provide this service and have funding available for these independent expert's work.

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147	Listening session	You talk about how would you spend additional money to help LGUs RGUs prepare these documents what I am suggesting is it become a war of the experts, the project advocates have their experts, the project opponents have their experts and if you end up going to court, it is a war of the experts and judges are caught in between. What I would suggest is a neutral body possibly funded by EQB, that is simply a pool of experts, who are independent and have no interest except getting the science of an environmental document right, this could function like peer review for scientific journals. If there's money available, and the idea would help stop the logjam of lawsuits, the model I go by is the UN intergovernmental panel on climate change, it is a large pool of unpaid scientists, but do it out of dedication to the integrity of science. This objective independent panel could function that way, and free up this whole amount of money and time and effort that this spent in these factual wars, yet it is not about the facts we are warring on opinion. If you have got money, I suggest that is how you might spend it, Denise.
148	Listening session	Second one is how to determine what is a significant environmental effect. As you know the trigger to go from an EAW to an EIS, turns on that decision. Local units of govt are ill-equipped scientifically and technically and politically to determine what is significant and what is not. So many drainage things happen that contribute to an already degraded ecosystem. Yet a local unit of government making that decision will deny that they are contributing to it again because of cumulative impact kind of thing. There are metrics that are readily available within existing agencies to determine if when a project will add to ongoing degradation or detract from. Those data have been virtually prohibited from use. I recommended them in the EIS for the line 3 pipeline. That the pipeline was going through already degraded watersheds and it would it add to that. The public needed to know that this pipeline was going to add to an already degraded environment. Yet the EIS would not reveal that it was simply trying to measure the incremental degradation instead of the cumulative degradation that had gone on before. It's a major failure of ER process that you cannot determine significance based on what has gone on before cumulatively and add another pin prick. The death by a thousand pin pricks is what we are going to the environment and the ER cannot detect that right now, there are mechanisms to correct that. Thank you
149	Listening session	EQB should provide guidance to RGUs on how to format documents meeting Section 508 requirements for accessibly and also consider multiple languages as well

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150	Listening session	EQB should Update definition of Cumulative Environmental Impacts or Effects in EQB guidance and EAW form to comport with the scientific definition rather than the confusing Card Decision. U.S. EPA has just issued guidance for federal environmental review agencies that can now be authoritatively incorporated into EQB guidance and EAW forms. It would be tremendous if EQB could seek from the RGU's quality examples of responses to the climate questions. I realize EQB would be hosting this information and the RGU would need to be denoted as the supplier of the "satisfactory" level of response.
151	Listening session	EQB staffing I usually have EQB staff on speed dial because I always have questions. I was actually gone for a year in a military deployment, as I am getting back into things, I continue to have questions. Denise has been awesome, others have been awesome, are they the only ones or do they need help?
152	Listening session	Establish Threshold Criteria for Significance of Impact - Improved guidance and criteria for RGU decisions on whether significant environmental effects are predictable from a proposed project. Current decisions on significance are subjective and therefore are too easily influenced by political pressures.
153	Listening session	For some of the smaller LGUs out there, these EAWs, AUARs, EIS' can get these can get super expensive, are there other funding opportunities that can be shared through the EQB website or something comparable to assist for smaller more rural communities out there?
154	Listening session	Has there been any discussion about training folks with regional reach (universities, extension offices like RSDP, etc.) to be able to help small LGUs effectively fill it out (and maybe even give students the opportunity to gain experience!)? Great idea
155	Listening session	Health risk assessment as a part of EAWs and EISs have been suggested by the medical professional community for decades now, yet no part of the ER process focuses on health impacts.
156	Listening session	I agree that more solid guidance on when review is necessary and also potential issues to look at more carefully would be really useful.
157	Listening session	-I do not have experience with the EAW. I have tried to prod and ask and listen in on a lot of the meetings within the cities I work in. I do work a lot with the public, I was in the climate action framework resiliency workgroup, and we just talked a lot about the need for technical assistance for Greater MN in general, not just citizen volunteer kind of work. There was conversation about, there needs to be some other entity created, that can also help with filling those things out and helping with grant applications and bolstering project plans and the best management practices that somebody might implement. I think there might be a similar thought between technical assistance for an EAW and that.

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158	Listening session	I just have a quick historical note, that I can follow-up with the information, the original powerplant signing act actually had a similar map, that is being discussed here, it identified environmentally sensitive areas of the state, and it as a requirement of the power plant sighting process it predetermined where/which areas were available particularly for long projects like power lines and pipelines and required if a project could not avoid those areas it had to explain why and what its alternatives were. It was put into a book as a model that I ran into in grad school. It's very interesting that idea comes up again, because it was in the original power plant sighting act.
159	Listening session	I know it's super frustrating to hold these sessions and be told it's not enough, but deeper convos with groups after the use the new EAW would be wise for some time
160	Listening session	I really don't know how swamped they are, but I believe there are only a couple EQB staff members who help answer inquiries. Do they need more staff? I do not know the answer but know how hectic it can be when you are one of only a few individuals who covers a very large geographic area - or a whole state. Suggestion is a good one, EQB staff really help with process but technical assistance on hard environmental issues is not a role EQB staff have been allowed or equipped to do. Having a pool of independent experts available would be very useful.
161	Listening session	I strongly believe that the Mandatory Category, which is currently based on scale and project intent, should also have a geographic element. We have sufficient geographic environmental quality date to base establish a critical area basis
162	Listening session	I suggest EQB Improve the Science with informal or formal Peer Review – Most easily done by separating public comments by credentialed experts from lay comments and requirement to disclose conflicts of interest. More effective formal peer review would emulate scientific literature review by having pool of independent experts on retainer (not consultants) review EAWs and EISs for scientific integrity.
163	Listening session	I was just typing out examples of what I heard from the discussion and the waters and one of those would be, what additional review requirements to better assess and protect waters from cumulative impacts. And the other one, I was very interested in the ideas from, I think it was Mr. Kingston, what kind of action, what kind of role could EQB play in providing – I'll put this in the chat – some independent or professional perspective on specific complicated or challenged environmental review proceedings. In the past EQB had a much different role, in the beginning EQB not only did ER, but I also believe it may have, functioned something as, Denise knows this, functioned had a larger role. I think preventing unnecessary costs in legal challenges and wasted time and resources is really important. I hope EQB pursues that further because it is a tremendous burden, I have been in the situation myself for citizens to take up these matters of protection.

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164	Listening session	I would like this reassert two things that were not addressed in that panel. One is the definition of cumulative impacts. EQB has given guidance and followed a court a decision that gives the most confusing definition of cumulative effects and impact and that defies science. EQB needs to go to a scientific definition on what cumulative effects and impact are. For help you can go to the EPA and the president's council on environmental quality go to these for definitions. Would not have to reinvent the wheel, EPA has already done that for you.
165	Listening session	if you are looking at larger projects, such as a stream bank restoration project, there is an environmental benefit, there is sometimes an economic development benefit, if you are looking at federal funding levels, sometimes federal funding that comes into play cover the environmental review process. My question is are there cost share options that smaller municipalities could access or at least reference on how to better leverage funds to ensure that they are following the Minnesota rules and that they understand them. I thought I would bring up funding opportunities for smaller local level review processes.
166	Listening session	Improved training around the AUAR process and how that provides additional flexibility as LGUs work through their comprehensive and economic development planning while promoting sustainable development and conserving our natural and cultural resources.
167	Listening session	Need a better search tool for the EQB Monitor and SONAR Archives.
168	Listening session	 No specific details right now, it's more just an overview; instead of sending an e-mail out to the required distribution list if that was feasible through the EQB website. I know the Monitor is a great resource, just a matter of reducing e-mail traffic, we all get a lot these days. [Is it more about submission of environmental documents?] Yes, a lot of the environmental documents are housed on the respective RGU websites. That's not as big of a deal, we are not having to print massive amounts of copies and things like that any longer, but it's just more of instead of potentially missing an e-mail address or something like that. You asked for magic wand moments and I figured I would throw one out there.

ltem number	Source	Improvement ideas/ responses/ recommendations
169	Listening session	One of them that I want to speak to directly is for the EQB to consider the addition of mandatory EAW categories specific to drainage projects that address cumulative water quality impacts of drain tile systems on our state waters. With the current mandatory EAW categories used to address public waters in the past have to do with impacts of public waters, change in cross section of public waters or public water However, these thresholds do not address the extensive and very well documented cumulative water quality effects of drainage systems. These have to do more with sediment and nutrient loads to our state waters. For example, multiple studies, from the MCPA such as the state sediment reduction strategy address the fact that drain tile is primary cause of nitrate to our waters, increase in peak flow and volume to water systems, increased sediment loads. For examples this is particularly in the Mn river basin where the sediment reduction strategy has said that we need for reduction in sediment loads. There are not currently any mandatory EAW categories specific to drainage projects. Like I said the ones that have been used have to do with impacts of public waters. Given the extensive knowledge base at this point is that the water quality impacts, especially the cumulative impacts these are systemic and cannot be ignored anymore. So that there should be work within the EQB to set thresholds for review specific to water quality impacts.
170	Listening session	One of things we try to do in our work is to reach out to local governments in a way that give us opportunities to work together and spend a little less time on areas of disagreement and spend more time on areas of agreement. That is not a direct responsibility of EQB. But recognizing the rights of individuals and the rights of the broader community is an incredible part of making progressWe reached out to Association on Minnesota counties; I wish I could say we are really making progress. I have to admit we are really not making progress but at least we are talking to each other, part of EQB process as I remembered is bringing agencies together. There is opportunity there to move the dynamics away from confrontation to problem solving. I would like to see post-conversation for EQB leadership to consider the possibilities, what would that look like, how would that work. I would love to see a day when people realize that what happens to water in their counties affects shrimp fisherman in the Gulf of Mexico We should not turn our backs opportunities to improve that unfortunate interface that we often turn out with.
171	Listening session	PCA is working on having an environmental justice mapping tool. They are many of them out there. The Biden administration created a justice 40 tool which might have even better metrics that PCA is using. I think it is very important when an environmental justice community is impacted that elevates environmental review, to the extent that it is not explicit enough in EAW form, perhaps it could be somehow incorporated so that whenever something is going to be geographically connected to environmental justice areas it would also be a mandatory category. I don't know if a GIS map not sure if a mandatory category but certainly something EQB could look at.

ltem number	Source	Improvement ideas/ responses/ recommendations
172	Listening session	Returning to using the EQB website to answer the Cumulative Potential Effects (CPE) question, I have found that the interactive map doesn't match what I find in the Monitor. Seems to be far less projects on the map than are published in the Monitor.
173	Listening session	So, I live in Winona and there is one person who is tasked with all natural resources and sustainability work. He does not have the time to do the job really well if he is learning something. Having an entity that can provide assistance in general on these things, that intersection between policy and science and development. Just because most people do not have that interdisciplinary combination.
174	Listening session	Submit environmental review documents through the EQB website and it "magically" gets distributed to the required agencies and public locales. Possibly incorporate a drop-down menu to specific certain counties, districts, etc with the understanding a local copy usually remains with the RGU and other required local venues.
175	Listening session	That would be great, honestly (if all projects in specific areas with a significant portion of waters on the 303d list). However, I was told at the WinLaC 1W1P approval meeting that most small municipalities have to hire a consultant to fill out the EAW, at a cost of ~\$30k
176	Listening session	The best way to better outcomes is to provide some method of alternatives development in the EAW, that would be scoped and further developed in an EIS, if required.
177	Listening session	The mapping tool is a good start, but woefully inadequate. The ER materials should be accessible right on that site, practitioners should be able to update with results from the process (rather than resubmit a form that isn't tied to the original information for the ER); there should be an ability to search even previous years activity.
178	Listening session	The new climate change ER requirements are built around making it easier to deny new housing projects - California is working at reducing its ER requirements for housing,
179	Listening session	Update definition of Cumulative Environmental Impacts or Effects in EQB guidance and EAW form to comport with the scientific definition rather than the confusing Card Decision. U.S. EPA has just issued guidance for federal environmental review agencies that can now be authoritatively incorporated into EQB guidance and EAW forms.
180	Listening session	What additional review requirements are necessary to better assess and protect state waters (and other critical green infrastructure) from cumulative impact
181	Listening session	What is the purpose of regional representatives on the EQB? Few of these board members actually have a broad environmental knowledge on the landscapes they represent.
182	Listening session	What possible role could EQB play to provide independent advisory (only) review for ER challenges, agency actions and/or decisions? The goal being to reduce unnecessary legal challenges, costs, wasted time, resources and divisiveness.

ltem number	Source	Improvement ideas/ responses/ recommendations
183	Listening session	When you look at Upper Mn watershed, it is listed hydrologically as eradicate and biologically listed as impaired. We have petitioned to drain in an over drained watershed. My recommendation is that it would be extremely wise to put that watershed and watersheds like it into a mandatory EAW category. It would save people time and expense. It would improve the position by nonprofits and volunteers like who myself who often do not find out about projects until they are fairly mature. They may be 1-2 years old. There are 38 counties in that watershed. It is very difficult to find out on a timely basis when there might be a petition to drain that further exacerbates the profile, I used in describing that watershed. It makes no sense to me, to have a project begin in that watershed without at least an environmental assessment. That provides an opportunity not to serve not just petitioners' interest, also the greater communities' interest before the petitioners and local governments become emotionally attached to project and resent latecomers. When we do show up, we find ourselves charged with where have you been for the last year. It's my understanding that agencies are often treated with same type of resentment. So, we need to make that change. This is nothing new. Has been suggested to the EQB several times before, I am certain.
184	Listening session	Within the working group, the climate action framework, they had talked about the fact that government entities cannot provide feedback on grants like U of M extension can, it is multiple rounds - it's a wonderful process. They bring up things you might not have known and ways to enhance your projects and include the community- which for us has been huge. The more the community is involved the better, it helps provide a level of transparency, they better understand what is going on, they are also more inclined to come up ways to help and projects they might want to start. The feedback in that meeting was that it cannot be a government entity that serves that role but that the government could be a partner in it, if it is something more like at Indiana University they have the environmental resilience institute, they serve as the assistance entity for LGUs they also provide fellowships that are kind of like Green Corps.
185	Past EQB evaluation recommendations	1. Strengthen EQB capacity for oversight and assistance in implementation of environmental review
186	Past EQB evaluation recommendations	2) Add a new threshold for highways to Mn. Rules Ch. 4410.4300, subp. 22, requiring a mandatory EAW for: "D. the reconstruction of an existing road two miles or greater in length if the road is substantially without well-defined right-of-way, or if it involves an increase in right-of-way width of 40% or more including temporary slope easements and borrow areas taken during construction."
187	Past EQB evaluation recommendations	2. Develop a better system of making information available
188	Past EQB evaluation recommendations	3) Clarify exemption from review of highway safety improvement projects in Mn. Rules. Ch. 4410.4600, subp. 14A. Such exemptions should apply only to specific locations where safety problems exist; they should not be used to exempt entire linear projects from review, as happen currently.

ltem number	Source	Improvement ideas/ responses/ recommendations
189	Past EQB evaluation recommendations	3. Expand the use of Alternative Urban Areawide Review (AUAR) or AUAR-like alternative review processes
190	Past EQB evaluation recommendations	4) Clarify exemption from review of highway projects consisting of modernization of an existing roadway or bridge that may involve the acquisition of minimal rights-of-way. This exemption has been used to avoid environmental review.
191	Past EQB evaluation recommendations	4. Develop a pilot screening tool for EAW development and early coordination process.
192	Past EQB evaluation recommendations	5) Revise threshold for wetlands to require mandatory EAWs for 1) wetland impacts greater or equal to 1 acre that are within 500 ft of the ordinary high-water mark of recreational development, natural environment, and general development lakes, and 2) cumulative impacts to 5 or more wetland basins and or cumulative wetland impacts equal to or greater than 1 acre.
193	Past EQB evaluation recommendations	5. Develop an easier process for RGU re-designation.
194	Past EQB evaluation recommendations	6) Lower the mandatory EAW threshold for projects converting forested or other land with native vegetation to a different open space land use from 640 acres to 40 acres.
195	Past EQB evaluation recommendations	6. Revise EAW to consider broader issues or effects
196	Past EQB evaluation recommendations	7) Lower the mandatory EAW threshold for the permanent conversion of forested or other land with native vegetation, including native pasture, from 80 to 20 acres.
197	Past EQB evaluation recommendations	 7. Hire and retaining additional staff to carry out the above recommendations: At a minimum, two FTEs should be dedicated solely to administration of the environmental review program with appropriate administrative support and leadership from an Executive Director. A substantial one-time cost and an annual maintenance cost will be needed to implement the second priority recommendation. A substantial one-time cost and an annual maintenance cost will be needed to implement the second priority recommendation.
198	Past EQB evaluation recommendations	A Findings Statement should be issued by each permitting and approval authority documenting the final course of action chosen (including mitigation measures to be carried out); how review documents were used to arrive at it (including reasons for rejection and selection of alternatives), and how the decision complies with MEPA's policy goals.
199	Past EQB evaluation recommendations	All projects should provide a short description of the project's purpose in environmental documents. Further, all projects proposed by public entities should discuss the need the project will address as well as the beneficiaries of the project.

ltem number	Source	Improvement ideas/ responses/ recommendations
200	Past EQB evaluation recommendations	An administrative appeal process should be established to hear appeals of RGU decisions.
201	Past EQB evaluation recommendations	 Climate change considerations, including greenhouse gas calculations Problem statement: There isn't a consistent approach for assessing climate change-related impacts in the ER process. Panel recommendations: To support RGUs in the quantification of their GHG emissions in metric tons of carbon dioxide equivalent for all mandatory categories, the EQB should develop and disseminate guidance and tools, including a consistent and simple calculation method. All EAWs should provide a narrative discussion of the project's climate adaptation planning and emission mitigation opportunities. Additional stakeholder engagement should take place before any recommendations are implemented.
202	Past EQB evaluation recommendations	Construction on a project should not be allowed to begin until all judicial appeals under MEPA or MERA have been decided. Courts should be instructed to give preference to such cases in order to prevent undue delay.
203	Past EQB evaluation recommendations	EAWs should include analysis of a specified range of alternatives to the project. Alternatives to the project as proposed by the developer are only required to be analyzed in EISs, not in EAWs. EAWs should not be required to include analysis of alternatives that are irrelevant because of project type, e.g., EAWs for highway projects would not examine alternative processes, but would focus on alternative routes and designs.
204	Past EQB evaluation recommendations	 Education and outreach Problem statement: Project proposers, RGUs, and the public need more information and training about the ER process, how environmental review relates to other regulatory processes, and best practices for public engagement. Panel recommendations: The EQB should develop best practices around notification policy, including tribal notification. EQB should facilitate technical support from state experts for topic areas outside of their permitting authority. The EQB should build capacity among RGUs, project proposers, and consultants to advance effective public engagement. o The EQB should continuously identify, document, and disseminate best practices through its website; trainings for RGUs, project proposers, and consultants; workshops for sharing best practices among practitioners; and supporting documents. Provide training for local RGUs to ensure consistent approaches for implementing Minnesota Rules 4410. Convene a practitioners group of RGUs, specialized consultants, and other interested parties for recurring meetings to increase information sharing and identification of new and emerging issues.

ltem number	Source	Improvement ideas/ responses/ recommendations
205	Past EQB evaluation recommendations	EQB could clarify further—either through guidance or a regulatory change to the EIS decision criteria—that RGUs should evaluate the significance of greenhouse gas emissions in the context of broader statutory and policy goals. This context is important because of the cumulative nature of climate change; standing alone, a bare number of several thousand (or million) tons of CO2 emissions may not mean much to a decision-maker. The current Minnesota EAW form asks for project emissions but provides no accompanying information for courts or policymakers to assess the meaning of those numbers.
206	Past EQB evaluation recommendations	EQB should continue to make its work on customizing EAW forms a priority.
207	Past EQB evaluation recommendations	EQB should identify best practices of the environmental review process and encourage their widespread use where appropriate.
208	Past EQB evaluation recommendations	EQB should modify the process for redesignating a responsible governmental unit and develop criteria to help potential responsible governmental units determine whether they have sufficient expertise and experience to conduct environmental reviews.
209	Past EQB evaluation recommendations	EQB should work with associations of local governments to 1) identify resources to assist local governments that lack experience or expertise with environmental review, and 2) develop and promote environmental review training for continuing education of association members.
210	Past EQB evaluation recommendations	Final decisions on permits should be made no sooner than 30 days after the final EAW or EIS decision. In cases where the permit is non-controversial, as evidenced by the absence of intervenors during the draft permit process, this period could be waived.
211	Past EQB evaluation recommendations	Health impactProblem statement: There isn't a consistent approach for assessing all aspects of health in the ER process.Panel recommendationEQB should provide more guidance on how to incorporate human health impacts into environmental review.Moreover, this guidance should provide a variety of options, including but not limited to how to complete theEAW form with greater human health impacts considered in each question; using EAWs as a screening tool foran HIA; including HIAs in EISs—particularly in scoping of the EIS and any other method that could betterintegrate a human health perspective into ER.
212	Past EQB evaluation recommendations	Language in the rules regarding the range of alternatives to be examined, the depth of examination, and the format of such analysis should be strengthened.

ltem number	Source	Improvement ideas/ responses/ recommendations
213	Past EQB evaluation recommendations	 Major Structural Reform The EQB staff and Technical Representatives recommend that any new effort to restructure Environmental Review be attempted only if the following conditions are met: There is a clearly defined problem or opportunity that EQB members, given the EQB's mission, feel would be irresponsible of them not to address now; Significant resources (money) are secured for the effort and a workplan is clearly defined; and If, to move structural reform ahead, the Board feels that some level of consensus among stakeholders is needed, the process should be headed by professionals with expertise in consensus-building/conflict resolution and ideally experience with similar issues. The EQB staff and Technical Representatives believe that state agency staff should not embark on Environmental Review reform again without leadership from a qualified outside party, possibly from outside the state system and selected through a nationwide search.
214	Past EQB evaluation recommendations	 Mandatory category rulemaking Problem statement: Some mandatory categories and thresholds may be confusing and not align with recent program updates. Panel recommendation: Broaden the scope of categories that were identified in the proposed 2017 rulemaking to include panel recommendations for specific categories (see page 17). Identify all categories that have thresholds for applicability and affirm with RGUs with permitting authority if those thresholds are still appropriate; make changes if needed. Evaluate and eliminate some existing categories, if those project types no longer have the potential for significant environmental effects. Ensure mandatory categories are easily understood and the thresholds are relevant.

ltem number	Source	Improvement ideas/ responses/ recommendations
215	Past EQB evaluation recommendations	Meaningful engagement in the ER process Problem statement: Competing needs and different levels of understanding between project proposers, RGUs,
		and the public can result in ineffective public engagement in the ER process. Panel recommendations:
		1. The EQB should more actively recruit tribal representatives on future panels as the panel observed a lack of representation of tribal voices in the ER process.
		2. The ER program should intentionally recruit and engage diverse audiences, with particular emphasis on people who are traditionally underrepresented and underserved.
		3. Recommend RGUs to use accepted best practices for public engagement that are appropriate for their project needs.
		o The EQB should continually identify, document, and disseminate define best practices through its website; trainings or workshops for RGUs, project proposers, and consultants; and supporting documents.
		4. Encourage RGUs to bring the public into project discussions early in the process and provide guidance for initiating conversations with the public.
		5. Add a question on the EAW form that asks project proposers and RGUs to describe the public engagement process.
		o The form should also specify opportunities for public participation in other approval processes. 6. A concise summary in plain language should be provided at the beginning of the ER document.
216	Past EQB evaluation recommendations	MEPA should be amended to allow that judicial appeals for projects for which a state agency is the RGU be held either in the county where the project is to be located or in the county where the principal office of the RGU is located, at the discretion of the party filing the appeal.
217	Past EQB evaluation recommendations	MEPA should be amended to direct that the 30-day period for judicial appeals to be filed on the day the RGU's decision is published in the EQB Monitor.
218	Past EQB evaluation recommendations	MEPA should be amended to give the EQB the authority to intervene and reverse RGU decisions for all state and local projects it believes are inconsistent with MEPA, EAWs as well as EISs.
219	Past EQB evaluation recommendations	MN should offer proposers of projects for which an EIS is not mandatory but which "have the potential for significant environmental effects" the option of avoiding preparing an EIS if the proposer agrees to implement mitigation measures which lower the impacts below that significance threshold.
220	Past EQB evaluation recommendations	Past stages of a project should be counted towards the mandatory threshold. Review is mandatory when the total of past and present phases exceeds the applicable threshold.
221	Past EQB evaluation recommendations	Permits for expansions by facilities which have a history of non-compliance should contain conditions requiring more stringent monitoring and reporting of environmental conditions than would be imposed otherwise.

ltem number	Source	Improvement ideas/ responses/ recommendations
222	Past EQB evaluation recommendations	Policy and Assistance The EQB administers the Environmental Review program and makes certain decisions at the policy level as described in "EQB"s Historical and Present Role in Environmental Review" section of this report. Overall, EQB staff and Technical Representatives do not recommend any changes in this role.
223	Past EQB evaluation recommendations	Remove the administration of the environmental review program from the EQB and place it in the hands of an independent agency for which such administration is the sole function.
224	Past EQB evaluation recommendations	Require RGUs to notify the public of opportunities for participation in the environmental review process by one of the following means: a paid legal notice or ads in a general circulation newspaper, notice posted in the vicinity of the project site, or notice mailed to property owners in the vicinity of the project site.
225	Past EQB evaluation recommendations	Revise the following thresholds: 1) Add a new threshold for dams to Mn. Rules Ch. 4410.4300, subp. 24, requiring a mandatory EAW for construction of a dam with an upstream drainage area of 50 square miles or more.
226	Past EQB evaluation recommendations	 Streamlining the process, flexibility, and alternatives Problem statements: The intersection between federal, state and local permitting requirements can sometimes result in redundancies that needlessly slow the process. The current ER process might not allow enough flexibility when potential environmental effects are evaluated under multiple regulatory processes. Panel recommendations: The EQB should review and update as needed, existing guidance and rules relative to developing a scoped EAW. The EQB should consider a pilot for a new process for an application for exception to an EAW when an EAW is mandatory pursuant to Minnesota Rules 4410.1000. Instead of an "expedited" process, a new process for an "application for exception" should be created. The process would be similar to the petition process, except that it would be initiated by a project proposer for an exception. A project proposer could submit an application, with sufficient information that an RGU would be able to use the criteria in Minnesota Rules 4410.1700 to decide whether an EAW must be prepared because the project may have has the potential for significant environmental effects.
227	Past EQB evaluation recommendations	Th EQB and member agencies should comply with MEPA's requirement for issuing annual environmental quality reports.

ltem number	Source	Improvement ideas/ responses/ recommendations
228	Past EQB evaluation recommendations	The deadline for requests for the EQB to make the EIS adequacy determination should be extended to the end of the draft comment period, or five days after the date of the public hearing, whichever is later.
229	Past EQB evaluation recommendations	The description of projects in the EQB Monitor should succinctly state the project's major environmental impacts, e.g., type and quantity of air or water pollutants emitted or discharged, acreage of wetlands or forested diminished, etc.
230	Past EQB evaluation recommendations	The EAW form should direct RGUs for toxics-related projects to contact the Minnesota Technical Assistance Project re: the existence of feasible pollution prevention measures that would reduce the generation of toxic chemicals.
231	Past EQB evaluation recommendations	The EQB and its members agencies should review mandatory categories and thresholds biennially to determine if changes or additions need to be made, i.e., if certain project types that should undergo review are not captured by the current rules.
232	Past EQB evaluation recommendations	The EQB could provide guidance for RGUs on calculating climate costs. While emissions data is a critical piece of the puzzle, it does not tell the full story. The harmful impact of greenhouse gas emissions comes not from their mere presence in the air, but from their contribution to climate change.
		One solution would be to add a question to the EAW form asking for a discussion of the impact of the project's emissions on climate change. The EQB could supplement that discussion with guidance for project proposers on calculating the social cost of carbon (which can be done with a simple formula—the social cost of carbon is measured in dollars per ton).
233	Past EQB evaluation recommendations	The EQB should automatically review all environmental documentsEAWs, EISs, responses to commentsfor completeness. Incomplete documents should be returned to RGUs with the missing items identified and the understanding that the review process will not proceed until the missing information is supplied.
234	Past EQB evaluation recommendations	The EQB should fully computerize its environmental review record-keeping system to enable immediate access to individual project status and the dates actions were taken, as well as the generation of statistics regarding project types, length of the process, RGU types, etc.
235	Past EQB evaluation recommendations	The EQB, in conjunction with the attorney general's office and the PCA, should develop monetary penalties to be applied to project proponents who fail to conduct review when required.

ltem number	Source	Improvement ideas/ responses/ recommendations
236	Past EQB evaluation recommendations	The EQB, in consultation with its member agencies, should develop mandatory Environmental Assessment Worksheet (EAW) and Environmental Impact Statements (EIS) review thresholds for the following project types: 1) Commercial composting 2) aquaculture operations 3) agri. feedlots (EIS only) 4) golf courses (EAW only) 5) facilities discharging sewage, industrial and other wastes into the waters of the state, including indirect discharges to wastewater treatment plants, in amounts greater than 200,000 gallons per day, facilities discharging toxic chemicals into waters of the state, facilities generating air emissions of toxic chemicals 6) facilities generating hazardous wastes 7) storage of toxic chemicals
237	Past EQB evaluation recommendations	 The following questions should be added to the EAW form: 1) If the project emits criteria air pollutants, is the project site located within a prevention of significant deterioration area for any of these pollutants? If so, what is the size of the remaining increment for those pollutants? 2) If the project emits criteria air pollutants (e.g. sulfur dioxide, particulates), is the project site located in a non-attainment area for any of those pollutants? Which ones? 3) Discuss any inconsistencies between project impacts and any applicable state, regional or local plans.

ltem number	Source	Improvement ideas/ responses/ recommendations
238	Past EQB evaluation recommendations	The proposed draft guidance still lets too many projects fall through the environmental review cracks.
		First: the Draft Recommendations' so-called "de minimis" threshold of 25,000 tons per year for requiring additional climate and mitigation discussion is far too high. With this threshold, EAWs for projects emitting fewer than 25,000 tons per year of greenhouse gases would not have to contain more detailed mitigation information or discuss consistency with state emissions reduction goals.
		Calling 25,000 tons per year a "de mini-mis" threshold—and requiring less analysis for smaller projects— creates a risk of inaccurately implying that smaller quantities of greenhouse gas emissions may not be significant under MEPA.
		To gather the most relevant information about climate impacts and best inform significance determinations, Minnesota RGUs should be required to include more detailed context and mitigation discussion in all EAWs, regardless of a project's total emissions.
		Second, the EQB should consider a much broader mandatory EAW category, or else provide more guidance as to what level of emissions should require a discretionary EAW.
		Third, this situation calls for an increased focus on mitigation. If RGUs are to properly recognize the cumulative significance of numerous smaller-emitting facilities and additional project types, they would benefit from tools that allow them to approve those facilities without undertaking an impossible number of EISs.
239	Past EQB evaluation recommendations	The record should be a separately prepared document, so that the facts the RGU relies upon to make its decision are unambiguously set out in a form easily obtainable by the public.