

Internal memo

Date: March 2, 2023

To: Environmental Quality Board

From: Karen Gaides, Mariyam Naadha, and Mongkol Teng, Management Analysis and Development

RE: Research summary on environmental review effectiveness for continuous improvement

Background

The Minnesota Environmental Quality Board (EQB) contracted with Management Analysis and Development (MAD) to help coordinate the development of a systematic process that will be used for continuously evaluating and prioritizing environmental review (ER) program improvements in a strategic, transparent, and efficient manner. As part of this work, MAD conducted research that included a review of past Environmental Review Program evaluations, performed interviews for state comparison research, and completed a focused literature review.

Methodology

Between October and December 2022, MAD consultants conducted research on:

- Recommendations from past EQB evaluations: A review of recommendations from 10 reports consisting of past EQB evaluations conducted between 1994 and 2021 (Appendix C contains full list of reports).
- Notable examples of success and best practices: Interviews with environmental review program state representatives in California, Massachusetts, Washington, and Wisconsin.
- Best practices in the literature: A focused literature review examining best or emerging practices in environmental review.

Overall findings and considerations for continuous improvement of environmental review

Over the last few decades, various parties have recommended that EQB improve the efficiency of the environmental review process and procedures. In response, EQB has conducted rule changes, process revisions, and issued guidance over the years in an effort to improve implementation of the environmental review

process.¹ Based on MAD's analysis of past evaluation recommendations from 1994 to 2020, EQB reported having taken some actions to resolve many of the recommendations as of the time of this research (Appendix B). This report summarizes recommendations from past evaluations that have not been resolved or have been partially resolved (pages 3 to 6). They include a wide range of recommendations including strengthening the environmental review program through statutory change and structural reform, changing environmental review requirements and mandatory categories, and updating environmental review processes and procedures.

Additionally, based on MAD's research, there are several overarching themes and considerations that emerged for continuous improvement of the Minnesota environmental review program.

- **Minnesota's environmental review program governance structure and authority differs from other states' environmental review programs.** The environmental review program in Minnesota is housed within EQB, an interagency coordinating body that includes nine state agency leaders and eight public members, one from each Congressional District. Other states studied for this project including California, Massachusetts, Washington, and Wisconsin, house their environmental review programs within cabinet agencies or the Office of the Governor. Similar to Minnesota, the oversight of the environmental review program is separated in the states of California and Massachusetts, while in Washington State the oversight entity is the Department of Ecology, which can also act as a lead or co-lead for certain types of project reviews. There is no single oversight entity in the state of Wisconsin, however the main environmental review compliance coordinator is housed within the Department of Natural Resources, and additional state environmental policy act coordinators are located in all state agencies. A significant difference between states studied for this research is the degree of oversight authority. In Massachusetts the environmental review program oversight entity (the Massachusetts Environmental Policy Act Office) conducts review for projects that require one or more state agency actions, including determining the adequacy of documents submitted, pre-filing meetings with project proponents, public disclosure and consultation, and site visits. The states interviewed for this research also have relatively more staff dedicated to the environmental review program oversight than Minnesota (for more details refer to pages 6 to 8).
- **Strengthen information sharing, public disclosure, and engagement mechanisms for environmental review with the public and tribes in Minnesota.** Based on MAD's focused literature review, public disclosure of a project's primary environmental effects is a critical objective of environmental review. Previous efforts to improve the environmental review program have also stressed the importance of

¹ For a full list of rule changes from 1990 to 2009, refer to Minnesota Pollution Control Agency, "Environmental Review Streamlining Legislative Report," December 2009. Accessed at https://www.eqb.state.mn.us/sites/default/files/documents/MPCA%20Environmental%20Review%20Streamlining%20Report_0.pdf.

improving public engagement and tribal engagement in the environmental review process in Minnesota (pages 3 to 5). MAD's interviews with other states found that California and Washington have made program improvements for public disclosure, public engagement, and tribal consultation, through rule change as well as investment in technology. For example, both California and Washington have moved to online submission and publication of environmental review documents (for more details on public disclosure and engagement, refer to pages 8 to 9). California has also updated guidance on tribal engagement for projects that may impact cultural and historical resources. Similarly, the Washington State environmental review process requires consultation with tribes to ensure protection of cultural and historical resources (for more details on tribal consultation and protection of cultural and historical resources, refer to page 10).

- **Consider comprehensive updates to Minnesota's environmental review program, process, rules, and guidance on emerging issues.** MAD consultants found that the federal government² and many states are taking action to address emerging issues such as climate change impacts, including greenhouse gas (GHG) emissions, resiliency, adaptation, as well as environmental justice. The states of California and Massachusetts have updated environmental review rules and requirements to account for climate change and environmental justice legislations (for more details, refer to pages 9 to 10).

Detailed findings

This section will address recommendations from past EQB evaluations, notable examples of success and best practices from other states, and best practices in the literature and environmental review practice.

Recommendations from past EQB evaluations

Review of past EQB evaluations

MAD reviewed EQB evaluations conducted between 1994 and 2021 and found 51 recommendations that offered suggestions on a wide range of topic areas (Appendix C). For this analysis, MAD excluded four recommendations that were identified by EQB staff as those that EQB already has authority to do or is not within EQB purview.

Figure 1 highlights the broad themes of those recommendations, a majority of which appeared to center around Environmental Assessment Worksheet (EAW) and Environmental Impact Statement (EIS) requirements and overarching environmental review program and process changes. Other, less common themes found were related to public engagement and disclosure, EQB authority and structure, administrative and judicial appeal process, and climate change-related guidance. A full list of recommendations including their source and status in terms of implementation, can be found in Appendix C.

² In January 2023, the White House Council on Environmental Quality (CEQ) released federal guidance to consider GHG and climate to better evaluate and disclose climate impacts during environmental reviews. For information about the guidance, refer to <https://www.federalregister.gov/documents/2023/01/09/2023-00158/national-environmental-policy-act-guidance-on-consideration-of-greenhouse-gas-emissions-and-climate>

Figure 1. Broad themes of recommendations from past EQB evaluations (N=51)



Unresolved or partially resolved recommendations

MAD shared the list of these recommendations with EQB staff who have extensive and long-term knowledge of the environmental review program to confirm the statuses of these past recommendations. As shown in Table 1 and Figure 2, EQB reported having taken actions on 20 recommendations, as of the time of this study. In their review of the recommendations, EQB staff only checked for whether or not a recommendation has been implemented or resolved and not on the feasibility of a recommendation.

Figure 2. Status of recommendations by themes (N=51)

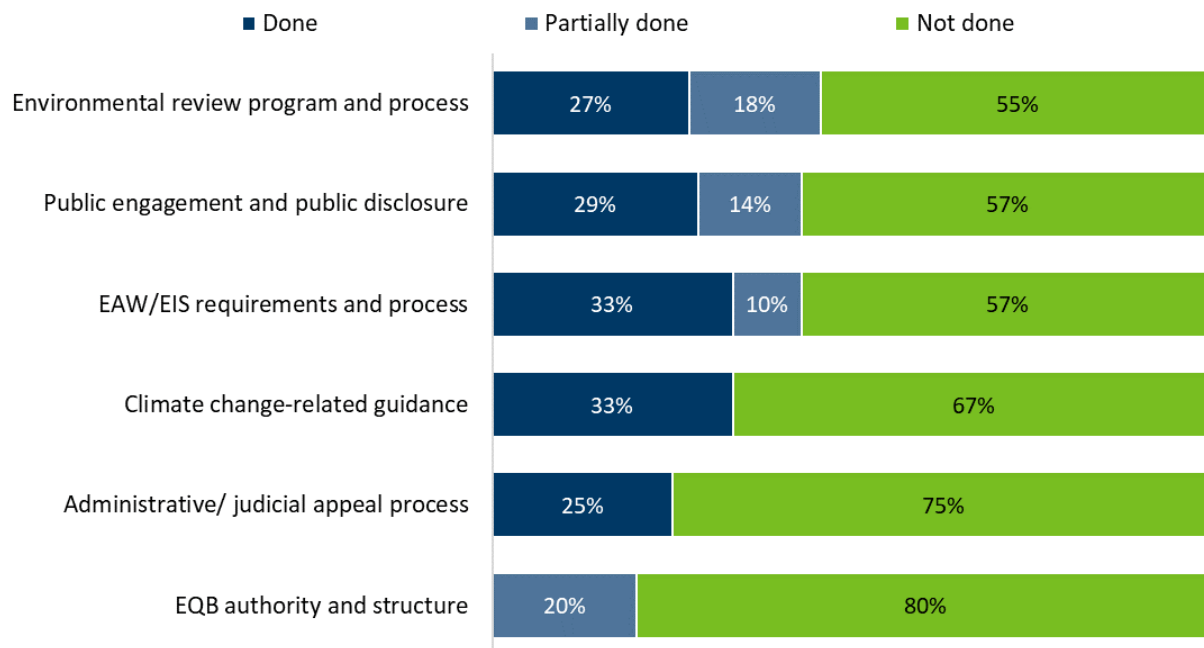


Table 1: Status of recommendations by theme (n=51)

Themes	Done	Partially done	Not done	Total
EAW/EIS requirements and process	7	2	12	21
Environmental review program and process	3	2	6	11
Public engagement and public disclosure	2	1	4	7
EQB authority and structure	0	1	4	5
Administrative/ judicial appeal process	1	0	3	4
Climate change-related guidance	1	0	2	3
Total	14	6	31	51

MAD reviewed the themes or sets of recommendations from past evaluations that are unresolved or partially resolved. The following list summarizes these recommendations.

- EAW/ EIS requirements and process:** Recommendations from previous evaluations include a wide variety of specific recommendations to update the EAW/ EIS requirements and forms such as, including

analysis of alternatives to the project, updating as needed, guidance and rules to developing EAW, inclusion of more context and mitigation discussion in all EAWs, and so forth.

- **Environmental review program and process:** Recommendations from previous evaluations include expanding scope of mandatory categories, expanding the use of alternative review processes, issuing guidance on emerging trends such as human health impacts, reviewing all environmental documents for completeness, providing technical assistance to Responsible Government Units (RGUs) in the implementation of environmental review, expanding the capacity of the environmental review program through increased funding.
- **Public disclosure and engagement:** Recommendations from previous efforts include, improving meaningful engagement in the environmental review process through improved understanding of public and tribal engagement best practices, requiring RGUs to notify the public of opportunities for participation in the environmental review process through various means, disclosure of final course of action chosen by the permitting agency, and including comprehensive information about a project's major impacts in the *EQB Monitor*.
- **EQB authority and structure:** Recommendations from past reports include strengthening EQB oversight and authority through statutory change and structural reform for implementation of environmental review, developing penalty structures when project proponents fail to conduct review, and amending MEPA to give EQB authority to intervene and reverse RGU decisions for state and local projects that are not consistent with MEPA.
- **Administrative/ judicial appeal process:** Recommendations include, halting construction of projects until judicial appeal process has been completed, and judicial appeals to be conducted in jurisdictions where the project is located.
- **Climate change-related guidance:** Recommendations from previous evaluations include, updating guidance or regulations for RGUs to evaluate the significance of greenhouse gas emissions to account for cumulative impact, and providing guidance to RGU's in calculating climate costs.

Notable examples of success and best practices from other states

Methods

In close consultation with EQB staff, the consultants developed a list of interview questions for state representatives, which can be found in Appendix A. MAD conducted interviews with representatives of environmental review programs in California, Massachusetts, Washington, and Wisconsin. The EQB selected these states for comparison research because they have state environmental policy acts similar to the National Environmental policy Act (NEPA) and have progressive environmental review programs. Appendix B summarizes how the four states administer their environmental review programs and how they compare to Minnesota's environmental review program. Unless otherwise noted, the information below and in Appendix B are from interviews with environmental review program representatives from these states.

The Minnesota environmental review program differs considerably from other state environmental review programs

The states interviewed for this research have enacted state environmental policy acts, similar to the National Environmental Policy Act (NEPA), that established environmental review processes in those states. In Minnesota, the EQB, an interagency coordinating body that includes nine state agency leaders and eight public members, one from each Congressional District, is charged with administering the environmental review program. The Board has three full time employees to administer the program. In other states the administration and oversight of environmental review differed and is located within cabinet agencies or the Office of the Governor. In California, the oversight entity is the Governor's Office of Planning and Research (OPR). In Massachusetts, the environmental review program oversight is located in the Massachusetts Environmental Policy Act (MEPA) Office that is part of the Executive Office of Environmental Affairs (EEA). In Washington, the oversight entity for the environmental review program is the Department of Ecology. In Wisconsin, there is no oversight entity, however, the state's environmental review compliance coordinator is situated within the Department of Natural Resources.

All states interviewed highlighted that all state agencies (including permitting agencies) and in certain cases local government units have responsibilities for implementation of the environmental review processes according to their state's environmental policy act regulations. For example, In Washington State, the Department of Ecology oversees the rules and guidelines for the state's environmental policy act and is a lead agency for certain type of projects. Therefore, they can also conduct reviews for those projects. In Wisconsin, while there is no single oversight entity, there are environmental review coordinators (Wisconsin Environmental Policy Act coordinators) in all state agencies. Additionally, the states interviewed shared a similar overall goal of minimizing environmental impacts of projects, but the environmental review procedures varied among states.³

The oversight entities play varying roles in the environmental review process including writing rules and issuing guidance, as well as establishing mechanisms for public input in environmental review, and coordinating review of projects. Some notable differences include the degree of authority to coordinate state level review in California and Massachusetts. For example, in Massachusetts, the Secretary of Environmental Affairs (the oversight entity), has the authority to determine adequacy of environmental review documents and compliance with the state's environmental policy act. Additionally, the MEPA Office (the staff of the environmental review program oversight entity) provides pre-filing information to project proponents,⁴ and assigns analysts to review the project and conduct site visits when Massachusetts Environmental Policy Act review of a project is initiated.

³ MAD's comparison research was limited in scope to understanding the environmental review program and did not explore the environmental review processes or procedures of other states in detail.

⁴ Massachusetts Environmental Policy Act (MEPA) regulations define a proponent as "an agency or person, including a designee or successor in interest, that undertakes, or has significant role in undertaking, a project." For more details, refer to <https://www.mass.gov/regulations/301-CMR-1100-mepa-regulations#11-02-definitions>

⁵ In California, once environmental review documents are submitted by a lead agency, ⁶ the Governor's Office of Planning and Research (the oversight entity) coordinates review of those documents by other state agencies by ensuring appropriate parties provide comments, and makes those comments available for lead agencies to consider.⁷

While none of the states interviewed had a formal coordinating body similar to EQB, all state representatives discussed coordination and collaboration with lead or responsible agencies (including permitting agencies and local government agencies) as a key responsibility. They include wider program coordination efforts including work groups, commissions, advisory committees, and technical assistance and consultation on a case-by-case or ongoing basis. For example, in Massachusetts there are standing collaborative meetings between the oversight entity (Executive Office of Environmental Affairs), the state executive office of housing, and the department of transportation for stronger collaboration on certain projects (e.g., real estate). Of the states interviewed, only Washington (Department of Ecology) has both responsibilities to write rules and guidance and also co-leads reviews with local agencies on certain types of project proposals.

The states interviewed for this research have a wide range of Full-Time Equivalent (FTEs) staff dedicated to their environmental review program coordination in their oversight entities, including 10 in Washington, six in California, five in Massachusetts and one main environmental review compliance coordinator in Wisconsin. These programs have considerably more FTEs compared to Minnesota which has three FTEs dedicated to the environmental review program.

States have made improvements to their programs to better align with their objectives of improving public disclosure and participation in the environmental review process.

Both California and Washington State have made a significant investment recently to upgrade and modernize mechanisms for submission and disclosure of environmental review documents.

- In California, the State Clearing House (SCH), a division of the Governor's Office of Planning and Research, coordinates the state-level review of documents prepared under the California Environmental Quality Act (CEQA). In addition to advising government agencies and the public on the environmental review process, SCH is also responsible for coordinating the review and distribution of environmental review documents and maintaining records of these documents for public access. In 2020, the SCH transitioned to two online platforms for submission (*CEQA Submit*) and publication (*CEQAnet*) of environmental documents. For submission of documents, users must register on *CEQA Submit* and receive a user guide to be able to submit their documents. *CEQAnet* is a searchable database containing

⁵ Environmental notification form (ENF) preparation and filing, Massachusetts Environmental Policy Act Office. Accessed on February 21, 2023, at <https://www.mass.gov/guides/environmental-notification-form-enf-preparation-and-filing#-preparing-an-enf>

⁶ The California Environmental Quality Act defines lead agency as "the public agency that has the primary responsibility for carrying out or approving a project." For more information, refer to <https://ceqaportal.org/tp/Lead%20Agency%20Responsible%20Trustee%2003-23-16.pdf>

⁷ Review process of draft environmental documents, Governor's Office of Planning and Research. Accessed February 15, 2023, at <https://opr.ca.gov/sch/document-submission.html>

environmental documents submitted for review since 1990. It contains summaries of environmental impact reports, statements, and other types of CEQA documents, as well as some federal NEPA documents.

- The Washington Department of Ecology also made similar updates to their program to allow for more timely submission and publication of the State Environmental Policy Act (SEPA) documents and NEPA documents.⁸ Lead agencies register to access an online portal to submit their environmental documents instead of emailing them to the department. The department also makes available resources on how to register for SEPA record submission, including instruction videos, and training opportunities. Once documents are submitted, the department reviews them prior to publishing in the *SEPA Register*, which is a searchable database that anyone can search and view environmental documents submitted since 2020.

States are taking steps to address emerging issues such as climate change, environmental justice, and cultural and historical impacts within environmental review.

All state representatives discussed emerging issues and trends for their programs such as climate change, GHG emissions, resilience and adaptation, and environmental justice. States have taken several steps to address these issues, including adopting legislation and streamlining environmental review to statutory updates. Specific examples include:

- Since 2010, Massachusetts has adopted environmental review protocols around GHG emissions, climate change, and environmental justice to better align with the state’s climate change and environmental justice legislations. Effective 2022, an environmental impact report is required for any project that impacts air quality within one mile of an environmental justice community as well as advance notification and meaningful community engagement of the environmental justice populations.⁹ The Massachusetts environmental review program provides various resources to project proponents, including climate assessment and environmental justice mapping tools to be included in environmental review documents.
- In 2018, California adopted amendments to the CEQA guidelines aimed at improving the analysis of GHG emissions and climate change impacts.¹⁰ The updated guidelines direct lead agencies to analyze the GHG emissions of proposed projects, focus on the projects’ effects on climate change, consider an appropriate analysis timeframe for the project, and consider developing scientific knowledge and state regulatory schemes, among others.

⁸ Statewide SEPA Register, Department of Ecology. Accessed January 6, 2022, at <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-Register>.

⁹ Massachusetts Environmental Policy Act Office, Executive Office of Energy and Environmental Affairs. Accessed January 6, 2022, at [https://www.mass.gov/guides/environmental-justice-protocols-and-resources#-environmental-justice-\(ej\)-protocols-](https://www.mass.gov/guides/environmental-justice-protocols-and-resources#-environmental-justice-(ej)-protocols-).

¹⁰ 2018 CEQA Guidelines Update, Governor’s Office of Planning and Research. Accessed January 6, 2022, at <https://opr.ca.gov/ceqa/guidelines/updates.html>.

- At the time of interviews, Washington Department of Ecology was in the process of conducting rulemaking changes on GHG assessments to address analysis and mitigation of GHG emissions in environmental review of industrial and fossil fuel projects.¹¹ The rulemaking is anticipated to streamline GHG emission analysis with rulemaking changes being conducted for Washington State’s climate and clean fuel standard legislations.

States are taking steps to better assess the potential impacts to cultural and historical resources and improve tribal consultation in environmental review.

- In California, the Governor’s Office of Planning and Research issued updated guidelines for tribal consultation in accordance with statutory revisions related to impacts to tribal cultural resources in 2014.¹² The updated guidelines direct public agencies to consult with California Native American tribes during the CEQA process for projects that tribes request consultation on and is “traditionally and culturally affiliated with the geographic area of the proposed project.”¹³
- In Washington State, the State Environmental Policy Act (SEPA) checklist requires projects to disclose potential impacts to historic and cultural resources.¹⁴ The checklist requires proposers to describe consultation with tribes to assess the potential impacts to cultural and historic resources. The Department of Ecology provides resources, including contact information, maps of federally recognized tribes in the state, and other materials to support tribal consultation.

Other environmental review improvements

- In 2014, Wisconsin conducted a rule change to strategically refocus the Department of Natural Resources environmental review process and procedures. Mainly, the agency stopped creating an “environmental assessment,” a document outlining the decision not to do an environmental impact assessment.¹⁵

Successes and challenges

As part of the interviews, MAD consultants also asked state representatives to share successes and challenges of their environmental review program. As highlighted above, several states pointed to significant changes that

¹¹ Washington Department of Ecology. Accessed January 6, 2022, at <https://ecology.wa.gov/Regulations-Permits/Laws-rules-rulemaking/Rulemaking/WAC-173-445>.

¹² Tribal Cultural Resources (AB 52), Governor’s Office of Planning and Research. Accessed, January 6, 2022, at <https://opr.ca.gov/ceqa/tribal/>.

¹³ Tribal Cultural Resources, Ibid.

¹⁴ SEPA checklist guidance, Section B: Historic and cultural preservation. Accessed, February 21, 2023, at <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/SEPA-checklist-guidance/SEPA-Checklist-Section-B-Environmental-elements/Environmental-elements-13-Historic-cultural-p>

¹⁵ MAD has not been able to get additional details about the implications of this rule change. According to Ma *at al*, 2009 report referenced in this research (page 12), Wisconsin has adopted mandatory thresholds for preparation of Environmental Impact Statements (EIS) for projects that may significantly impact the quality of the environment.

have been made to their environmental review programs to improve information sharing, public engagement, and strengthening the review process to streamline it with policy updates in their states, including addressing emerging issues such as climate change and environmental justice.

Additional notable examples shared include:

- According to Wisconsin state representatives, the 2014 rule change helps the agency be more strategic with the limited resources they have for environmental review. It has also created efficiencies by freeing up resources for evaluating environmental impact of projects that require greater attention. The shift to strategic analysis helps the agency be more proactive in its environmental analysis.
- The Washington state environmental policy act allows lead agencies to deny a project if there are significant adverse impacts to cultural and historical resources. Lead agencies can work with proposers on mitigation, but it also provides authority to lead agencies to deny or condition a permit.
- Massachusetts's program allows for consolidation of the state environmental review process within the executive office, which provides efficiencies for reviewing environmental documents.
- In California and Washington State, the move to shift environmental submission and publication online has led to efficiencies as well as improved record management by creating an online repository of environmental documents.

Several state representatives also discussed challenges, including:

- The small size of teams dedicated to the environmental review program
- Lack of formal interagency coordination bodies
- Subject-matter limitations within the oversight entity, with existing staff not being technical experts in all areas they have to review
- For topics such as climate change, limited ability to provide expert review when analysis is required, because these are not topics regulated by a lead agency or permitting agency

Best practices in the literature and environmental review practice

The following section summarizes best practices for environmental review in the literature. MAD collected this information from a focused review of information available through federal and state government websites, as well as publicly available information from academic sources.

Public disclosure and engagement

Public disclosure and engagement is an integral objective of environmental review. The importance of public engagement and involvement in environmental review, as well as how public engagement can strengthen environmental review at both the federal and state level, is well established in the literature.¹⁶ Nearly all states

¹⁶ Zhao Ma, Dennis R. Becker, and Michael A. Kilgore, "Characterising the landscape of state environmental review policies and procedures in the United States: a national assessment," *Journal of Environmental Planning and Management* 52, no. 8 (December 2009): 1035–1051, <https://doi.org/10.1080/09640560903327591>.

that have state environmental policy acts require public engagement in the environmental review process. Responsible government units or lead agencies are required to inform the public of projects under review and provide opportunities for members of the public to comment through mail, email, or public hearings. Several states, including Minnesota, also allow a public petition process for projects that may not require a review.

Cumulative environmental impacts

Cumulative environmental impacts or effects, as defined by the Minnesota Rules 4410 is “the impact on the environment that results from incremental effects of the project in addition to other past, present, and reasonably foreseeable future projects regardless of what person undertakes the other projects.”¹⁷ It is a “process of systematically analyzing and evaluating a proposed project’s cumulative environmental impacts.”¹⁸ In their 2009 study examining state environmental review programs for integration of cumulative impact assessment, Ma, Becker and Kilgore (2009) found that amongst the 37 states¹⁹ that have some form of formal environmental review policies and procedures, a majority of states require cumulative impact assessments as part of the review process albeit to varying extents.²⁰ These variations include level of specific procedural requirements and the implementation of the requirements. The study also found that state environmental review programs face challenges in effectively implementing cumulative impact assessments. The study recommended that states develop explicit guidelines that provide step-by-step direction for predicting and evaluating potential cumulative impacts, establish state oversight over assessment-related activities, increase collaboration between state agencies to share information and technical resources, develop policies that enable sharing assessment costs between project proposers and responsible government units.

Health impact assessment

A growing body of research points to the importance of integrating health impact risk assessments within environmental review.²¹ In a 2012 study, Minnesota Department of Health (MDH) describes health impact assessments as “a systematic process that uses an array of data sources and analytical methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the

¹⁷ Minnesota Rules, part 4410.0200 subpart 11, item A

¹⁸ Zhao Ma, Dennis R. Becker, and Michael A. Kilgore, “The integration of cumulative environmental impact assessments and state environmental review frameworks”(January 2009), <https://conservancy.umn.edu/bitstream/handle/11299/107768/201.pdf;sequence=1>. Accessed January 6, 2023.

¹⁹ These 37 states includes the 16 states that have state environmental review policy acts (or tier 1 states as described by the authors of the study) as well as 21 states which do not have a government oversight entity and environmental review only applies to certain activities as described by state statutes or rules. For more information, refer to Ma et al, 2009.

²⁰ Ma et al, Ibid.

²¹ Rajiv Bhatia and Aaron Wernham, “Integrating human health into the environmental impact assessment: an unrealized opportunity for environmental health and justice”, *Environmental Health Perspectives*, 118, no. 8 (August 2008): 991-1000, <https://doi.org/10.1289/ehp.11132>

health of a population and the distribution of those effects within the population.”²² In the same study, MDH found that the NEPA as well as several state statutes on environmental review supports the incorporation of health impact assessments in the review process. MDH found that several states, including California, Massachusetts, New York, and Washington have taken steps to incorporate health impact assessments within environmental review. MDH recommended that EQB revise and update environmental review guidelines and processes to better incorporate health in Minnesota’s environmental review process.

Environmental justice

Federal statutes and regulations require examination of environmental justice within the federal environmental review process as well as state and local agencies that receive federal assistance to incorporate some components of environmental justice in their programs.²³ Environmental justice within environmental review allows for a more comprehensive analysis of “potential adverse significant impacts, alternatives, and mitigation methods that would protect communities of color, low-income communities, and other communities whose social demographics lead to increased exposure to pollutants and serious disparate impacts.”²⁴ Several states, including New Jersey, Colorado, and Massachusetts have taken steps to protect communities disproportionately impacted by effects of pollution and environmental threats, such as through adoption of policies that minimize environmental health impacts, reforming land use and development policies, and increasing opportunities for communities to engage in environmental decision-making processes.²⁵ These efforts have resulted in the creation of variety of tools to improve data collection and identification of communities, such as EPA’s *EJSCREEN*, California’s *CalEnviroScreen*, Maryland’s *MD EJSCREEN*, Washington’s *Environmental Health Disparities Map*.

²² Minnesota Department of Health, 2012, “Incorporating Health and Climate Change into the Minnesota Environmental Assessment Worksheet”,
<https://www.health.state.mn.us/communities/environment/places/docs/eawreport.pdf>

Accessed January 6, 2023

²³ Alan Ramo, “Environmental justice as an essential tool in environmental review statutes—a new look at federal policies and civil rights protections and California’s recent initiatives”, *19 Hastings West Northwest J. of Env’tl. L. & Pol’y* 41 (2013), Available at:

https://repository.uchastings.edu/hastings_environmental_law_journal/vol19/iss1/4

²⁴ Ramo, *Ibid*.

²⁵ National Conference of State Legislatures, “State and Federal Environmental Justice Efforts”,
<https://www.ncsl.org/environment-and-natural-resources/state-and-federal-environmental-justice-efforts>,

Accessed January 6, 2023.

Appendix A: Interview guide for state comparison research

This appendix contains the full text of the interview questions.

Introduction

Thank you for agreeing to speak with me today about your state’s environmental review program. The Minnesota Environmental Quality Board (EQB) has asked Management Analysis and Development (MAD), where I work, to contact representatives of other state environmental review programs and ask these questions. MAD is a division within the State of Minnesota and is a neutral third party.

Data practices

The Minnesota Data Practices Act protects any information that you give MAD. MAD has a special section in state law that helps us keep your information private (Minnesota Statutes 13.64). I will be taking notes that will summarize the themes from the interviews but will leave out names or any other information that could identify specific people in our report. Interview notes will not become public documents and would remain private data. You do not have to take part in this interview—it’s completely voluntary. If there are any questions you do not want to answer, you are welcome to skip them.

Questions

1. Could you please tell us briefly about yourself and your role in your organization?
2. Can you tell us about the current administration of your state environmental review program?
 - a. Which state agency administers the program?
 - b. What is the program’s main role in the implementation of your state’s environmental protection act?
 - c. What are your programmatic goals and objectives?
3. What is the governance structure for your state’s environmental review program?
 - a. What enforcement and/or compliance authority do you have, if any?
 - b. Who are the key decision makers?
 - c. How many FTEs do you have?
 - d. What involvement do you have with other responsible government units in the implementation of your state’s environmental review program?
4. How does your state environmental review program set programmatic priorities?
5. What trends or emerging needs have you observed for your state’s environmental review program? (i.e. climate change, life cycle impacts, cumulative impacts, GHG emissions, etc.)
 - a. How does your program address these emerging issues?
6. How does your environmental review program address cross-jurisdictional issues?
7. What do you think are the advantages/ strengths of your state’s environmental review program?
 - a. What practices or approaches have you found to be most impactful/ effective?
 - b. What notable examples of success or best practices can you share?

- c. What opportunities do you see for your state's program?
- 8. What challenges have you encountered in your approach?
 - a. How has your state government responded to those challenges?
 - b. What are other opportunities to address those challenges or make general improvements?
- 9. What improvements have been made to your state's environmental review program, if any?
 - a. What are some lessons learned from these efforts?
- 10. What information (i.e. performance measures/ data) do you collect to measure results or outcomes of your state's program, if any?
 - a. What mechanism and tools do you use to track this information, if any?
- 11. Is there anything else you'd like to share with us about your state's environmental review program?

Appendix B: Summary of state comparison data

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
Environmental review program oversight entity	<ul style="list-style-type: none"> The Environmental Quality Board (EQB) 	<ul style="list-style-type: none"> The Governor's Office of Planning and Research (OPR) 	<ul style="list-style-type: none"> The Massachusetts Environmental Policy Act (MEPA) Office, located in the Executive Office of Energy and Environmental Affairs (EEA) 	<ul style="list-style-type: none"> The Department of Ecology 	<ul style="list-style-type: none"> No single entity with oversight and administration responsibility.
Entity responsible for developing administrative rules interpreting state environmental policy act	<ul style="list-style-type: none"> EQB 	<ul style="list-style-type: none"> Governor's Office of Planning and Research 	<ul style="list-style-type: none"> Massachusetts Environmental Policy Act Office 	<ul style="list-style-type: none"> Department of Ecology 	<ul style="list-style-type: none"> No single entity responsible. Lead agencies have adopted similar administrative rules and procedural guidelines

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
Entities responsible for preparing environmental documents	<ul style="list-style-type: none"> Lead agencies or responsible government units 	<ul style="list-style-type: none"> Lead agencies or responsible government units 	<ul style="list-style-type: none"> Lead agencies or responsible government MEPA Office conducts review for projects that require one or more state agency action 	<ul style="list-style-type: none"> Lead agencies or responsible government units 	<ul style="list-style-type: none"> Lead agencies or responsible government units
Other responsibilities of the environmental review program	<ul style="list-style-type: none"> Monitor the effectiveness of the program and respond appropriately to modify and improve the effectiveness Provide guidance documents and technical assistance Assign responsible 	<ul style="list-style-type: none"> Coordinate state level review and filing of all California Environmental Quality Act (CEQA) documents, including reviewing, and distributing environmental document to state agencies for review 	<ul style="list-style-type: none"> Determine adequacy of environmental documents submitted for a project Solicit comments from the general public and state agencies Represent the Secretary at public consultation 	<ul style="list-style-type: none"> Provide technical assistance to agencies, applicants, and citizens as they participate in the review process The department also serves as the SEPA lead or co-lead agency for 	<ul style="list-style-type: none"> Not applicable

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
	<p>governmental units to conduct environmental reviews</p> <ul style="list-style-type: none"> • Publish the EQB Monitor which is a legislative requirement to post project updates and public comment periods. 	<ul style="list-style-type: none"> • Maintain records of all CEQA documents • Provide technical assistance to state and local government units • In certain circumstance, designate lead agencies • Run the State Clearing House- the state's single point of contact 	<p>sessions on projects</p>	<p>some proposals</p>	

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
Programmatic objectives	<ul style="list-style-type: none"> Overall goal is to provide usable information to project proposers, the public, and decision makers prior to government approvals 	<ul style="list-style-type: none"> Overall goal is to minimize impacts to the environment through public disclosure 	<ul style="list-style-type: none"> Overall mission is to minimize environmental impact 	<ul style="list-style-type: none"> Overall goal is to provide public notice and engagement, systematic analysis of impact and to consider those impacts prior to making decisions and providing updates to laws and rules 	<ul style="list-style-type: none"> Compliance with the law
Oversight entity for enforcement/ compliance of state environmental policy act (according to state representatives)	<ul style="list-style-type: none"> Minnesota rules are enforced through litigation 	<ul style="list-style-type: none"> Enforced through litigation 	<ul style="list-style-type: none"> Enforcement lies with the lead agency 	<ul style="list-style-type: none"> Hearing boards or appeal court and lead agency is responsible for enforcement 	<ul style="list-style-type: none"> No authority

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
Number of FTEs dedicated to ER program	<ul style="list-style-type: none"> 3 FTEs dedicated to administering the environmental review program 	<ul style="list-style-type: none"> 6 FTEs dedicated to clearing house, receiving documents, and providing technical assistance 	<ul style="list-style-type: none"> 7 FTEs total; 5 environmental analysts, 1 Director and 1 admin staff 	<ul style="list-style-type: none"> 10 FTEs total at Ecology (including headquarters and regional units) 	<ul style="list-style-type: none"> 1 FTE coordinator
Involvement with lead/ responsible agencies/governmental or local units (RGUs and LGUs)	<ul style="list-style-type: none"> EQB supports with technical assistance, issues letters of extension, reviews and assigns petitions and assigns RGU. RGUs process petitions and perform environmental reviews 	<ul style="list-style-type: none"> OPR is responsible for coordinating with state agencies to provide opportunities for review and comments OPR staff sit on a variety of work groups, commissions, aspects of the 	<ul style="list-style-type: none"> On a case-by-case basis create advisory committees for regulation revisions Standing collaborative meetings between EEA (oversight entity), executive office of housing, and department of 	<ul style="list-style-type: none"> Provide technical assistance Co-lead with local government for certain type of proposals as requested by local agencies (based on capacity and expertise) 	<ul style="list-style-type: none"> WEPA coordinator works with other state lead agencies including providing advice and consultation for compliance

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
		CEQA involved	transportation		
Trends and emerging issues	<ul style="list-style-type: none"> • Climate change • Tribal engagement and consultation • Environmental justice • Public/community engagement 	<ul style="list-style-type: none"> • Climate change and greenhouse gas emissions • Tribal consultation 	<ul style="list-style-type: none"> • Climate change • Environmental justice 	<ul style="list-style-type: none"> • Climate change, and greenhouse gas emission assessments • SEPA can be used to assess vessel traffic impact on orca populations—SEPA can issue suggested guidance 	<ul style="list-style-type: none"> • Climate change • Environmental justice

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
<p>How does the program address these issues?</p>	<ul style="list-style-type: none"> • Developing continuous improvement process • Climate is considered on EAW form and guidance • Board subcommittee considers effectiveness of program • Public discussion and then board directs staff on program priorities/initiatives. 	<ul style="list-style-type: none"> • In 2018 OPR and the California Natural Resources Agency updated the guidelines related to new legislation on assessing transportation impacts, greenhouse gas emissions, and climate change. 	<ul style="list-style-type: none"> • MEPA Office promulgated protocols on GHG emissions, and climate change-related guidance to align with statutory updates • Environmental justice-mandate passed with higher level of threshold for environmental impact review, have updated protocols and regulatory changes • Separate climate team 	<ul style="list-style-type: none"> • Currently updating rules to streamline GHG emission analysis with rulemaking changes being conducted for Washington State's climate and clean fuel standard legislations • Provide technical assistance/guidance 	<ul style="list-style-type: none"> • Currently no mechanisms in place, looking at NEPA and CEQ for potential guidelines

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
			with the executive office that developed scientific tools assessing climate risks		
How does the program address cross-jurisdictional issues	<ul style="list-style-type: none"> • EQB determines appropriate government agencies (RGUs and LGUs) to do the review • Ombuds and board decides if there's a dispute. • Board can designate themselves as the RGU in cross- 	<ul style="list-style-type: none"> • Notification process including with tribal government and federal government. If a tribe asks to be involved, lead agency has to be notified and they engage, and consult based on tribe's request 	<ul style="list-style-type: none"> • Through interagency collaboration —if a project requires several different permits, the reviews are consolidated 	<ul style="list-style-type: none"> • NEPA documents are posted on the register • Data sharing agreement in place with the British Columbia, Canada provincial government, including weekly project updates 	<ul style="list-style-type: none"> • Cooperative work with Public Utilities Commission and Department of Transportation • Coordinate/communicate with tribal and federal government • Cooperation with federal agencies on environmental review

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
	jurisdictional issues.				
Advantages of the current program according to state representatives	<ul style="list-style-type: none"> The program is designed to provide information to the public for informed and meaningful participation, to project proposers early in the process to reduce their environmental impacts, and to government decision makers on how projects would affect their communities 	<ul style="list-style-type: none"> Law is self-governing. Having a dedicated resource through the <i>CEQAnet</i> to bring those impacts and permits together, and consolidating the information and informing the public Lead agencies are required to include the permitting entities in the environmental documents that are available for 	<ul style="list-style-type: none"> Consolidation of the environmental review process. It is housed in a centralized fashion and there are benefits and efficiencies 	<ul style="list-style-type: none"> Substantive authority to deny a project, and consideration of cultural and historical impact of a proposal. If there are significance adverse impact to these resources, then lead agencies can work with the proposer to mitigate, but also gives lead agency opportunity to deny or 	<ul style="list-style-type: none"> Strategic refocus to shift resources and efforts to projects that are large and controversial. Strategic analysis looks at alternatives, provides information for program decision or rule making

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
	<ul style="list-style-type: none"> A coordinating board oversees program requirements for consistent implementation to RGUs. 	<p>public to view on <i>CEQAnet</i></p>		<p>condition a permit</p>	
<p>Challenges of the current program or approach according to representatives</p>	<ul style="list-style-type: none"> At times, inconsistencies exist with implementation and variable expertise among delegated government units The rules don't identify any enforcement procedures 	<ul style="list-style-type: none"> Small team dedicated to coordination of statewide review as well as maintaining record of environmental review documents Documents are submitted by lead agencies and the State Clearing 	<ul style="list-style-type: none"> Scoping is limited by statute. For example, topics such as climate change resiliency are not topics that are regulated by a permit program. If analysis is required, they may not get expert review 	<ul style="list-style-type: none"> Benefit of environmental review and analysis of impact, but also a regulatory burden and barrier to development, depending on perspectives 	<ul style="list-style-type: none"> Less staff and resources available when an environmental analysis is required

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
	<ul style="list-style-type: none"> <li data-bbox="499 240 709 540">• The program is not able to measure outcomes from downsizing projects <li data-bbox="499 557 709 987">• EQB has only three FTEs and no technical expertise to perform reviews; staff don't prepare technical documents 	<p data-bbox="835 240 1003 719">House accepts them as they are; Agencies are instructed to provide accessible documents, but it is a work in progress</p>	<p data-bbox="1129 240 1297 492">because that permitting agency may not require climate resiliency</p> <ul style="list-style-type: none"> <li data-bbox="1087 508 1308 1430">• Subject matter limitations—being housed within a separate body there is a risk of reviewing procedures diverting from what the permit agencies are doing. The existing staff are not necessarily experts in areas they may have to deal with 		

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
<p>Implemented Improvements to the program</p>	<ul style="list-style-type: none"> • A climate question was added in the EAW form • Ombuds position piloted • Convened panel to assess and identify necessary changes which resulted in continuous improvement process • Developing a new, online interface to collect <i>EQB Monitor</i> submittals with a connected 	<ul style="list-style-type: none"> • Initiated in 2013, and adopted in 2018, OPR and the Natural Resources Agency updated guidelines for improving environmental review to address greenhouse gas emissions and climate change; the state also proposed changes to assess transportation impacts • In 2020, the state clearing house 	<ul style="list-style-type: none"> • Since 2010, Massachusetts has adopted environmental review protocols around GHG, climate change, environmental justice to better align with the state’s climate change and environmental justice legislations • Starting 2022, environmental impact reports are required for any project that impacts air quality 	<ul style="list-style-type: none"> • Updated <i>SEPA Register</i> submission to give agencies authority to create their own records and allows it to be processed in a timelier fashion • <i>SEPA Register</i> also creates a permanent repository of SEPA records, overall improving available information to the public and record management of environmental review 	<ul style="list-style-type: none"> • Rule change to do less environmental analysis on whether or not an EIS is required; It was time consuming and resource intensive. • Have not completed an environmental analysis since 2014. • Rewrote the rules to provide strategic environmental analysis on policy, including addressing emerging issues

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
	<p>searchable database of environmental review projects and the associated documents</p> <ul style="list-style-type: none"> Over time, increased staffing from 1.5 to 3 FTE 	<p>transitioned to two online platforms for environmental document submission and publication, the <i>CEQAnet</i> and <i>CEQA Submit</i></p>	<p>within one mile of an environmental justice community as well as advance notification and meaningful community engagement of environmental justice populations</p>		<ul style="list-style-type: none"> Environmental analysis only conducted for large and controversial projects
<p>Performance measures or data collected/mechanisms and tools used</p>	<ul style="list-style-type: none"> Data Management Plan, limited information due to the fact that it's a delegated program 	<ul style="list-style-type: none"> No formal performance metrics OPR uses Google analytics to provide information on users to the <i>CEQAnet</i>, but not used 	<ul style="list-style-type: none"> Generate reports, basic project numbers and numbers of filings, track environmental justice reports 	<ul style="list-style-type: none"> Surveys of users to understand what people find valuable 	<ul style="list-style-type: none"> The number of EAs (has gone down from 2014 from 40 to 0)

Theme	Minnesota	California	Massachusetts	Washington	Wisconsin
		<p>systematically ; the state clearing house is exploring how users currently interact with <i>CEQAnet</i> to further improve upon suggestions.</p>			

Appendix C: Summary of past EQB evaluation recommendations

This section contains the recommendations from past EQB evaluations by the year and source of the recommendation. It is meant to provide an overview of the status of these recommendations. In their review of the recommendations, EQB staff only checked for whether or not a recommendation has been implemented or resolved and not on the feasibility of a recommendation.

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	An administrative appeal process should be established to hear appeals of RGU decisions.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	MEPA (Minnesota Environmental Protection Act) 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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	Construction on a project should not be allowed to begin until all judicial appeals under MEPA or MERA (Minnesota Environmental Rights Act) have been decided. Courts should be instructed to give preference to such cases in order to prevent undue delay.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	MEPA should be amended to allow those 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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The following questions should be added to the EAW (Environmental Assessment Worksheet) 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.	Not done

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The EAW form should direct RGUs for toxics-related projects to contact the Minnesota Technical Assistance Project regarding the existence of feasible pollution prevention measures that would reduce the generation of toxic chemicals.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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 (Environmental Impact Statements), 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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The EQB, in consultation with its member agencies, should develop mandatory EAW and EIS review thresholds for the following project types: 1) Commercial composting 2) aquaculture operations 3) agriculture 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	Partially done- numbers 1,2,3,7 are not done.
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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."	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The EQB and its member 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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The EQB and member agencies should comply with MEPA's requirement for issuing annual environmental quality reports.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	The EQB should automatically review all environmental documents--EAWs, EISs, responses to comments--for 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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	No EQB authority to do this
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	No EQB authority to do this
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Partially done

Year	Source	Conducted by	Recommendation	Status
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	May no longer be relevant
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Done
1994	<i>Unfulfilled promises</i>	Minnesota Center for Environmental Advocacy	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.	Not done
2007	<i>Technical Representatives' Report to the Environmental Quality Board on Environmental Review</i>	EQB	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.	EQB does this
2007	<i>Technical Representatives' Report to the Environmental Quality Board on Environmental Review</i>	EQB	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: 1. 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; 2. Significant resources (money) are secured for the effort and a workplan is clearly defined; and 3. 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,	Partially done

Year	Source	Conducted by	Recommendation	Status
			possibly from outside the state system and selected through a nationwide search.	
2011	<i>Environmental Review and Permitting Evaluation Report</i>	Office of the Legislative Auditor	EQB should continue to make its work on customizing EAW forms a priority.	Done
2011	<i>Environmental Review and Permitting Evaluation Report</i>	Office of the Legislative Auditor	EQB should identify best practices of the environmental review process and encourage their widespread use where appropriate.	Done
2011	<i>Environmental Review and Permitting Evaluation Report</i>	Office of the Legislative Auditor	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.	Not done
2011	<i>Environmental Review and Permitting Evaluation Report</i>	Office of the Legislative Auditor	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.	Not done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Strengthen EQB capacity for oversight and assistance in implementation of environmental review	Not done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Develop a better system of making information available	Done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Expand the use of Alternative Urban Areawide Review (AUAR) or AUAR-like alternative review processes	Not done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Develop a pilot screening tool for EAW development and early coordination process.	Not done

Year	Source	Conducted by	Recommendation	Status
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Revise EAW to consider broader issues or effects.	Partially done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Develop an easier process for RGU re-designation.	Done
2012	<i>Evaluation and Recommendations for Improving Environmental Review</i>	EQB	Hire and retain 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.	Partially done
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	Streamlining the process, flexibility, and alternatives <i>Problem statements:</i> <ul style="list-style-type: none"> • <i>The intersection between federal, state, and local permitting requirements can sometimes result in redundancies that needlessly slow the process.</i> • <i>The current ER process might not allow enough flexibility when potential environmental effects are evaluated under multiple regulatory processes.</i> Panel recommendations: <ol style="list-style-type: none"> 1. The EQB should review and update as needed, existing guidance and rules relative to developing a scoped EAW. 2. 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 MN Rules 4410.1000. 	Not done

Year	Source	Conducted by	Recommendation	Status
			<p>3. Instead of an “expedited” process, a new process for an “application for exception” should be created.</p> <ul style="list-style-type: none"> o The process would be similar to the petition process, except that it would be initiated by a project proposer for an exception. o A project proposer could submit an application, with sufficient information that an RGU would be able to use the criteria in MN Rules 4410.1700 to decide whether an EAW must be prepared because the project may have has the potential for significant environmental effects. 	
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	<p>Education and outreach <i>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.</i></p> <p>Panel recommendations:</p> <ol style="list-style-type: none"> 1. The EQB should develop best practices around notification policy, including tribal notification. 2. The EQB should facilitate technical support from state experts for topic areas outside of their permitting authority. 3. The EQB should build capacity among RGUs, project proposers, and consultants to advance effective public engagement. <ul style="list-style-type: none"> 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. 4. Provide training for local RGUs to ensure consistent approaches for implementing Minnesota Rules 4410. 5. 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. 	Not done

Year	Source	Conducted by	Recommendation	Status
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	<p>Health impact <i>Problem statement: There isn't a consistent approach for assessing all aspects of health in the ER process.</i></p> <p>Panel recommendation EQB 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 the EAW form with greater human health impacts considered in each question; using EAWs as a screening tool for an HIA; including HIAs in EISs—particularly in scoping of the EIS and any other method that could better integrate a human health perspective into ER.</p>	Not done
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	<p>Climate change considerations, including greenhouse gas calculations <i>Problem statement: There isn't a consistent approach for assessing climate change-related impacts in the ER process.</i></p> <p>Panel recommendations:</p> <ol style="list-style-type: none"> 1. 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. 2. All EAWs should provide a narrative discussion of the project's climate adaptation planning and emission mitigation opportunities. 3. Additional stakeholder engagement should take place before any recommendations are implemented. 	Done

Year	Source	Conducted by	Recommendation	Status
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	<p>Mandatory category rulemaking <i>Problem statement: Some mandatory categories and thresholds may be confusing and not align with recent program updates.</i></p> <p>Panel recommendation:</p> <ol style="list-style-type: none"> 1. Broaden the scope of categories that were identified in the proposed 2017 rulemaking to include panel recommendations for specific categories (see page 17). 2. 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. 3. Evaluate and eliminate some existing categories, if those project types no longer have the potential for significant environmental effects. 4. Ensure mandatory categories are easily understood and the thresholds are relevant. 	Partially done
2018	<i>Environmental Review Advisory Panel Evaluation</i>	MAD	<p>Meaningful engagement in the ER process <i>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.</i></p> <p>Panel recommendations:</p> <ol style="list-style-type: none"> 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. <ul style="list-style-type: none"> 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 	Not done

Year	Source	Conducted by	Recommendation	Status
			<p>early in the process and provide guidance for initiating conversations with the public.</p> <p>5. Add a question on the EAW form that asks project proposers and RGUs to describe the public engagement process. The form should also specify opportunities for public participation in other approval processes.</p> <p>6. A concise summary in plain language should be provided at the beginning of the ER document.</p>	

Year	Source	Conducted by	Recommendation	Status
2021	<i>Mending MEPA Analysis: Properly Addressing Climate Change Costs Under the Minnesota Environmental Policy Act</i>	Minnesota Journal of Law, Science & Technology	<p>The proposed draft guidance still lets too many projects fall through the environmental review cracks.</p> <p>1) 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.</p> <p>2) 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.</p> <p>3) 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.</p>	Not done

Year	Source	Conducted by	Recommendation	Status
2021	<i>Mending MEPA Analysis: Properly Addressing Climate Change Costs Under the Minnesota Environmental Policy Act</i>	Minnesota Journal of Law, Science & Technology	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 CO ₂ 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.	Not done
2021	<i>Mending MEPA Analysis: Properly Addressing Climate Change Costs Under the Minnesota Environmental Policy Act</i>	Minnesota Journal of Law, Science & Technology	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).	Not done